

SEQUENCE LISTING

<110> SENTI BIOSCIENCES, INC.

<120> CHIMERIC RECEPTORS AND METHODS OF USE THEREOF

<130> STB-022WO

<140> PCT/US2021/055302

<141> 2021-10-15

<150> 63/151,483

<151> 2021-02-19

<150> 63/092,736

<151> 2020-10-16

<160> 109

<170> PatentIn version 3.5

<210> 1

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 1

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

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

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

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

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

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

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

<210> 2
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 2
 Gly Phe Ser Leu Ser Arg Tyr
 1 5

<210> 3
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 3
 Trp Gly Asn Gly Asn
 1 5

<210> 4
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 4
 Arg Ile Lys Asp
 1

<210> 5
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

peptide

<400> 5

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

Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser
			20					25

<210> 6

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 6

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

Gly Val Ile

<210> 7

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 7

Thr	His	Tyr	His	Ser	Ala	Leu	Lys	Ser	Arg	Leu	Ser	Ile	Ser	Arg	Asp
1				5					10					15	

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

Asp	Thr	Ala	Ile	Tyr	Phe	Cys	Thr	Leu
		35					40	

<210> 8

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 8

Trp Gly Pro Gly Thr Met Val Thr Val Ser Ser
1 5 10

<210> 9

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 9

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

Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Val Ala Ser
20 25 30

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

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

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

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

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

<210> 10

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 10

Lys	Ser	Ser	Gln	Ser	Leu	Val	Ala	Ser	Asp	Glu	Asn	Thr	Tyr	Leu	Asn
1				5					10					15	

<210> 11

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 11

Gln	Val	Ser	Lys	Leu	Asp	Ser
1				5		

<210> 12

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 12

Leu	Gln	Gly	Ile	His	Leu	Pro	Trp	Thr
1				5				

<210> 13

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 13

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

Gln	Ser	Val	Ser	Ile	Ser	Cys
						20

<210> 14
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 14
 Trp Leu Leu Gln Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr
 1 5 10 15

<210> 15
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 15
 Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe Thr
 1 5 10 15

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

<210> 16
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 16
 Phe Gly Gly Gly Thr Lys Leu Glu Leu Lys
 1 5 10

<210> 17
 <211> 239
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic

polypeptide

<400> 17

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

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

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

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

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

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

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

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
 115 120 125

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

Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Val Ala Ser Asp
 145 150 155 160

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

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

Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe Thr Leu Lys Ile Ser
 195 200 205

Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Leu Gln Gly Ile
 210 215 220

His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Leu Lys
 225 230 235

<210> 18

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 18

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

Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Val Ala Ser
 20 25 30

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

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

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

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

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

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
 115 120 125

Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Gln Pro Ser Gln Thr
 130 135 140

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

Met His Trp Val Arg Gln Pro Pro Gly Gln Gly Leu Glu Trp Met Gly
 165 170 175

Val Ile Trp Gly Asn Gly Asn Thr His Tyr His Ser Ala Leu Lys Ser
 180 185 190

Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser Gln Val Phe Leu Lys
 195 200 205

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

Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val Thr Val Ser Ser
 225 230 235

<210> 19

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 19

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

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

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

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

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

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

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

Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
 115 120 125

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

Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Val
 145 150 155 160

Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser Pro Gly
 165 170 175

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

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

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

Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu
 225 230 235 240

Leu Lys

<210> 20

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 20

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

Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Val Ala Ser
 20 25 30

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

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

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

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

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

Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
 115 120 125

Lys Gly Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Gln Pro
 130 135 140

Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser
 145 150 155 160

Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly Leu Glu
 165 170 175

Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His Ser Ala
 180 185 190

Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser Gln Val
 195 200 205

Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile Tyr Phe

210

215

220

Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val Thr Val
 225 230 235 240

Ser Ser

<210> 21

<211> 229

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 21

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

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

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

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

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

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

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

Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu
 115 120 125

Ser Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln

130

135

140

Ser Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln
 145 150 155 160

Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu
 165 170 175

Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp
 180 185 190

Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr
 195 200 205

Tyr Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr
 210 215 220

Lys Leu Glu Leu Lys
 225

<210> 22

<211> 229

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 22

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

Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Val Ala Ser
 20 25 30

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

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

Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe Thr Leu Lys Ile

65		70		75		80									
Ser	Arg	Val	Glu	Ala	Glu	Asp	Leu	Gly	Val	Tyr	Tyr	Cys	Leu	Gln	Gly
			85					90						95	
Ile	His	Leu	Pro	Trp	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Glu	Leu	Lys
		100					105					110			
Gly	Gly	Gly	Gly	Ser	Gln	Val	Gln	Leu	Lys	Glu	Ser	Gly	Pro	Gly	Leu
		115					120					125			
Val	Gln	Pro	Ser	Gln	Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Phe
	130					135					140				
Ser	Leu	Ser	Arg	Tyr	Asp	Met	His	Trp	Val	Arg	Gln	Pro	Pro	Gly	Gln
145					150					155					160
Gly	Leu	Glu	Trp	Met	Gly	Val	Ile	Trp	Gly	Asn	Gly	Asn	Thr	His	Tyr
			165						170					175	
His	Ser	Ala	Leu	Lys	Ser	Arg	Leu	Ser	Ile	Ser	Arg	Asp	Thr	Ser	Lys
		180						185					190		
Ser	Gln	Val	Phe	Leu	Lys	Met	Asn	Ser	Leu	Gln	Thr	Glu	Asp	Thr	Ala
		195					200					205			
Ile	Tyr	Phe	Cys	Thr	Leu	Arg	Ile	Lys	Asp	Trp	Gly	Pro	Gly	Thr	Met
	210					215					220				
Val	Thr	Val	Ser	Ser											
225															

<210> 23

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 23

Gly Gly Ser

1

<210> 24
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 24
 Gly Gly Ser Gly Gly Ser
 1 5

<210> 25
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 25
 Gly Gly Ser Gly Gly Ser Gly Gly Ser
 1 5

<210> 26
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 26
 Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser
 1 5 10

<210> 27
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 27

Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser
1 5 10 15

<210> 28

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 28

Gly Gly Gly Ser
1

<210> 29

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 29

Gly Gly Gly Ser Gly Gly Gly Ser
1 5

<210> 30

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 30

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
1 5 10

<210> 31

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

peptide

<400> 31

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
1 5 10 15

<210> 32

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 32

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
1 5 10 15

Gly Gly Gly Ser
20

<210> 33

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 33

Gly Gly Gly Gly Ser
1 5

<210> 34

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 34

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 35

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

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 35
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 36
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 36
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 1 5 10 15

Gly Gly Gly Ser
 20

<210> 37
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 37
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser
 20 25

<210> 38
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 38

Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
1 5 10 15

Lys Gly

<210> 39

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 39

Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu
1 5 10 15

Ala Ala Ala Lys
20

<210> 40

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 40

Ala Ala Ala Ile Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu
1 5 10 15

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

Ser Pro Leu Phe Pro Gly Pro Ser Lys Pro
35 40

<210> 41

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

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 41

Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Cys	Pro	Ser	Cys	Pro
1				5					10		

<210> 42

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 42

Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Ala	Pro	Ser	Ala	Pro
1				5					10		

<210> 43

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 43

Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Cys	Pro	Pro	Cys	Pro
1				5					10		

<210> 44

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 44

Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro
1				5					10		

<210> 45
 <211> 86
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 45
 Ala Ala Ala Phe Val Pro Val Phe Leu Pro Ala Lys Pro Thr Thr Thr
 1 5 10 15

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
 20 25 30

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
 35 40 45

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
 50 55 60

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
 65 70 75 80

Tyr Cys Asn His Arg Asn
 85

<210> 46
 <211> 132
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 46
 Ala Cys Pro Thr Gly Leu Tyr Thr His Ser Gly Glu Cys Cys Lys Ala
 1 5 10 15

Cys Asn Leu Gly Glu Gly Val Ala Gln Pro Cys Gly Ala Asn Gln Thr
 20 25 30

Val Cys Glu Pro Cys Leu Asp Ser Val Thr Phe Ser Asp Val Val Ser

35

40

45

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

Met Ser Ala Pro Cys Val Glu Ala Asp Asp Ala Val Cys Arg Cys Ala
 65 70 75 80

Tyr Gly Tyr Tyr Gln Asp Glu Thr Thr Gly Arg Cys Glu Ala Cys Arg
 85 90 95

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

Asn Thr Val Cys Glu Glu Cys Pro Asp Gly Thr Tyr Ser Asp Glu Ala
 115 120 125

Asp Ala Glu Cys
 130

<210> 47

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 47

Ala Cys Pro Thr Gly Leu Tyr Thr His Ser Gly Glu Cys Cys Lys Ala
 1 5 10 15

Cys Asn Leu Gly Glu Gly Val Ala Gln Pro Cys Gly Ala Asn Gln Thr
 20 25 30

Val Cys

<210> 48

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 48

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

Pro Phe Lys Val
20

<210> 49

<211> 126

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 49

gcagcagcta tcgaggtgat gtatcctccg ccctacctgg ataatgaaaa gagtaatggg 60

actatcattc atgtaaaagg gaagcatctt tgtccttctc cccttttccc cggtcctgtct 120

aaacct 126

<210> 50

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 50

gaaagcaagt acgggccacc ttggcctagc tgtccg 36

<210> 51

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 51

gaatccaagt acggccccc agcgccctagt gcccca 36

<210> 52
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

 <400> 52
 gaatctaaat atggcccgcc atgcccgcct tgccca 36

 <210> 53
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

 <400> 53
 gaaccgaagt cttgtgataa aactcatacg tgcccc 36

 <210> 54
 <211> 258
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 polynucleotide

 <400> 54
 gctgctgctt tcgtaccgt gttcctccct gctaagccta cgactacccc cgcaccgaga 60
 ccaccacgc cagcacccac gattgctagc cagcccctta gtttgcgacc agaagcttgt 120
 cggcctgctg ctggtggcgc ggtacatacc cgcggccttg attttgcttg cgatatatat 180
 atctgggagc ctctggccgg aacatgcggg gtcctcctcc tttctctggt tattactctc 240
 tactgtaatc acaggaat 258

 <210> 55
 <211> 396
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 55

gcctgcccga ccgggctcta cactcatagc ggggaatggt gtaaggcatg taacttgggt 60

gagggcgctg cacagccctg cggagctaac caaacagtgt gcgaaccctg cctcgatagt 120

gtgacgttct ctgatgttgt atcagctaca gaggccttgca aacctgttac tgagtgcgtt 180

ggacttcagt caatgagcgc tccatgtgtg gaggcagatg atgcggtctg tcgatgtgct 240

tacggatact accaagacga gacaacaggg cggtgagagg cctgtagagt ttgtgaggcg 300

ggctccgggc tgggtgtttc atgtcaagac aagcaaaata cggtctgtga agagtgcctt 360

gatggcacct actcagacga agcagatgca gaatgc 396

<210> 56

<211> 102

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 56

gcctgcccta caggactcta cacgcatagc ggtgagtgtt gtaaagcatg caacctcggg 60

gaaggtgtag cccagccatg cggggctaac caaacgttt gc 102

<210> 57

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 57

gctgtgggcc aggacacgca ggaggtcatc gtggtgccac actccttgcc ctttaaggtg 60

<210> 58

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 58

caggtgcagc tgaaagagtc tggacctgga ctggtgcagc ccagccaaac actgagcctg	60
acctgtaccg tgtccggctt cagcctgagc agatacgaca tgcaactgggt ccgacagcct	120
ccaggacaag gcttggaatg gatgggcgtg atctggggca acggcaacac acactatcac	180
agcgccctga agtcccggct gagcatcagc agagatacca gcaagagcca ggtgttcctg	240
aagatgaact ccctccagac cgaggacacc gccatctatt tctgcaccct gcggatcaag	300
gattggggcc ctggcacaat ggtcaccgtt tctagcggag gcggaggatc tgggtggcga	360
ggaagtggcg gaggcggttc tgatatcgtg atgaccaga cacctcctag cctgtctgtg	420
gctctgggcc agtctgtgtc catcagctgc aagagcagcc agtctctggt ggccagcgac	480
gagaacacct acctgaattg gctgctgcaa agccccggca gaagcccaa gagactgac	540
taccaggtgt ccaagctgga cagcggcgtg cccgatagat tttctggcag cggcagcgag	600
aaggacttca ccctgaagat ctccagagtg gaagccgagg acctgggcgt gtactactgt	660
ctgcaaggca tccatctgcc ttggacctt ggaggcggca caaagctgga actgaaggcc	720
gct	723

<210> 59

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 59

gacatcgtga tgaccagac acctcctagc ctgtctgtgg ctctgggcca gtctgtgtcc	60
atcagctgca agagcagcca gtctctggtg gccagcgacg agaacaccta cctgaattgg	120
ctgctgcaaa gccccggcag aagccccaag agactgatct accaggtgtc caagctggac	180
agcggcgtgc ccgatagatt ttctggcagc ggctccgaga aggacttcac cctgaagatc	240
agcagagtgg aagccgagga cctgggcgtg tactactgtc tgcaaggcat ccatctgcct	300
tggacctttg gcggaggcac aaagctggaa ctgaaaggcg gcggaggaag cggaggcggga	360
ggatctggtg gtggtggatc tcaggtgcag ctgaaagagt ctggccctgg actggtgcag	420

cctagccaaa cactgagcct gacctgtacc gtgtccggct tcagcctgag cagatacgac	480
atgcactggg tccgacagcc tccaggacaa ggcttggaat ggatgggcgt gatctggggc	540
aacggcaaca cacactatca cagcgccctg aagtcccggc tgagcatctc cagagatacc	600
agcaagagcc aggtgttcct gaagatgaac tccctccaga ccgaggacac cgccatctat	660
ttctgcaccc tgcggatcaa ggattggggc cctggcaciaa tggtcaccgt gtctagcgcc	720
gct	723

<210> 60

<211> 732

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 60

caggtgcagc tgaaagagtc tggacctgga ctggtgcagc ccagccaaac actgagcctg	60
acctgtaccg tgtccggctt cagcctgagc agatacgaca tgcactgggt ccgacagcct	120
ccaggacaag gcttggaatg gatgggcgtg atctggggca acggcaacac acactatcac	180
agcgccctga agtcccggct gagcatcagc agagatacca gcaagagcca ggtgttcctg	240
aagatgaact ccctccagac cgaggacacc gccatctatt tctgcaccct gcggatcaag	300
gattggggcc ctggcacaat ggtcaccgtg tctagcggca gcacaagcgg ctctggaaaa	360
cctggatctg gcgagggtc taccaagggc gacatcgtga tgaccagac acctccttct	420
ctgtctgtgg ccctgggcca gtctgtgtcc atcagctgta aaagcagcca gtctctggtg	480
gccagcgacg agaacaccta cctgaattgg ctgctgcaaa gccccggcag aagccccaag	540
agactgatct accaggtgtc caagctggac agcggcgtgc ccgatagatt ttctggcagc	600
ggcagcgaga aggacttcac cctgaagatc tccagagtgg aagccgagga cctgggcgtg	660
tactactgtc tgcaaggcat ccatctgcct tggacctttg gcggaggcac aaagctggaa	720
ctgaaggccg ct	732

<210> 61

<211> 732

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 61

gacatcgtga tgacccagac acctcctagc ctgtctgtgg ctctgggcca gtctgtgtcc	60
atcagctgca agagcagcca gtctctggtg gccagcgacg agaacaccta cctgaattgg	120
ctgctgcaaa gccccggcag aagccccaag agactgatct accaggtgtc caagctggac	180
agcggcgtgc ccgatagatt ttctggcagc ggctccgaga aggacttcac cctgaagatc	240
agcagagtgg aagccgagga cctgggcgtg tactactgtc tgcaaggcat ccatctgcct	300
tggacctttg gcggaggcac aaagctggaa ctgaagggca gcacaagcgg ctctggcaaa	360
cctggatctg gcgagggctc taccaaaggc caggtgcagc tgaaagagtc tggccctgga	420
ctggtgcagc ctagccaaac actgagcctg acctgtaccg tgtccggctt cagcctgagc	480
agatacgaca tgcactgggt cgcacagcct ccaggacaag gcttggaatg gatgggcgtg	540
atctggggca acggcaacac acactatcac agcgccctga agtcccggct gagcatctcc	600
agagatacca gcaagagcca ggtgttcctg aagatgaact ccctccagac cgaggacacc	660
gccatctatt tctgcaccct gcggatcaag gattggggcc ctggcacaat ggtcaccgtg	720
tctagcgccg ct	732

<210> 62

<211> 693

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 62

caggtgcagc tgaaagagtc tggacctgga ctggtgcagc ccagccaaac actgagcctg	60
acctgtaccg tgtccggctt cagcctgagc agatacgaca tgcactgggt cgcacagcct	120
ccaggacaag gcttggaatg gatgggcgtg atctggggca acggcaacac acactatcac	180
agcgccctga agtcccggct gagcatcagc agagatacca gcaagagcca ggtgttcctg	240
aagatgaact ccctccagac cgaggacacc gccatctatt tctgcaccct gcggatcaag	300

gattggggcc ctggcacaat ggtcaccgtt tctagtgggtg gcggaggcag cgacatcgtg 360
 atgacacaga cacctccaag cctgtctgtg gccctgggac agtccgtgtc tatcagctgc 420
 aagagcagcc agtctctggt ggccagcgac gagaacacct acctgaattg gctgctgcaa 480
 agccccggca gaagccccaa gagactgata taccaggtgt ccaagctgga cagcggcgtg 540
 cccgatagat tttctggcag cggcagcgag aaggacttca ccctgaagat ctccagagtg 600
 gaagccgagg acctgggcgt gtactactgt ctgcaaggca tccatctgcc ttggaccttt 660
 ggaggcggca caaagctgga actgaaggcc gct 693

<210> 63

<211> 693

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 63

gacatcgtga tgaccagac acctcctagc ctgtctgtgg ctctgggcca gtctgtgtcc 60
 atcagctgca agagcagcca gtctctggtg gccagcgacg agaacaccta cctgaattgg 120
 ctgctgcaaa gccccggcag aagccccaaag agactgatct accaggtgtc caagctggac 180
 agcggcgtgc ccgatagatt ttctggcagc ggctccgaga aggacttcac cctgaagatc 240
 agcagagtgg aagccgagga cctgggcgtg tactactgtc tgcaaggcat ccatctgcct 300
 tggacctttg gcggaggcac aaagctggaa ctgaaaggcg gcggaggatc ccaggtgcag 360
 ctgaaagaat ctggccctgg actggtgcag ccagccaaa cactgagcct gacctgtacc 420
 gtgtccggct tcagcctgag cagatacgac atgcactggg tccgacagcc tccaggacaa 480
 ggcttggaat ggatgggcgt gatctggggc aacggcaaca cacactatca cagcgccttg 540
 aagtcccggc tgagcatctc cagagatacc agcaagagcc aggtgttcct gaagatgaac 600
 tccctccaga ccgaggacac cgccatctat ttctgcaccc tgcggatcaa ggattggggc 660
 cctggcacaa tggtcaccgt gtctagcgcc gct 693

<210> 64

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 64

ggaggcggag gatctggtgg cggaggaagt ggcggaggcg gttct 45

<210> 65

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 65

ggtggtggtg gcagtgggtgg cgggtggctca ggtggcggcg gatcaggcgg tgggtggttct 60

ggcggcgggtg gatct 75

<210> 66

<211> 730

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 66

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

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly
35 40 45

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

Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
85 90 95

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

Ala Val Tyr Tyr Cys Ala Thr Phe Ala Leu Phe Gly Phe Arg Glu Gln
115 120 125

Ala Phe Asp Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
145 150 155 160

Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
165 170 175

Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
180 185 190

Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala
195 200 205

Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
210 215 220

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
225 230 235 240

Leu Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Phe Thr Phe
245 250 255

Gly Pro Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala Pro Arg
260 265 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg
275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
290 295 300

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
 305 310 315 320

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Lys Arg Gly Arg Lys
 325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
 340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
 355 360 365

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

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
 385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
 405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
 420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
 435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
 450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 465 470 475 480

Ala Leu Pro Pro Arg Gly Ser Ser Gly Thr Gly Met Val Ser Lys Gly
 485 490 495

Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp Gly
 500 505 510

Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly Asp
 515 520 525

Ala Thr Tyr Gly Lys Leu Thr Leu Lys Leu Ile Cys Thr Thr Gly Lys
 530 535 540

Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu Gly Tyr Gly Leu
 545 550 555 560

Gln Cys Phe Ala Arg Tyr Pro Asp His Met Lys Gln His Asp Phe Phe
 565 570 575

Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe Phe
 580 585 590

Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu Gly
 595 600 605

Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys Glu
 610 615 620

Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser His
 625 630 635 640

Asn Val Tyr Ile Thr Ala Asp Lys Gln Lys Asn Gly Ile Lys Ala Asn
 645 650 655

Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val Gln Leu Ala Asp
 660 665 670

His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu Pro
 675 680 685

Asp Asn His Tyr Leu Ser Tyr Gln Ser Ala Leu Ser Lys Asp Pro Asn
 690 695 700

Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val Thr Ala Ala Gly
 705 710 715 720

Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
 725 730

<210> 67

<211> 501

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 67

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1 5 10 15

Gly Ser Thr Gly Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp Lys
20 25 30

Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
35 40 45

Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
50 55 60

Thr Asp Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
65 70 75 80

Glu Trp Ile Gly Tyr Ile Tyr Pro Tyr Asn Gly Gly Thr Gly Tyr Asn
85 90 95

Gln Lys Phe Lys Ser Lys Ala Thr Ile Thr Ala Asp Glu Ser Thr Asn
100 105 110

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
115 120 125

Tyr Tyr Cys Ala Arg Gly Arg Pro Ala Met Asp Tyr Trp Gly Gln Gly
130 135 140

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
165 170 175

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
 180 185 190

Glu Ser Val Asp Asn Tyr Gly Ile Ser Phe Met Asn Trp Phe Gln Gln
 195 200 205

Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Asn Gln
 210 215 220

Gly Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 225 230 235 240

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr
 245 250 255

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

Lys Val Glu Ile Lys Ser Gly Ala Ala Ala Ile Glu Val Met Tyr Pro
 275 280 285

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

Lys Gly Lys His Leu Cys Pro Ser Pro Leu Phe Pro Gly Pro Ser Lys
 305 310 315 320

Pro Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser
 325 330 335

Leu Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val Arg Ser Lys Arg
 340 345 350

Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro Arg Arg Pro
 355 360 365

Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro Arg Asp Phe
 370 375 380

Ala Ala Tyr Arg Ser Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
 385 390 395 400

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
 405 410 415

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
 420 425 430

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
 435 440 445

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

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
 465 470 475 480

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 485 490 495

Ala Leu Pro Pro Arg
 500

<210> 68

<211> 452

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 68

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser Val
165 170 175

Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu
180 185 190

Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser Pro
195 200 205

Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp Ser
210 215 220

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

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
245 250 255

Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
260 265 270

Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
 275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
 290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
 305 310 315 320

Leu Leu Pro Leu Gly Gly Leu Pro Leu Leu Ile Thr Thr Cys Phe Cys
 325 330 335

Leu Phe Cys Cys Leu Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser
 340 345 350

Asp Thr Ala Gly Arg Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser
 355 360 365

Glu Gln Thr Glu Ala Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser
 370 375 380

Glu Thr Gly Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln
 385 390 395 400

Glu Gly Ser Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro
 405 410 415

Gly Ile Val Tyr Ala Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser
 420 425 430

Arg Leu Ala Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile
 435 440 445

Cys Val Arg Ser
 450

<210> 69

<211> 673

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 69

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
 85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser Val
 165 170 175

Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu
 180 185 190

Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser Pro
 195 200 205

Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp Ser
 210 215 220

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

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
 245 250 255

Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
 260 265 270

Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
 275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
 290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
 305 310 315 320

Leu Leu Pro Leu Gly Gly Leu Pro Leu Leu Ile Thr Thr Cys Phe Cys
 325 330 335

Leu Phe Cys Cys Leu Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser
 340 345 350

Asp Thr Ala Gly Arg Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser
 355 360 365

Glu Gln Thr Glu Ala Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser
 370 375 380

Glu Thr Gly Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln
 385 390 395 400

Glu Gly Ser Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro
 405 410 415

Gly Ile Val Tyr Ala Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser
 420 425 430

Arg Leu Ala Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile
 435 440 445

Cys Val Arg Ser Gly Ser Gly Ala Thr Asn Phe Ser Leu Leu Lys Gln
 450 455 460

Ala Gly Asp Val Glu Glu Asn Pro Gly Pro Met Thr Glu Tyr Lys Pro
 465 470 475 480

Thr Val Arg Leu Ala Thr Arg Asp Asp Val Pro Arg Ala Val Arg Thr
 485 490 495

Leu Ala Ala Ala Phe Ala Asp Tyr Pro Ala Thr Arg His Thr Val Asp
 500 505 510

Pro Asp Arg His Ile Glu Arg Val Thr Glu Leu Gln Glu Leu Phe Leu
 515 520 525

Thr Arg Val Gly Leu Asp Ile Gly Lys Val Trp Val Ala Asp Asp Gly
 530 535 540

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

Val Phe Ala Glu Ile Gly Pro Arg Met Ala Glu Leu Ser Gly Ser Arg
 565 570 575

Leu Ala Ala Gln Gln Gln Met Glu Gly Leu Leu Ala Pro His Arg Pro
 580 585 590

Lys Glu Pro Ala Trp Phe Leu Ala Thr Val Gly Val Ser Pro Asp His
 595 600 605

Gln Gly Lys Gly Leu Gly Ser Ala Val Val Leu Pro Gly Val Glu Ala
 610 615 620

Ala Glu Arg Ala Gly Val Pro Ala Phe Leu Glu Thr Ser Ala Pro Arg
625 630 635 640

Asn Leu Pro Phe Tyr Glu Arg Leu Gly Phe Thr Val Thr Ala Asp Val
645 650 655

Glu Val Pro Glu Gly Pro Arg Thr Trp Cys Met Thr Arg Lys Pro Gly
660 665 670

Ala

<210> 70

<211> 509

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 70

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser Val
 165 170 175

Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu
 180 185 190

Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser Pro
 195 200 205

Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp Ser
 210 215 220

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

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
 245 250 255

Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
 260 265 270

Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
 275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
 290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
 305 310 315 320

Val Ile Gly Ile Leu Val Ala Val Ile Leu Leu Leu Leu Leu Leu
 325 330 335

Leu Leu Phe Leu Ile Leu Arg His Arg Arg Gln Gly Lys His Trp Thr
 340 345 350

Ser Thr Gln Arg Lys Ala Asp Phe Gln His Pro Ala Gly Ala Val Gly
 355 360 365

Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp Arg Ser Ser Pro Ala Ala
 370 375 380

Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys His Thr Gln Pro
 385 390 395 400

Glu Asp Gly Val Glu Met Asp Thr Arg Ser Pro His Asp Glu Asp Pro
 405 410 415

Gln Ala Val Thr Tyr Ala Glu Val Lys His Ser Arg Pro Arg Arg Glu
 420 425 430

Met Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu Asp Thr Lys
 435 440 445

Asp Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu Ala Ala Ala
 450 455 460

Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His Ser Leu Thr
 465 470 475 480

Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro Ser Gln Glu Gly Pro Ser
 485 490 495

Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu Ala Ile His
 500 505

<210> 71

<211> 730

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 71

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
 85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser Val
 165 170 175

Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu
 180 185 190

Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser Pro
 195 200 205

Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp Ser
 210 215 220

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

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
 245 250 255

Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
 260 265 270

Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
 275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
 290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
 305 310 315 320

Val Ile Gly Ile Leu Val Ala Val Ile Leu Leu Leu Leu Leu Leu Leu
 325 330 335

Leu Leu Phe Leu Ile Leu Arg His Arg Arg Gln Gly Lys His Trp Thr
 340 345 350

Ser Thr Gln Arg Lys Ala Asp Phe Gln His Pro Ala Gly Ala Val Gly
 355 360 365

Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp Arg Ser Ser Pro Ala Ala
 370 375 380

Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys His Thr Gln Pro
 385 390 395 400

Glu Asp Gly Val Glu Met Asp Thr Arg Ser Pro His Asp Glu Asp Pro
 405 410 415

Gln Ala Val Thr Tyr Ala Glu Val Lys His Ser Arg Pro Arg Arg Glu
 420 425 430

Met Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu Asp Thr Lys
 435 440 445

Asp Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu Ala Ala Ala
 450 455 460

Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His Ser Leu Thr
 465 470 475 480

Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro Ser Gln Glu Gly Pro Ser
 485 490 495

Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu Ala Ile His Gly Ser Gly
 500 505 510

Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
 515 520 525

Pro Gly Pro Met Thr Glu Tyr Lys Pro Thr Val Arg Leu Ala Thr Arg
 530 535 540

Asp Asp Val Pro Arg Ala Val Arg Thr Leu Ala Ala Ala Phe Ala Asp
 545 550 555 560

Tyr Pro Ala Thr Arg His Thr Val Asp Pro Asp Arg His Ile Glu Arg
 565 570 575

Val Thr Glu Leu Gln Glu Leu Phe Leu Thr Arg Val Gly Leu Asp Ile
 580 585 590

Gly Lys Val Trp Val Ala Asp Asp Gly Ala Ala Val Ala Val Trp Thr
 595 600 605

Thr Pro Glu Ser Val Glu Ala Gly Ala Val Phe Ala Glu Ile Gly Pro
 610 615 620

Arg Met Ala Glu Leu Ser Gly Ser Arg Leu Ala Ala Gln Gln Gln Met
 625 630 635 640

Glu Gly Leu Leu Ala Pro His Arg Pro Lys Glu Pro Ala Trp Phe Leu
 645 650 655

Ala Thr Val Gly Val Ser Pro Asp His Gln Gly Lys Gly Leu Gly Ser
 660 665 670

Ala Val Val Leu Pro Gly Val Glu Ala Ala Glu Arg Ala Gly Val Pro
 675 680 685

Ala Phe Leu Glu Thr Ser Ala Pro Arg Asn Leu Pro Phe Tyr Glu Arg
 690 695 700

Leu Gly Phe Thr Val Thr Ala Asp Val Glu Val Pro Glu Gly Pro Arg
 705 710 715 720

Thr Trp Cys Met Thr Arg Lys Pro Gly Ala
 725 730

<210> 72

<211> 452

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 72

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser
 35 40 45

Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser
 50 55 60

Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser
 65 70 75 80

Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp
85 90 95

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe
100 105 110

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
115 120 125

Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys
130 135 140

Leu Glu Leu Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Gln
165 170 175

Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe Ser Leu
180 185 190

Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly Leu
195 200 205

Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His Ser
210 215 220

Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser Gln
225 230 235 240

Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile Tyr
245 250 255

Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val Thr
260 265 270

Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
305 310 315 320

Leu Leu Pro Leu Gly Gly Leu Pro Leu Leu Ile Thr Thr Cys Phe Cys
325 330 335

Leu Phe Cys Cys Leu Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser
340 345 350

Asp Thr Ala Gly Arg Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser
355 360 365

Glu Gln Thr Glu Ala Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser
370 375 380

Glu Thr Gly Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln
385 390 395 400

Glu Gly Ser Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro
405 410 415

Gly Ile Val Tyr Ala Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser
420 425 430

Arg Leu Ala Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile
435 440 445

Cys Val Arg Ser
450

<210> 73

<211> 620

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 73

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
 85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser Val
 165 170 175

Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu
 180 185 190

Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser Pro
 195 200 205

Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp Ser
 210 215 220

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

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
 245 250 255

Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
 260 265 270

Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
 275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
 290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
 305 310 315 320

Leu Leu Pro Leu Gly Gly Leu Pro Leu Leu Ile Thr Thr Cys Phe Cys
 325 330 335

Leu Phe Cys Cys Leu Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser
 340 345 350

Asp Thr Ala Gly Arg Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser
 355 360 365

Glu Gln Thr Glu Ala Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser
 370 375 380

Glu Thr Gly Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln
 385 390 395 400

Glu Gly Ser Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro
 405 410 415

Gly Ile Val Tyr Ala Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser
 420 425 430

Arg Leu Ala Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile
 435 440 445

Cys Val Arg Ser Leu Arg His Arg Arg Gln Gly Lys His Trp Thr Ser
 450 455 460

Thr Gln Arg Lys Ala Asp Phe Gln His Pro Ala Gly Ala Val Gly Pro
 465 470 475 480

Glu Pro Thr Asp Arg Gly Leu Gln Trp Arg Ser Ser Pro Ala Ala Asp
 485 490 495

Ala Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys His Thr Gln Pro Glu
 500 505 510

Asp Gly Val Glu Met Asp Thr Arg Ser Pro His Asp Glu Asp Pro Gln
 515 520 525

Ala Val Thr Tyr Ala Glu Val Lys His Ser Arg Pro Arg Arg Glu Met
 530 535 540

Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu Asp Thr Lys Asp
 545 550 555 560

Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu Ala Ala Ala Ser
 565 570 575

Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His Ser Leu Thr Leu
 580 585 590

Arg Arg Glu Ala Thr Glu Pro Pro Pro Ser Gln Glu Gly Pro Ser Pro
 595 600 605

Ala Val Pro Ser Ile Tyr Ala Thr Leu Ala Ile His
 610 615 620

<210> 74

<211> 509

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 74

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser
 35 40 45

Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser
 50 55 60

Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser
 65 70 75 80

Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp
 85 90 95

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe
 100 105 110

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
 115 120 125

Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys
 130 135 140

Leu Glu Leu Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Gln
 165 170 175

Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe Ser Leu
 180 185 190

Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly Leu
 195 200 205

Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His Ser
210 215 220

Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser Gln
225 230 235 240

Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile Tyr
245 250 255

Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val Thr
260 265 270

Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
305 310 315 320

Val Ile Gly Ile Leu Val Ala Val Ile Leu Leu Leu Leu Leu Leu Leu
325 330 335

Leu Leu Phe Leu Ile Leu Arg His Arg Arg Gln Gly Lys His Trp Thr
340 345 350

Ser Thr Gln Arg Lys Ala Asp Phe Gln His Pro Ala Gly Ala Val Gly
355 360 365

Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp Arg Ser Ser Pro Ala Ala
370 375 380

Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys His Thr Gln Pro
385 390 395 400

Glu Asp Gly Val Glu Met Asp Thr Arg Ser Pro His Asp Glu Asp Pro
405 410 415

Gln Ala Val Thr Tyr Ala Glu Val Lys His Ser Arg Pro Arg Arg Glu
420 425 430

Met Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu Asp Thr Lys
435 440 445

Asp Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu Ala Ala Ala
450 455 460

Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His Ser Leu Thr
465 470 475 480

Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro Ser Gln Glu Gly Pro Ser
485 490 495

Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu Ala Ile His
500 505

<210> 75

<211> 620

<212> PRT

<213> Artificial Sequence

$\langle 220 \rangle$

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 75

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser Val
 165 170 175

Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu
 180 185 190

Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser Pro
 195 200 205

Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp Ser
 210 215 220

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

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
 245 250 255

Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
 260 265 270

Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
 275 280 285

Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
 290 295 300

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
305 310 315 320

Val Ile Gly Ile Leu Val Ala Val Ile Leu Leu Leu Leu Leu Leu
325 330 335

Leu Leu Phe Leu Ile Leu Arg His Arg Arg Gln Gly Lys His Trp Thr
340 345 350

Ser Thr Gln Arg Lys Ala Asp Phe Gln His Pro Ala Gly Ala Val Gly
355 360 365

Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp Arg Ser Ser Pro Ala Ala
370 375 380

Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys His Thr Gln Pro
385 390 395 400

Glu Asp Gly Val Glu Met Asp Thr Arg Ser Pro His Asp Glu Asp Pro
405 410 415

Gln Ala Val Thr Tyr Ala Glu Val Lys His Ser Arg Pro Arg Arg Glu
420 425 430

Met Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu Asp Thr Lys
435 440 445

Asp Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu Ala Ala Ala
450 455 460

Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His Ser Leu Thr
465 470 475 480

Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro Ser Gln Glu Gly Pro Ser
485 490 495

Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu Ala Ile His Arg Arg His
500 505 510

Gln Gly Lys Gln Asn Glu Leu Ser Asp Thr Ala Gly Arg Glu Ile Asn
515 520 525

Leu Val Asp Ala His Leu Lys Ser Glu Gln Thr Glu Ala Ser Thr Arg
 530 535 540

Gln Asn Ser Gln Val Leu Leu Ser Glu Thr Gly Ile Tyr Asp Asn Asp
 545 550 555 560

Pro Asp Leu Cys Phe Arg Met Gln Glu Gly Ser Glu Val Tyr Ser Asn
 565 570 575

Pro Cys Leu Glu Glu Asn Lys Pro Gly Ile Val Tyr Ala Ser Leu Asn
 580 585 590

His Ser Val Ile Gly Pro Asn Ser Arg Leu Ala Arg Asn Val Lys Glu
 595 600 605

Ala Pro Thr Glu Tyr Ala Ser Ile Cys Val Arg Ser
 610 615 620

<210> 76

<211> 442

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 76

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
145 150 155 160

Pro Pro Ser Leu Ser Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys
165 170 175

Lys Ser Ser Gln Ser Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn
180 185 190

Trp Leu Leu Gln Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln
195 200 205

Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
210 215 220

Ser Glu Lys Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
225 230 235 240

Leu Gly Val Tyr Tyr Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe
245 250 255

Gly Gly Gly Thr Lys Leu Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg
260 265 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg
275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
 290 295 300

Leu Asp Phe Ala Cys Asp Leu Leu Pro Leu Gly Gly Leu Pro Leu Leu
 305 310 315 320

Ile Thr Thr Cys Phe Cys Leu Phe Cys Cys Leu Arg Arg His Gln Gly
 325 330 335

Lys Gln Asn Glu Leu Ser Asp Thr Ala Gly Arg Glu Ile Asn Leu Val
 340 345 350

Asp Ala His Leu Lys Ser Glu Gln Thr Glu Ala Ser Thr Arg Gln Asn
 355 360 365

Ser Gln Val Leu Leu Ser Glu Thr Gly Ile Tyr Asp Asn Asp Pro Asp
 370 375 380

Leu Cys Phe Arg Met Gln Glu Gly Ser Glu Val Tyr Ser Asn Pro Cys
 385 390 395 400

Leu Glu Glu Asn Lys Pro Gly Ile Val Tyr Ala Ser Leu Asn His Ser
 405 410 415

Val Ile Gly Pro Asn Ser Arg Leu Ala Arg Asn Val Lys Glu Ala Pro
 420 425 430

Thr Glu Tyr Ala Ser Ile Cys Val Arg Ser
 435 440

<210> 77

<211> 499

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 77

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
 85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
 145 150 155 160

Pro Pro Ser Leu Ser Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys
 165 170 175

Lys Ser Ser Gln Ser Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn
 180 185 190

Trp Leu Leu Gln Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln
 195 200 205

Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
 210 215 220

Ser Glu Lys Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
 225 230 235 240

Leu Gly Val Tyr Tyr Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe
 245 250 255

Gly Gly Gly Thr Lys Leu Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg
 260 265 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg
 275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
 290 295 300

Leu Asp Phe Ala Cys Asp Val Ile Gly Ile Leu Val Ala Val Ile Leu
 305 310 315 320

Leu Leu Leu Leu Leu Leu Leu Leu Phe Leu Ile Leu Arg His Arg Arg
 325 330 335

Gln Gly Lys His Trp Thr Ser Thr Gln Arg Lys Ala Asp Phe Gln His
 340 345 350

Pro Ala Gly Ala Val Gly Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp
 355 360 365

Arg Ser Ser Pro Ala Ala Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala
 370 375 380

Val Lys His Thr Gln Pro Glu Asp Gly Val Glu Met Asp Thr Arg Ser
 385 390 395 400

Pro His Asp Glu Asp Pro Gln Ala Val Thr Tyr Ala Glu Val Lys His
 405 410 415

Ser Arg Pro Arg Arg Glu Met Ala Ser Pro Pro Ser Pro Leu Ser Gly
 420 425 430

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

Asp Thr Glu Ala Ala Ala Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala
 450 455 460

Gln Leu His Ser Leu Thr Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro
 465 470 475 480

Ser Gln Glu Gly Pro Ser Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu
 485 490 495

Ala Ile His

<210> 78

<211> 610

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 78

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
 85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
 145 150 155 160

Pro Pro Ser Leu Ser Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys
 165 170 175

Lys Ser Ser Gln Ser Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn
 180 185 190

Trp Leu Leu Gln Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln
 195 200 205

Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
 210 215 220

Ser Glu Lys Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
 225 230 235 240

Leu Gly Val Tyr Tyr Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe
 245 250 255

Gly Gly Gly Thr Lys Leu Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg
 260 265 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg
 275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
 290 295 300

Leu Asp Phe Ala Cys Asp Val Ile Gly Ile Leu Val Ala Val Ile Leu
 305 310 315 320

Leu Leu Leu Leu Leu Leu Leu Phe Leu Ile Leu Arg His Arg Arg
 325 330 335

Gln Gly Lys His Trp Thr Ser Thr Gln Arg Lys Ala Asp Phe Gln His
 340 345 350

Pro Ala Gly Ala Val Gly Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp
 355 360 365

Arg Ser Ser Pro Ala Ala Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala
 370 375 380

Val Lys His Thr Gln Pro Glu Asp Gly Val Glu Met Asp Thr Arg Ser
 385 390 395 400

Pro His Asp Glu Asp Pro Gln Ala Val Thr Tyr Ala Glu Val Lys His
 405 410 415

Ser Arg Pro Arg Arg Glu Met Ala Ser Pro Pro Ser Pro Leu Ser Gly
 420 425 430

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

Asp Thr Glu Ala Ala Ala Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala
 450 455 460

Gln Leu His Ser Leu Thr Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro
 465 470 475 480

Ser Gln Glu Gly Pro Ser Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu
 485 490 495

Ala Ile His Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser Asp Thr
 500 505 510

Ala Gly Arg Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser Glu Gln
 515 520 525

Thr Glu Ala Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser Glu Thr
 530 535 540

Gly Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln Glu Gly
 545 550 555 560

Ser Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro Gly Ile
 565 570 575

Val Tyr Ala Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser Arg Leu
 580 585 590

Ala Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile Cys Val
 595 600 605

Arg Ser
 610

<210> 79

<211> 455

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 79

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
 20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
 85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly
 145 150 155 160

Glu Gly Ser Thr Lys Gly Asp Ile Val Met Thr Gln Thr Pro Pro Ser
 165 170 175

Leu Ser Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser
 180 185 190

Gln Ser Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu
 195 200 205

Gln Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys
 210 215 220

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

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val
 245 250 255

Tyr Tyr Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly
 260 265 270

Thr Lys Leu Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 275 280 285

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala
 290 295 300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 305 310 315 320

Ala Cys Asp Leu Leu Pro Leu Gly Gly Leu Pro Leu Leu Ile Thr Thr
325 330 335

Cys Phe Cys Leu Phe Cys Cys Leu Arg Arg His Gln Gly Lys Gln Asn
340 345 350

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

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

Leu Leu Ser Glu Thr Gly Ile Tyr Asp Asn Asp Pro Asp Leu Cys Phe
385 390 395 400

Arg Met Gln Glu Gly Ser Glu Val Tyr Ser Asn Pro Cys Leu Glu Glu
405 410 415

Asn Lys Pro Gly Ile Val Tyr Ala Ser Leu Asn His Ser Val Ile Gly
420 425 430

Pro Asn Ser Arg Leu Ala Arg Asn Val Lys Glu Ala Pro Thr Glu Tyr
435 440 445

Ala Ser Ile Cys Val Arg Ser
450 455

<210> 80

<211> 512

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 80

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
 35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
 65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
 85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
 100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
 115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly
 145 150 155 160

Glu Gly Ser Thr Lys Gly Asp Ile Val Met Thr Gln Thr Pro Pro Ser
 165 170 175

Leu Ser Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser
 180 185 190

Gln Ser Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu
 195 200 205

Gln Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys
 210 215 220

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

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val
 245 250 255

Tyr Tyr Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly
 260 265 270

Thr Lys Leu Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 275 280 285

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala
 290 295 300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 305 310 315 320

Ala Cys Asp Val Ile Gly Ile Leu Val Ala Val Ile Leu Leu Leu Leu
 325 330 335

Leu Leu Leu Leu Phe Leu Ile Leu Arg His Arg Arg Gln Gly Lys
 340 345 350

His Trp Thr Ser Thr Gln Arg Lys Ala Asp Phe Gln His Pro Ala Gly
 355 360 365

Ala Val Gly Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp Arg Ser Ser
 370 375 380

Pro Ala Ala Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys His
 385 390 395 400

Thr Gln Pro Glu Asp Gly Val Glu Met Asp Thr Arg Ser Pro His Asp
 405 410 415

Glu Asp Pro Gln Ala Val Thr Tyr Ala Glu Val Lys His Ser Arg Pro
 420 425 430

Arg Arg Glu Met Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu
 435 440 445

Asp Thr Lys Asp Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu
 450 455 460

Ala Ala Ala Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His
465 470 475 480

Ser Leu Thr Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro Ser Gln Glu
485 490 495

Gly Pro Ser Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu Ala Ile His
500 505 510

<210> 81

<211> 623

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 81

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

His Ala Ala Arg Pro Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp
20 25 30

Lys Gly Gly Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val
35 40 45

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

Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln Gly
65 70 75 80

Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr His
85 90 95

Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser
100 105 110

Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala Ile
115 120 125

Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met Val
 130 135 140

Thr Val Ser Ser Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly
 145 150 155 160

Glu Gly Ser Thr Lys Gly Asp Ile Val Met Thr Gln Thr Pro Pro Ser
 165 170 175

Leu Ser Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser
 180 185 190

Gln Ser Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu
 195 200 205

Gln Ser Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys
 210 215 220

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

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val
 245 250 255

Tyr Tyr Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly
 260 265 270

Thr Lys Leu Glu Leu Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 275 280 285

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala
 290 295 300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 305 310 315 320

Ala Cys Asp Val Ile Gly Ile Leu Val Ala Val Ile Leu Leu Leu Leu
 325 330 335

Leu Leu Leu Leu Leu Phe Leu Ile Leu Arg His Arg Arg Gln Gly Lys
 340 345 350

His Trp Thr Ser Thr Gln Arg Lys Ala Asp Phe Gln His Pro Ala Gly
 355 360 365

Ala Val Gly Pro Glu Pro Thr Asp Arg Gly Leu Gln Trp Arg Ser Ser
 370 375 380

Pro Ala Ala Asp Ala Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys His
 385 390 395 400

Thr Gln Pro Glu Asp Gly Val Glu Met Asp Thr Arg Ser Pro His Asp
 405 410 415

Glu Asp Pro Gln Ala Val Thr Tyr Ala Glu Val Lys His Ser Arg Pro
 420 425 430

Arg Arg Glu Met Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu
 435 440 445

Asp Thr Lys Asp Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu
 450 455 460

Ala Ala Ala Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His
 465 470 475 480

Ser Leu Thr Leu Arg Arg Glu Ala Thr Glu Pro Pro Pro Ser Gln Glu
 485 490 495

Gly Pro Ser Pro Ala Val Pro Ser Ile Tyr Ala Thr Leu Ala Ile His
 500 505 510

Arg Arg His Gln Gly Lys Gln Asn Glu Leu Ser Asp Thr Ala Gly Arg
 515 520 525

Glu Ile Asn Leu Val Asp Ala His Leu Lys Ser Glu Gln Thr Glu Ala
 530 535 540

Ser Thr Arg Gln Asn Ser Gln Val Leu Leu Ser Glu Thr Gly Ile Tyr
 545 550 555 560

Asp Asn Asp Pro Asp Leu Cys Phe Arg Met Gln Glu Gly Ser Glu Val
565 570 575

Tyr Ser Asn Pro Cys Leu Glu Glu Asn Lys Pro Gly Ile Val Tyr Ala
580 585 590

Ser Leu Asn His Ser Val Ile Gly Pro Asn Ser Arg Leu Ala Arg Asn
595 600 605

Val Lys Glu Ala Pro Thr Glu Tyr Ala Ser Ile Cys Val Arg Ser
610 615 620

<210> 82

<211> 21

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Description of Artificial Sequence: Synthetic peptide

<400> 82

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr
20

<210> 83

<211> 27

<212> PRT

<213> Artificial Sequence

$\langle 220 \rangle$

<223> Description of Artificial Sequence: Synthetic peptide

<400> 83

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg
20 25

<210> 84
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 84
 Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
 1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn
 20 25

<210> 85
 <211> 45
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 85
 Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
 1 5 10 15

Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
 20 25 30

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
 35 40 45

<210> 86
 <211> 66
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 86
 Ala Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe Val Pro Val Phe
 1 5 10 15

Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
 20 25 30

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
 35 40 45

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

Cys Asp
 65

<210> 87

<211> 55

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 87

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

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu
 20 25 30

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
 35 40 45

Gly Leu Asp Phe Ala Cys Asp
 50 55

<210> 88

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 peptide

<220>

<221> MOD_RES

<222> (5)..(5)
 <223> Leu or Ile

<220>
 <221> MOD_RES
 <222> (11)..(11)
 <223> Leu or Ile

<400> 88
 Gly Gly Cys Lys Xaa Ser Gly Gly Cys Lys Xaa Ser
 1 5 10

<210> 89
 <211> 426
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 89
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
 35 40 45

Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr
 65 70 75 80

His Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys
 85 90 95

Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala
 100 105 110

Ile Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met
 115 120 125

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser
 145 150 155 160

Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser
 165 170 175

Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser
 180 185 190

Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp
 195 200 205

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe
 210 215 220

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
 225 230 235 240

Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys
 245 250 255

Leu Glu Leu Lys Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp
 260 265 270

Ser Thr Asn Gly Ala Ala Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 275 280 285

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala
 290 295 300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 305 310 315 320

Ala Cys Asp Ile Leu Ile Gly Thr Ser Val Val Ile Ile Leu Phe Ile
 325 330 335

Leu Leu Phe Phe Leu Leu His Arg Trp Cys Ser Asn Lys Lys Asn Ala

340

345

350

Ala Val Met Asp Gln Glu Ser Ala Gly Asn Arg Thr Ala Asn Ser Glu
 355 360 365

Asp Ser Asp Glu Gln Asp Pro Gln Glu Val Thr Tyr Thr Gln Leu Asn
 370 375 380

His Cys Val Phe Thr Gln Arg Lys Ile Thr Arg Pro Ser Gln Arg Pro
 385 390 395 400

Lys Thr Pro Pro Thr Asp Ile Ile Val Tyr Thr Glu Leu Pro Asn Ala
 405 410 415

Glu Ser Arg Ser Lys Val Val Ser Cys Pro
 420 425

<210> 90

<211> 385

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 90

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

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
 35 40 45

Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr
 65 70 75 80

His Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys

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

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
305 310 315 320

Ala Cys Asp Val Ile Gly Ile Leu Val Ala Val Ile Leu Leu Leu Leu
325 330 335

Leu Leu Leu Leu Leu Phe Leu Ile Met Thr Asp Ser Val Ile Tyr Ser
340 345 350

Met Leu Glu Leu Pro Thr Ala Thr Gln Ala Gln Asn Asp Tyr Gly Pro
355 360 365

Gln Gln Lys Ser Ser Ser Ser Arg Pro Ser Cys Ser Cys Leu Gly Ser
370 375 380

Gly
385

<210> 91

<211> 385

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 91

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

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
35 40 45

Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr
65 70 75 80

His Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys
85 90 95

Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala
100 105 110

Ile Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met
115 120 125

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser
145 150 155 160

Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser
165 170 175

Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser
180 185 190

Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp
195 200 205

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe
210 215 220

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
225 230 235 240

Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys
245 250 255

Leu Glu Leu Lys Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp
260 265 270

Ser Thr Asn Gly Ala Ala Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
275 280 285

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala

290

295

300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 305 310 315 320

Ala Cys Asp Val Ala Ile Ala Leu Gly Leu Leu Thr Ala Val Leu Leu
 325 330 335

Ser Val Leu Leu Tyr Gln Trp Ile Met Thr Asp Ser Val Ile Tyr Ser
 340 345 350

Met Leu Glu Leu Pro Thr Ala Thr Gln Ala Gln Asn Asp Tyr Gly Pro
 355 360 365

Gln Gln Lys Ser Ser Ser Ser Arg Pro Ser Cys Ser Cys Leu Gly Ser
 370 375 380

Gly
 385

<210> 92

<211> 445

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 92

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

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
 35 40 45

Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr

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

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala
 290 295 300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 305 310 315 320

Ala Cys Asp Ile Leu Ile Gly Val Ser Val Val Phe Leu Phe Cys Leu
 325 330 335

Leu Leu Leu Val Leu Phe Cys Leu His Arg Gln Asn Gln Ile Lys Gln
 340 345 350

Gly Pro Pro Arg Ser Lys Asp Glu Glu Gln Lys Pro Gln Gln Arg Pro
 355 360 365

Asp Leu Ala Val Asp Val Leu Glu Arg Thr Ala Asp Lys Ala Thr Val
 370 375 380

Asn Gly Leu Pro Glu Lys Asp Arg Glu Thr Asp Thr Ser Ala Leu Ala
 385 390 395 400

Ala Gly Ser Ser Gln Glu Val Thr Tyr Ala Gln Leu Asp His Trp Ala
 405 410 415

Leu Thr Gln Arg Thr Ala Arg Ala Val Ser Pro Gln Ser Thr Lys Pro
 420 425 430

Met Ala Glu Ser Ile Thr Tyr Ala Ala Val Ala Arg His
 435 440 445

<210> 93

<211> 460

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 93

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

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
 35 40 45

Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr
 65 70 75 80

His Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys
 85 90 95

Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala
 100 105 110

Ile Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met
 115 120 125

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser
 145 150 155 160

Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser
 165 170 175

Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser
 180 185 190

Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp
 195 200 205

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe
 210 215 220

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr

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

Ala Glu Pro Ser Ile Tyr Ala Thr Leu Ala Ile His
 450 455 460

<210> 94

<211> 511

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 94

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

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
 35 40 45

Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr
 65 70 75 80

His Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys
 85 90 95

Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala
 100 105 110

Ile Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met
 115 120 125

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser
 145 150 155 160

Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser
165 170 175

Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser
180 185 190

Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp
195 200 205

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe
210 215 220

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
225 230 235 240

Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys
245 250 255

Leu Glu Leu Lys Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp
260 265 270

Ser Thr Asn Gly Ala Ala Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
275 280 285

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala
290 295 300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
305 310 315 320

Ala Cys Asp Val Leu Ile Gly Val Ser Val Ala Phe Val Leu Leu Leu
325 330 335

Phe Leu Leu Leu Phe Leu Leu Leu Arg Arg Gln Arg His Ser Lys His
340 345 350

Arg Thr Ser Asp Gln Arg Lys Thr Asp Phe Gln Arg Pro Ala Gly Ala
355 360 365

Ala Glu Thr Glu Pro Lys Asp Arg Gly Leu Leu Arg Arg Ser Ser Pro

370

375

380

Ala Ala Asp Val Gln Glu Glu Asn Leu Tyr Ala Ala Val Lys Asp Thr
 385 390 395 400

Gln Ser Glu Asp Arg Val Glu Leu Asp Ser Gln Ser Pro His Asp Glu
 405 410 415

Asp Pro Gln Ala Val Thr Tyr Ala Pro Val Lys His Ser Ser Pro Arg
 420 425 430

Arg Glu Met Ala Ser Pro Pro Ser Ser Leu Ser Gly Glu Phe Leu Asp
 435 440 445

Thr Lys Asp Arg Gln Val Glu Glu Asp Arg Gln Met Asp Thr Glu Ala
 450 455 460

Ala Ala Ser Glu Ala Ser Gln Asp Val Thr Tyr Ala Gln Leu His Ser
 465 470 475 480

Leu Thr Leu Arg Arg Lys Ala Thr Glu Pro Pro Pro Ser Gln Glu Gly
 485 490 495

Glu Pro Pro Ala Glu Pro Ser Ile Tyr Ala Thr Leu Ala Ile His
 500 505 510

<210> 95

<211> 512

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 95

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

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe

35					40					45					
Ser	Leu	Ser	Arg	Tyr	Asp	Met	His	Trp	Val	Arg	Gln	Pro	Pro	Gly	Gln
	50					55					60				
Gly	Leu	Glu	Trp	Met	Gly	Val	Ile	Trp	Gly	Asn	Gly	Asn	Thr	His	Tyr
65					70					75					80
His	Ser	Ala	Leu	Lys	Ser	Arg	Leu	Ser	Ile	Ser	Arg	Asp	Thr	Ser	Lys
				85					90					95	
Ser	Gln	Val	Phe	Leu	Lys	Met	Asn	Ser	Leu	Gln	Thr	Glu	Asp	Thr	Ala
			100						105					110	
Ile	Tyr	Phe	Cys	Thr	Leu	Arg	Ile	Lys	Asp	Trp	Gly	Pro	Gly	Thr	Met
		115							120					125	
Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
	130														
Gly	Gly	Gly	Ser	Asp	Ile	Val	Met	Thr	Gln	Thr	Pro	Pro	Ser	Leu	Ser
145															160
Val	Ala	Leu	Gly	Gln	Ser	Val	Ser	Ile	Ser	Cys	Lys	Ser	Ser	Gln	Ser
				165											175
Leu	Val	Ala	Ser	Asp	Glu	Asn	Thr	Tyr	Leu	Asn	Trp	Leu	Leu	Gln	Ser
			180						185						190
Pro	Gly	Arg	Ser	Pro	Lys	Arg	Leu	Ile	Tyr	Gln	Val	Ser	Lys	Leu	Asp
		195							200						205
Ser	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Glu	Lys	Asp	Phe
	210														220
Thr	Leu	Lys	Ile	Ser	Arg	Val	Glu	Ala	Glu	Asp	Leu	Gly	Val	Tyr	Tyr
225															240
Cys	Leu	Gln	Gly	Ile	His	Leu	Pro	Trp	Thr	Phe	Gly	Gly	Gly	Thr	Lys
				245											255

Leu Glu Leu Lys Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp
 260 265 270

Ser Thr Asn Gly Ala Ala Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 275 280 285

Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala
 290 295 300

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 305 310 315 320

Ala Cys Asp Val Leu Ile Gly Val Leu Val Val Ser Ile Leu Leu Leu
 325 330 335

Ser Leu Leu Leu Phe Leu Leu Leu Gln His Trp Arg Gln Gly Lys His
 340 345 350

Arg Thr Leu Ala Gln Arg Gln Ala Asp Phe Gln Arg Pro Pro Gly Ala
 355 360 365

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

Ala Ala Asp Val Gln Gly Glu Asn Phe Cys Ala Ala Val Lys Asn Thr
 385 390 395 400

Gln Pro Glu Asp Gly Val Glu Met Asp Thr Arg Gln Ser Pro His Asp
 405 410 415

Glu Asp Pro Gln Ala Val Thr Tyr Ala Lys Val Lys His Ser Arg Pro
 420 425 430

Arg Arg Glu Met Ala Ser Pro Pro Ser Pro Leu Ser Gly Glu Phe Leu
 435 440 445

Asp Thr Lys Asp Arg Gln Ala Glu Glu Asp Arg Gln Met Asp Thr Glu
 450 455 460

Ala Ala Ala Ser Glu Ala Pro Gln Asp Val Thr Tyr Ala Gln Leu His

465 470 475 480
 Ser Phe Thr Leu Arg Gln Lys Ala Thr Glu Pro Pro Pro Ser Gln Glu
 485 490 495
 Gly Ala Ser Pro Ala Glu Pro Ser Val Tyr Ala Thr Leu Ala Ile His
 500 505 510

 <210> 96
 <211> 483
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 polypeptide

 <400> 96
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

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

 Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
 35 40 45

 Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
 50 55 60

 Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr
 65 70 75 80

 His Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys
 85 90 95

 Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala
 100 105 110

 Ile Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met
 115 120 125

 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly

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

Ser Gln Gln Gly Leu Gln Glu Asn Ser Ser Gly Gln Ser Phe Phe Val
 355 360 365

Arg Asn Lys Lys Val Arg Arg Ala Pro Leu Ser Glu Gly Pro His Ser
 370 375 380

Leu Gly Cys Tyr Asn Pro Met Met Glu Asp Gly Ile Ser Tyr Thr Thr
 385 390 395 400

Leu Arg Phe Pro Glu Met Asn Ile Pro Arg Thr Gly Asp Ala Glu Ser
 405 410 415

Ser Glu Met Gln Arg Pro Pro Pro Asp Cys Asp Asp Thr Val Thr Tyr
 420 425 430

Ser Ala Leu His Lys Arg Gln Val Gly Asp Tyr Glu Asn Val Ile Pro
 435 440 445

Asp Phe Pro Glu Asp Glu Gly Ile His Tyr Ser Glu Leu Ile Gln Phe
 450 455 460

Gly Val Gly Glu Arg Pro Gln Ala Gln Glu Asn Val Asp Tyr Val Ile
 465 470 475 480

Leu Lys His

<210> 97

<211> 470

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 97

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

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

Val Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe
 35 40 45

Ser Leu Ser Arg Tyr Asp Met His Trp Val Arg Gln Pro Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Val Ile Trp Gly Asn Gly Asn Thr His Tyr
 65 70 75 80

His Ser Ala Leu Lys Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys
 85 90 95

Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln Thr Glu Asp Thr Ala
 100 105 110

Ile Tyr Phe Cys Thr Leu Arg Ile Lys Asp Trp Gly Pro Gly Thr Met
 115 120 125

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Pro Ser Leu Ser
 145 150 155 160

Val Ala Leu Gly Gln Ser Val Ser Ile Ser Cys Lys Ser Ser Gln Ser
 165 170 175

Leu Val Ala Ser Asp Glu Asn Thr Tyr Leu Asn Trp Leu Leu Gln Ser
 180 185 190

Pro Gly Arg Ser Pro Lys Arg Leu Ile Tyr Gln Val Ser Lys Leu Asp
 195 200 205

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Glu Lys Asp Phe
 210 215 220

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
 225 230 235 240

Cys Leu Gln Gly Ile His Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys

245	250	255
Leu Glu Leu Lys Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp		
260	265	270
Ser Thr Asn Gly Ala Ala Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr		
275	280	285
Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu Ala		
290	295	300
Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe		
305	310	315
Ala Cys Asp Gly Ala Phe Leu Gly Ile Gly Ile Thr Ala Leu Leu Phe		
325	330	335
Leu Cys Leu Ala Leu Ile Ile Met Lys Ile Leu Pro Lys Arg Arg Thr		
340	345	350
Gln Thr Glu Thr Pro Arg Pro Arg Phe Ser Arg His Ser Thr Ile Leu		
355	360	365
Asp Tyr Ile Asn Val Val Pro Thr Ala Gly Pro Leu Ala Gln Lys Arg		
370	375	380
Asn Gln Lys Ala Thr Pro Asn Ser Pro Arg Thr Pro Leu Pro Pro Gly		
385	390	395
Ala Pro Ser Pro Glu Ser Lys Lys Asn Gln Lys Lys Gln Tyr Gln Leu		
405	410	415
Pro Ser Phe Pro Glu Pro Lys Ser Ser Thr Gln Ala Pro Glu Ser Gln		
420	425	430
Glu Ser Gln Glu Glu Leu His Tyr Ala Thr Leu Asn Phe Pro Gly Val		
435	440	445
Arg Pro Arg Pro Glu Ala Arg Met Pro Lys Gly Thr Gln Ala Asp Tyr		
450	455	460

Ala Glu Val Lys Phe Gln
465 470

<210> 98
<211> 717
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 98
caggtgcagc tgaaagagtc tggacctgga ctggtgcagc ccagccaaac actgagcctg 60
acctgtaccg tgtccggctt cagcctgagc agatacgaca tgcactgggt ccgacagcct 120
ccaggacaag gcttggaatg gatgggcgtg atctggggca acggcaacac acactatcac 180
agcgccctga agtcccggct gagcatcagc agagatacca gcaagagcca ggtgttcctg 240
aagatgaaca gcctgcagac cgaggacacc gccatctatt tctgcaccct gcggatcaag 300
gattggggcc ctggcacaat ggtcaccgtt tctagcggag gcggaggatc tgggtggcgga 360
ggaagtggcg gaggcggttc tgatatcgtg atgaccaga cacctcctag cctgtctgtg 420
gctctgggcc agtctgtgtc catcagctgc aagagcagcc agagcctggt ggcctccgac 480
gagaacacct acctgaattg gctgctgcag agccccggca gaagcccaa gagactgac 540
taccaggtgt ccaagctgga cagcggcgtg ccgatagat tttctggcag cggcagcgag 600
aaggacttca ccctgaagat ctccagagtg gaagccgagg acctgggcgt gtactactgt 660
ctgcaaggca tccatctgcc ttggaccttt ggaggcggca caaagctgga actgaaa 717

<210> 99
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<400> 99
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

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

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

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

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

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

Ala Thr Phe Ala Leu Phe Gly Phe Arg Glu Gln Ala Phe Asp Ile Trp
100 105 110

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

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

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

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys
165 170 175

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

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

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

Cys Gln Gln Ser Tyr Ser Thr Pro Phe Thr Phe Gly Pro Gly Thr Lys
225 230 235 240

Val Asp Ile Lys

<210> 100

<211> 504

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 100

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1 5 10 15

Gly Ser Thr Gly Ala Gly Gly Ser Asp Tyr Lys Asp Asp Asp Asp Lys
20 25 30

Gly Gly Ser Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
35 40 45

Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe
50 55 60

Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
65 70 75 80

Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala
85 90 95

Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser
100 105 110

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
115 120 125

Tyr Tyr Cys Ala Thr Phe Ala Leu Phe Gly Phe Arg Glu Gln Ala Phe
130 135 140

Asp Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly
145 150 155 160

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met
 165 170 175

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

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 195 200 205

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 210 215 220

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

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

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Phe Thr Phe Gly Pro
 260 265 270

Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
 275 280 285

Thr Pro Ala Pro Thr Ile Ala Leu Gln Pro Leu Ser Leu Arg Pro Glu
 290 295 300

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 305 310 315 320

Phe Ala Cys Asp Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala
 325 330 335

Cys Tyr Ser Leu Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val Arg
 340 345 350

Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro
 355 360 365

Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro
 370 375 380

Arg Asp Phe Ala Ala Tyr Arg Ser Arg Val Lys Phe Ser Arg Ser Ala
 385 390 395 400

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
 405 410 415

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
 420 425 430

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
 435 440 445

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

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
 465 470 475 480

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
 485 490 495

His Met Gln Ala Leu Pro Pro Arg
 500

<210> 101

<211> 1524

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polynucleotide

<400> 101

gccgccacca tggaaaccga cacactgctg ctgtgggtgc tgcttctttg ggtgcccgga 60

tctacaggtg ccggcggaag cgactacaag gacgacgatg acaaaggcgg cagcgagggtt 120

caactggtac aaagcggagc cgaggtaaag aaaccaggga gtagcgtcaa agtgtcctgc 180

aaagcctcag gcggcacatt cagtagctat gctatttcac gggtacgcca agcaccagga 240

```

caggggctgg agtggatggg cgggattatc cccatcttcg gtacggcaaa ctatgcacaa      300
aagttccagg gacgagtcac catcacggct gataagtcca cctccaccgc ctatatggag      360
ctgagttccc ttcgagcgga ggatactgct gtgtattatt gtgccacgtt cgcactgttc      420
ggttttcggg agcaggcggt tgatatttgg ggacaaggca caacggtcac ggtcagttca      480
ggcggagggg gatcaggggg tgggggggtca ggtggcggtg gaagtgacat tcagatgacc      540
cagagtcctt cttcattgag tgcgagcgct ggtgatcggg ttacgataac ctgtagggcc      600
tcccaaagta tatcatcata tttgaactgg taccaacaga aacctgggaa agcgccgaag      660
ctccttatct atgctgccag ctctttgcaa agcgggtgtgc cctcacggtt ctccggtagt      720
gggtccggga ccgacttcac tttgaccatc agcagccttc agccagagga tcttgccact      780
tattactgcc agcaatctta tagcacaccg tttacattcg gtccaggcac aaaggtagac      840
attaagacca ccacaccagc tcctagacct ccaactcctg ctctacaat cgccctgcag      900
ccactgagtc tgaggccaga ggctttaga cctgctgcag gcggagccgt gcatacaaga      960
ggactggatt tcgcctgcga cttctgggtg ctctgtggtg ttggcggagt gctggcctgt     1020
tacagcctgc tggttaccgt ggccttcac atcttttggg tccgaagcaa gcggagccgg     1080
ctgctgcaca gcgattacat gaacatgacc cctcgagggc ccggacctac cagaaagcac     1140
taccagcctt acgctcctcc tagagatttc gccgcctacc ggtccagagt gaagttcagc     1200
agatccgccg atgctccgc ctataagcag ggccagaacc agctgtacaa cgagctgaac     1260
ctggggagaa gagaagagta cgacgtgctg gacaagcgga gaggcagaga tcctgaaatg     1320
ggcggcaagc ccagacggaa gaatcctcaa gagggcctgt ataatgagct gcagaaagac     1380
aagatggccg aggcttacag cgagatcgga atgaaggcg agcgcagaag aggcaaggga     1440
cacgatggac tgtaccaggg actgagcacc gccaccaagg atacctatga cgccctgcac     1500
atgcaggccc tgcctccaag ataa                                             1524

```

<210> 102

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 102

Arg Tyr Asp Met His

1 5

<210> 103

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 103

Val Ile Trp Gly Asn Gly Asn Thr His Tyr His Ser Ala Leu Lys Ser

1 5 10 15

<210> 104

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 104

Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Gln Pro Ser Gln

1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser

20 25 30

<210> 105

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 105

Trp Val Arg Gln Pro Pro Gly Gln Gly Leu Glu Trp Met Gly

1 5 10

<210> 106

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 106

Arg	Leu	Ser	Ile	Ser	Arg	Asp	Thr	Ser	Lys	Ser	Gln	Val	Phe	Leu	Lys
1				5					10					15	

Met	Asn	Ser	Leu	Gln	Thr	Glu	Asp	Thr	Ala	Ile	Tyr	Phe	Cys	Thr	Leu
			20					25					30		

<210> 107

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<223> See specification as filed for detailed description of substitutions and preferred embodiments

<400> 107

Gly	Gly	Gly	Gly	Ser
1				5

<210> 108

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<223> See specification as filed for detailed description of substitutions and preferred embodiments

<400> 108

Gly	Gly	Gly	Ser
1			

<210> 109

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> SITE

<222> (1)..(30)

<223> This sequence may encompass 1-6 "Gly Gly Gly Gly Ser" repeating units

<400> 109

Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
1				5					10					15	

Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
			20					25					30