

SEQUENCE LISTING

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<120> CELLS EXPRESSING CHIMERIC ACTIVATING RECEPTORS AND
 CHIMERIC STIMULATING RECEPTORS AND USES THEREOF

<130> 75004-20010.40

<140> Not Yet Assigned
 <141> Concurrently Herewith

<150> US 62/490,580
 <151> 2017-04-26

<150> US 62/490,578
 <151> 2017-04-26

<150> US 62/490,576
 <151> 2017-04-26

<160> 105

<170> FastSEQ for windows Version 4.0

<210> 1
 <211> 142
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 1
 Pro Asn Ile Gln Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser
 1 5 10 15
 Lys Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Asp Ser Gln
 20 25 30
 Thr Asn Val Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys
 35 40 45
 Thr Val Leu Asp Met Arg Ser Met Asp Phe Lys Ser Asn Ser Ala Val
 50 55 60
 Ala Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Asn Asn
 65 70 75 80
 Ser Ile Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Cys
 85 90 95
 Asp Val Lys Leu Val Glu Lys Ser Phe Glu Thr Asp Thr Asn Leu Asn
 100 105 110
 Phe Gln Asn Leu Ser Val Ile Gly Phe Arg Ile Leu Leu Leu Lys Val
 115 120 125
 Ala Gly Phe Asn Leu Leu Met Thr Leu Arg Leu Trp Ser Ser
 130 135 140

<210> 2
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<220>

<223> Synthetic Construct

<400> 2

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Glu Asp Leu Asn Lys Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro
 1      5      10      15
Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu
 20      25      30
Ala Thr Gly Phe Phe Pro Asp His Val Glu Leu Ser Trp Trp Val Asn
 35      40      45
Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys
 50      55      60
Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu
 65      70      75
Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys
 85      90      95
Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp
100      105      110
Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp Gly Arg
115      120      125
Ala Asp Cys Gly Phe Thr Ser Val Ser Tyr Gln Gln Gly Val Leu Ser
130      135      140
Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr Leu Tyr Ala
145      150      155      160
Val Leu Val Ser Ala Leu Val Leu Met Ala Met Val Lys Arg Lys Asp
165      170      175
Phe
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<210> 3

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 3

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Ser Gln Pro His Thr Lys Pro Ser Val Phe Val Met Lys Asn Gly Thr
 1      5      10      15
Asn Val Ala Cys Leu Val Lys Glu Phe Tyr Pro Lys Asp Ile Arg Ile
 20      25      30
Asn Leu Val Ser Ser Lys Lys Ile Thr Glu Phe Asp Pro Ala Ile Val
 35      40      45
Ile Ser Pro Ser Gly Lys Tyr Asn Ala Val Lys Leu Gly Lys Tyr Glu
 50      55      60
Asp Ser Asn Ser Val Thr Cys Ser Val Gln His Asp Asn Lys Thr Val
 65      70      75
His Ser Thr Asp Phe Glu Val Lys Thr Asp Ser Thr Asp His Val Lys
 85      90      95
Pro Lys Glu Thr Glu Asn Thr Lys Gln Pro Ser Lys Ser Cys His Lys
100      105      110
Pro Lys Ala Ile Val His Thr Glu Lys Val Asn Met Met Ser Leu Thr
115      120      125
Val Leu Gly Leu Arg Met Leu Phe Ala Lys Thr Val Ala Val Asn Phe
130      135      140
Leu Leu Thr Ala Lys Leu Phe Phe Leu
145      150
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<210> 4

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 4
 Asp Lys Gln Leu Asp Ala Asp Val Ser Pro Lys Pro Thr Ile Phe Leu
 1 5 10 15
 Pro Ser Ile Ala Glu Thr Lys Leu Gln Lys Ala Gly Thr Tyr Leu Cys
 20 25 30
 Leu Leu Glu Lys Phe Phe Pro Asp Val Ile Lys Ile His Trp Gln Glu
 35 40 45
 Lys Lys Ser Asn Thr Ile Leu Gly Ser Gln Glu Gly Asn Thr Met Lys
 50 55 60
 Thr Asn Asp Thr Tyr Met Lys Phe Ser Trp Leu Thr Val Pro Glu Lys
 65 70 75 80
 Ser Leu Asp Lys Glu His Arg Cys Ile Val Arg His Glu Asn Asn Lys
 85 90 95
 Asn Gly Val Asp Gln Glu Ile Ile Phe Pro Pro Ile Lys Thr Asp Val
 100 105 110
 Ile Thr Met Asp Pro Lys Asp Asn Cys Ser Lys Asp Ala Asn Asp Thr
 115 120 125
 Leu Leu Leu Gln Leu Thr Asn Thr Ser Ala Tyr Tyr Met Tyr Leu Leu
 130 135 140
 Leu Leu Leu Lys Ser Val Val Tyr Phe Ala Ile Ile Thr Cys Cys Leu
 145 150 155 160
 Leu Arg Arg Thr Ala Phe Cys Cys Asn Gly Glu Lys Ser
 165 170

<210> 5
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 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 5
 Ile Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu Arg
 1 5 10 15
 Leu Trp Ser Ser
 20

<210> 6
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 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 6
 Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr Leu Tyr Ala Val
 1 5 10 15
 Leu Val Ser Ala Leu Val Leu
 20

<210> 7
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 7
 Val Leu Gly Leu Arg Met Leu Phe Ala Lys Thr Val Ala Val Asn Phe
 1 5 10 15
 Leu Leu Thr Ala Lys Leu Phe Phe Leu
 20 25

<210> 8
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 8
Tyr Tyr Met Tyr Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
1 5 10 15
Ile Ile Thr Cys Cys Leu Leu
20

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

<220>
<223> Synthetic Construct

<400> 9
Val Leu Gly Leu Arg Met Leu Phe Ala Lys Thr Val Ala Val Asn Phe
1 5 10 15
Leu Leu Thr Ala Lys Leu Phe Ser Leu
20 25

<210> 10
<211> 25
<212> PRT
<213> Artificial Sequence

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<223> Synthetic Construct

<400> 10
Val Leu Gly Leu Arg Val Leu Phe Ala Lys Thr Val Ala Val Asn Phe
1 5 10 15
Leu Leu Thr Ala Lys Leu Phe Phe Leu
20 25

<210> 11
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 11
Val Leu Gly Cys Arg Met Leu Phe Ala Lys Thr Val Ala Val Asn Phe
1 5 10 15
Leu Leu Thr Ala Lys Leu Phe Phe Leu
20 25

<210> 12
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<223> Synthetic Construct

<400> 12

Val	Leu	Gly	Leu	Arg	Met	Leu	Phe	Ala	Lys	Thr	Phe	Ala	Val	Ser	Phe
1				5					10					15	
Leu	Leu	Thr	Ala	Lys	Leu	Phe	Phe	Leu							
			20					25							

<210> 13

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 13

Val	Leu	Gly	Leu	Arg	Met	Leu	Phe	Ala	Lys	Thr	Val	Ala	Val	Asn	Phe
1				5					10					15	
Leu	Leu	Thr	Ala	Lys	Leu	Phe	Phe	Ser							
			20					25							

<210> 14

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 14

Tyr	Tyr	Met	Tyr	Leu	Leu	Leu	Leu	Leu	Lys	Ser	Val	Tyr	Tyr	Phe	Ala
1				5					10					15	
Ile	Ile	Thr	Cys	Cys	Leu	Leu	Arg	Arg	Thr	Ala	Phe				
			20					25							

<210> 15

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 15

Tyr	Tyr	Met	Tyr	Leu	Leu	Leu	Leu	Leu	Lys	Ser	Val	Val	Tyr	Phe	Ala
1				5					10					15	
Ile	Ile	Thr	Cys	Gly	Leu	Leu	Arg	Arg	Thr	Ala	Phe				
			20					25							

<210> 16

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 16

Tyr	Leu	Val	Tyr	Leu	Leu	Leu	Leu	Leu	Lys	Ser	Val	Val	Tyr	Phe	Val
1				5					10					15	
Ile	Val	Thr	Cys	Cys	Leu	Leu	Arg	Arg	Thr	Ala	Phe				
			20					25							

<210> 17
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 <400> 17
 Tyr Leu Met Tyr Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
 1 5 10 15
 Ile Ile Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
 20 25

<210> 18
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 18
 Tyr Tyr Val Tyr Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
 1 5 10 15
 Ile Ile Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
 20 25

<210> 19
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 19
 Tyr Tyr Met Tyr Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Val
 1 5 10 15
 Ile Ile Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
 20 25

<210> 20
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 20
 Tyr Tyr Met Tyr Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
 1 5 10 15
 Ile Val Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
 20 25

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

<220>
 <223> Synthetic Construct

<400> 21
Tyr Tyr Ile Tyr Leu Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
1 5 10 15
Ile Ile Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
20 25

<210> 22
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 22
Tyr Ile Ile Tyr Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ile
1 5 10 15
Ile Leu Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
20 25

<210> 23
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 23
Tyr Tyr Met Tyr Cys Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
1 5 10 15
Ile Ile Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
20 25

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

<220>
<223> Synthetic Construct

<400> 24
Tyr Tyr Met Tyr Leu Leu Leu Phe Leu Lys Ser Phe Val Tyr Ser Ala
1 5 10 15
Ile Ile Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
20 25

<210> 25
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 25
Tyr Tyr Met Tyr Leu Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
1 5 10 15
Ile Ile Thr Met Cys Leu Leu Arg Arg Thr Ala Phe
20 25

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

<220>
 <223> Synthetic Construct

<400> 26
 Gln Tyr Met Tyr Leu Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala
 1 5 10 15
 Ile Ile Thr Cys Cys Leu Leu Arg Arg Thr Ala Phe
 20 25

<210> 27
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 <212> PRT
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<400> 27
 Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe Glu Thr Asp
 1 5 10 15
 Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe Arg
 20 25 30

<210> 28
 <211> 40
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 28
 Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Cys Asp Val
 1 5 10 15
 Lys Leu Val Glu Lys Ser Phe Glu Thr Asp Thr Asn Leu Asn Phe Gln
 20 25 30
 Asn Leu Ser Val Ile Gly Phe Arg
 35 40

<210> 29
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 29
 Ala Asp Cys Gly Phe Thr Ser Val Ser Tyr Gln Gln Gly Val Leu Ser
 1 5 10 15
 Ala

<210> 30
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 30

Gly Arg Ala Asp Cys Gly Phe Thr Ser Val Ser Tyr Gln Gln Gly Val
1 5 10 15
Leu Ser Ala

<210> 31

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 31

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

<210> 32

<211> 48

<212> PRT

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<223> Synthetic Construct

<400> 32

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

<210> 33

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 33

Met Asp Pro Lys Asp Asn Cys Ser Lys Asp Ala Asn Asp Thr Leu Leu
1 5 10 15
Leu Gln Leu Thr Asn Thr Ser Ala
20

<210> 34

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 34

Pro Ile Lys Thr Asp Val Ile Thr Met Asp Pro Lys Asp Asn Cys Ser

1	5	10	15
Lys	Asp	Ala	Asn
20	Asp	Thr	Leu
	Leu	Leu	Leu
	25	Gln	Leu
		Thr	Asn
		30	Thr
			Ser
			Ala

<210> 35
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 <212> PRT
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<400> 35
Met
1
Ala
Met
Val
5
Lys
Arg
Lys
Asp
Phe

<210> 36
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 36
Arg
1
Arg
Thr
Ala
5
Phe
Cys
Cys
Asn
Gly
10
Glu
Lys
Ser

<210> 37
 <211> 101
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 37
Ala
1
Ser
Thr
Lys
5
Gly
Pro
Ser
Val
Phe
10
Pro
Leu
Ala
Pro
Ser
15
Ser
Lys
20
Gly
Thr
Ala
Ala
25
Leu
Gly
Cys
Leu
Val
30
Lys
Asp
Tyr
35
Phe
Pro
Glu
Pro
Val
Thr
Val
Ser
40
Trp
Asn
Ser
Gly
Ala
Leu
Thr
Ser
45
Gly
Ser
Leu
Ser
50
Gly
Val
His
Thr
Phe
Pro
Ala
55
Val
Leu
Gln
Ser
Ser
60
Gly
Thr
Gln
Thr
Tyr
Ile
65
Ser
Val
Val
Thr
Val
Pro
70
Ser
Ser
Ser
Ser
Leu
75
Gly
Thr
Gln
Thr
Tyr
80
Cys
Asn
Val
Asn
His
Lys
Pro
Ser
Asn
Thr
90
Lys
Val
Asp
Lys
Arg
Val
95
Glu
Pro
Lys
Ser
100
Cys

<210> 38
 <211> 99
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 38
Ala
1
Ser
Thr
Lys
5
Gly
Pro
Ser
Val
Phe
10
Pro
Leu
Ala
Pro
Cys
Ser
Arg
15
Ser
Thr
Ser
Glu
Ser
Thr
Ala
Ala
Leu
Gly
Cys
Leu
Val
Lys
Asp
Tyr

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

<210> 39
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 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 40
 <211> 101
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 41
 <211> 101
 <212> PRT
 <213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 41
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1 5 10 15
Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
20 25 30
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Ser Leu Ser
50 55 60
Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Thr
65 70 75 80
Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val
85 90 95
Glu Leu Lys Thr Pro
100

<210> 42
<211> 101
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 42
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1 5 10 15
Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
20 25 30
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Ser Leu Ser
50 55 60
Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr
65 70 75 80
Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val
85 90 95
Glu Ser Lys Tyr Gly
100

<210> 43
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 43
Asp Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr Gln Pro
1 5 10 15
Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe Pro Gln
20 25 30
Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val Thr Ala
35 40 45
Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr Thr Thr
50 55 60
Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly Lys Ser
65 70 75 80
Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp Val Thr
85 90 95
Val Pro Cys Pro Val Pro Ser Thr Pro Thr Pro Ser Pro Ser Thr
100 105 110

Pro Pro Thr Pro Ser Pro Ser
115

<210> 44
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 44
Asp Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Asp Ser Thr Pro Gln
1 5 10 15
Asp Gly Asn Val Val Val Ala Cys Leu Val Gln Gly Phe Phe Pro Gln
20 25 30
Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Asn Val Thr Ala
35 40 45
Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr Thr Thr
50 55 60
Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Pro Asp Gly Lys Ser
65 70 75 80
Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp Val Thr
85 90 95
Val Pro Cys Pro Val Pro Pro Pro Pro Pro
100 105

<210> 45
<211> 159
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 45
Ala Pro Thr Lys Ala Pro Asp Val Phe Pro Ile Ile Ser Gly Cys Arg
1 5 10 15
His Pro Lys Asp Asn Ser Pro Val Val Leu Ala Cys Leu Ile Thr Gly
20 25 30
Tyr His Pro Thr Ser Val Thr Val Thr Trp Tyr Met Gly Thr Gln Ser
35 40 45
Gln Pro Gln Arg Thr Phe Pro Glu Ile Gln Arg Arg Asp Ser Tyr Tyr
50 55 60
Met Thr Ser Ser Gln Leu Ser Thr Pro Leu Gln Gln Trp Arg Gln Gly
65 70 75 80
Glu Tyr Lys Cys Val Val Gln His Thr Ala Ser Lys Ser Lys Lys Glu
85 90 95
Ile Phe Arg Trp Pro Glu Ser Pro Lys Ala Gln Ala Ser Ser Val Pro
100 105 110
Thr Ala Gln Pro Gln Ala Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala
115 120 125
Pro Ala Thr Thr Arg Asn Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys
130 135 140
Glu Lys Glu Lys Glu Glu Gln Glu Glu Arg Glu Thr Lys Thr Pro
145 150 155

<210> 46
<211> 103
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 46
 Ala Ser Thr Gln Ser Pro Ser Val Phe Pro Leu Thr Arg Cys Cys Lys
 1 5 10 15
 Asn Ile Pro Ser Asn Ala Thr Ser Val Thr Leu Gly Cys Leu Ala Thr
 20 25 30
 Gly Tyr Phe Pro Glu Pro Val Met Val Thr Trp Asp Thr Gly Ser Leu
 35 40 45
 Asn Gly Thr Thr Met Thr Leu Pro Ala Thr Thr Leu Thr Leu Ser Gly
 50 55 60
 His Tyr Ala Thr Ile Ser Leu Leu Thr Val Ser Gly Ala Trp Ala Lys
 65 70 75 80
 Gln Met Phe Thr Cys Arg Val Ala His Thr Pro Ser Ser Thr Asp Trp
 85 90 95
 Val Asp Asn Lys Thr Phe Ser
 100

<210> 47
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 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 47
 Gly Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu Val Ser Cys Glu Asn
 1 5 10 15
 Ser Pro Ser Asp Thr Ser Ser Val Ala Val Gly Cys Leu Ala Gln Asp
 20 25 30
 Phe Leu Pro Asp Ser Ile Thr Leu Ser Trp Lys Tyr Lys Asn Asn Ser
 35 40 45
 Asp Ile Ser Ser Thr Arg Gly Phe Pro Ser Val Leu Arg Gly Gly Lys
 50 55 60
 Tyr Ala Ala Thr Ser Gln Val Leu Leu Pro Ser Lys Asp Val Met Gln
 65 70 75 80
 Gly Thr Asp Glu His Val Val Cys Lys Val Gln His Pro Asn Gly Asn
 85 90 95
 Lys Glu Lys Asn Val Pro Leu Pro
 100

<210> 48
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 48
 Gly Gln Pro Lys Ala Asn Pro Thr Val Thr Leu Phe Pro Pro Ser Ser
 1 5 10 15
 Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
 20 25 30
 Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro
 35 40 45
 Val Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn Asn
 50 55 60
 Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys
 65 70 75 80
 Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val
 85 90 95
 Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
 100 105

<210> 49

<211> 105
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 49
 Ile Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Lys Ser Asn
 1 5 10 15
 Gly Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro Leu
 20 25 30
 Phe Pro Gly Pro Ser Lys Pro Phe Trp Val Leu Val Val Val Gly Gly
 35 40 45
 Val Leu Ala Cys Leu Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val
 50 55 60
 Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr
 65 70 75 80
 Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro
 85 90 95
 Pro Arg Asp Phe Ala Ala Tyr Arg Ser
 100 105

<210> 50
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 50
 Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
 1 5 10 15
 Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
 20 25 30
 Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
 35 40 45
 Pro Arg Arg Lys Asn Pro Gln Glu Gly Asn Glu Leu Gln Lys Asp Lys
 50 55 60
 Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg
 65 70 75 80
 Gly Lys Gly His Asp Gly Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 85 90 95
 Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 100 105

<210> 51
 <211> 105
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 51
 Ile Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Lys Ser Asn
 1 5 10 15
 Gly Thr Ile Ile His Val Lys Gly Lys His Leu Cys Pro Ser Pro Leu
 20 25 30
 Phe Pro Gly Pro Ser Lys Pro Phe Trp Val Leu Val Val Val Gly Gly
 35 40 45
 Val Leu Ala Cys Leu Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val
 50 55 60
 Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr
 65 70 75 80

Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro
85 90 95
Pro Arg Asp Phe Ala Ala Tyr Arg Ser
100 105

<210> 52
<211> 41
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 52
Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr
1 5 10 15
Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro
20 25 30
Pro Arg Asp Phe Ala Ala Tyr Arg Ser
35 40

<210> 53
<211> 94
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 53
Pro Ala Asp Leu Ser Pro Gly Ala Ser Ser Val Thr Pro Pro Ala Pro
1 5 10 15
Ala Arg Glu Pro Gly His Ser Pro Gln Ile Ile Ser Phe Phe Leu Ala
20 25 30
Leu Thr Ser Thr Ala Leu Leu Phe Leu Leu Phe Phe Leu Thr Leu Arg
35 40 45
Phe Ser Val Val Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys
50 55 60
Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys
65 70 75 80
Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
85 90

<210> 54
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 54
Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
1 5 10 15
Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
20 25 30
Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
35 40

<210> 55
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 55
Asp Pro Pro Ala Thr Gln Pro Gln Glu Thr Gln Gly Pro Pro Ala Arg
1 5 10 15
Pro Ile Thr Val Gln Pro Thr Glu Ala Trp Pro Arg Thr Ser Gln Gly
20 25 30
Pro Ser Trp Val Glu Val Pro Gly Gly Arg Ala Val Ala Ala Ile Leu
35 40 45
Gly Leu Gly Leu Val Leu Gly Leu Leu Gly Pro Leu Ala Ile Leu Leu
50 55 60
Ala Leu Tyr Leu Leu Arg Arg Asp Gln Arg Leu Pro Pro Asp Ala His
65 70 75 80
Lys Pro Pro Gly Gly Gly Ser Phe Arg Thr Pro Ile Gln Glu Glu Gln
85 90 95
Ala Asp Ala His Ser Thr Leu Ala Lys Ile
100 105

<210> 56
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 56
Ala Leu Tyr Leu Leu Arg Arg Asp Gln Arg Leu Pro Pro Asp Ala His
1 5 10 15
Lys Pro Pro Gly Gly Gly Ser Phe Arg Thr Pro Ile Gln Glu Glu Gln
20 25 30
Ala Asp Ala His Ser Thr Leu Ala Lys Ile
35 40

<210> 57
<211> 69
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 57
Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
1 5 10 15
Ser 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 Ile Tyr Ile
35 40 45
Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val
50 55 60
Ile Thr Leu Tyr Cys
65

<210> 58
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 58
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu

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

<210> 59
 <211> 109
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 59	Leu	Pro	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Lys
1				5					10					15		
	Thr	Ala	Arg	Ile	Thr	Cys	Gly	Gly	Asn	Ile	Gly	Ser	Lys	Ser	Val	
			20					25					30			
	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Val	Leu	Val	Val	Tyr
			35					40					45			
	Asp	Asp	Ser	Asp	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
		50					55				60					
	Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Arg	Val	Glu	Ala	Gly
65				70						75					80	
	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Val	Trp	Asp	Ser	Ser	Ser	Asp	Tyr
				85					90					95		
	Val	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu	Gly			
			100					105								

<210> 60
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 60	Gln	Val	Gln	Leu	Gln	Gln	Pro	Gly	Ala	Glu	Leu	Val	Lys	Pro	Gly	Ala
1				5					10					15		
	Ser	Val	Lys	Met	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
			20					25					30			
	Asn	Met	His	Trp	Val	Lys	Gln	Thr	Pro	Gly	Arg	Gly	Leu	Glu	Trp	Ile
			35					40					45			
	Gly	Ala	Ile	Tyr	Pro	Gly	Asn	Gly	Asp	Thr	Ser	Tyr	Asn	Gln	Lys	Phe
		50					55				60					
	Lys	Gly	Lys	Ala	Thr	Leu	Thr	Ala	Asp	Lys	Ser	Ser	Ser	Thr	Ala	Tyr
65				70						75					80	
	Met	Gln	Leu	Ser	Ser	Leu	Thr	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Tyr	Cys
				85					90					95		
	Ala	Arg	Ser	Thr	Tyr	Tyr	Gly	Gly	Asp	Trp	Tyr	Phe	Asn	Val	Trp	Gly
			100					105					110			
	Ala	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser							

115

120

<210> 61
 <211> 105
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 61
 Gln Ile Val Leu Ser Gln Ser Pro Ala Ile Leu Ser Asp Gly Glu Lys
 1 5 10 15
 Val Thr Met Thr Cys Arg Ala Ser Ser Val Ser Tyr Ile His Trp
 20 25 30
 Phe Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr Ala Thr
 35 40 45
 Ser Asn Leu Ala Ser Gly Val Pro Val Arg Phe Ser Gly Ser Gly Ser
 50 55 60
 Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Glu Ala Glu Asp Ala
 65 70 75 80
 Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Ser Asn Pro Pro Thr Phe Gly
 85 90 95
 Gly Gly Thr Lys Leu Glu Ile Lys Arg
 100 105

<210> 62
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 62
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15
 Ser Leu Thr Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Pro Asn Tyr
 20 25 30
 Trp Ile Thr Trp Val Arg Gln Met Ser Gly Gly Gly Leu Glu Trp Met
 35 40 45
 Gly Arg Ile Asp Pro Gly Asp Ser Tyr Thr Thr Tyr Asn Pro Ser Phe
 50 55 60
 Gln Gly His Val Thr Ile Ser Ile Asp Lys Ser Thr Asn Thr Ala Tyr
 65 70 75 80
 Leu His Trp Asn Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Tyr Val Ser Leu Val Asp Ile Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Thr Val Ser Ser
 115

<210> 63
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 63
 Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

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

<210> 64
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 65
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 66
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 66

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

<210> 67

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 67

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

Arg

<210> 68

<211> 286

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 68

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

Leu Lys Ser Val Val Tyr Phe Ala Ile Ile Thr Cys Cys Leu Leu Arg
 260 270
 Arg Thr Ala Phe Cys Cys Asn Gly Glu Lys Ser
 275 280

<210> 70
 <211> 286
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 70
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15
 Ser Leu Thr Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Pro Asn Tyr
 20 25 30
 Trp Ile Thr Trp Val Arg Gln Met Ser Gly Gly Gly Leu Glu Trp Met
 35 40 45
 Gly Arg Ile Asp Pro Gly Asp Ser Tyr Thr Thr Tyr Asn Pro Ser Phe
 50 55 60
 Gln Gly His Val Thr Ile Ser Ile Asp Lys Ser Thr Asn Thr Ala Tyr
 65 70 75 80
 Leu His Trp Asn Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Tyr Val Ser Leu Val Asp Ile Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu
 115 120 125
 Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys
 130 135 140
 Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser
 145 150 155 160
 Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser
 165 170 175
 Ser Gly Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly
 180 185 190
 Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys
 195 200 205
 Val Asp Lys Arg Val Glu Pro Lys Ser Cys Glu Val Lys Thr Asp Ser
 210 215 220
 Thr Asp His Val Lys Pro Lys Glu Thr Glu Asn Thr Lys Gln Pro Ser
 225 230 235 240
 Lys Ser Cys His Lys Pro Lys Ala Ile Val His Thr Glu Lys Val Asn
 245 250 255
 Met Met Ser Leu Thr Val Leu Gly Leu Arg Val Leu Phe Ala Lys Thr
 260 265 270
 Val Ala Val Asn Phe Leu Leu Thr Ala Lys Leu Phe Phe Leu
 275 280 285

<210> 71
 <211> 283
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 71
 Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30
 Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45

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

<210> 72

<211> 299

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 72

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

210	Arg	Val	Glu	Pro	Lys	Ser	215	Cys	Glu	Val	Lys	Thr	220	Asp	Ser	Thr	Asp	His
225	Val	Lys	Pro	Lys	Glu	Thr	230	Glu	Asn	Thr	Lys	Gln	235	Pro	Ser	Lys	Ser	Cys
	His	Lys	Pro	Lys	Ala	Ile	Val	His	Thr	Glu	Lys	Val	Asn	Met	Met	Met	Ser	
	Leu	Thr	Val	Leu	Gly	Leu	Arg	Met	Leu	Phe	Ala	Lys	Thr	Val	Ala	Val		
	Asn	Phe	Leu	Leu	Thr	Ala	Lys	Leu	Phe	Phe	Leu							
	290						295											

<210> 73
 <211> 281
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 73	Leu	Pro	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Lys		
1	Thr	Ala	Arg	Ile	Thr	Cys	Gly	Gly	Asn	Asn	Ile	Gly	Ser	Lys	Ser	Val		
	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Val	Leu	Val	Val	Tyr		
	Asp	Asp	Ser	Asn	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser		
	Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Arg	Val	Glu	Ala	Gly		
65	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Val	Trp	Asp	Ser	Ser	Ser	Glu	Tyr		
	Val	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu	Gly	Gln	Pro	Lys		
	Ala	Asn	Pro	Thr	Val	Thr	Leu	Phe	Pro	Pro	Ser	Ser	Glu	Glu	Leu	Gln		
	Ala	Asn	Lys	Ala	Thr	Leu	Val	Cys	Leu	Ile	Ser	Asp	Phe	Tyr	Pro	Gly		
	Ala	Val	Thr	Val	Ala	Trp	Lys	Ala	Asp	Gly	Ser	Pro	Val	Lys	Ala	Gly		
145	Val	Glu	Thr	Thr	Lys	Pro	Ser	Lys	Gln	Ser	Asn	Asn	Lys	Tyr	Ala	Ala		
	Ser	Ser	Tyr	Leu	Ser	Leu	Thr	Pro	Glu	Gln	Trp	Lys	Ser	His	Arg	Ser		
	Tyr	Ser	Cys	Gln	Val	Thr	His	Glu	Gly	Ser	Thr	Val	Glu	Lys	Thr	Val		
	Ala	Pro	Thr	Glu	Cys	Ser	Pro	Ile	Lys	Thr	Asp	Val	Ile	Thr	Met	Asp		
	Pro	Lys	Asp	Asn	Cys	Ser	Lys	Asp	Ala	Asn	Asp	Thr	Leu	Leu	Leu	Gln		
225	Leu	Thr	Asn	Thr	Ser	Ala	Tyr	Tyr	Met	Tyr	Leu	Leu	Leu	Leu	Leu	Lys		
	Ser	Val	Val	Tyr	Phe	Ala	Ile	Ile	Thr	Cys	Cys	Leu	Leu	Arg	Arg	Thr		
	Ala	Phe	Cys	Cys	Asn	Gly	Glu	Lys	Ser									
		275						280										

<210> 74
 <211> 299
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 74
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50 55 60
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95
 Ala Arg Gln Val Trp Gly Trp Gln Gly Met Tyr Pro Arg Ser Asn
 100 105 110
 Trp Trp Tyr Asn Met Asp Ser Trp Gly Gln Gly Thr Leu Val Thr Val
 115 120 125
 Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser
 130 135 140
 Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys
 145 150 155 160
 Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu
 165 170 175
 Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Ser
 180 185 190
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 195 200 205
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 210 215 220
 Arg Val Glu Pro Lys Ser Cys Glu Val Lys Thr Asp Ser Thr Asp His
 225 230 235 240
 Val Lys Pro Lys Glu Thr Glu Asn Thr Lys Gln Pro Ser Lys Ser Cys
 245 250 255
 His Lys Pro Lys Ala Ile Val His Thr Glu Lys Val Asn Met Met Ser
 260 265 270
 Leu Thr Val Leu Gly Leu Arg Val Leu Phe Ala Lys Thr Val Ala Val
 275 280 285
 Asn Phe Leu Leu Thr Ala Lys Leu Phe Phe Leu
 290 295

<210> 75
 <211> 281
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 75
 Leu Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15
 Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile Gly Ser Lys Ser Val
 20 25 30
 His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Val Tyr
 35 40 45
 Asp Asp Ser Asn Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60
 Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80
 Asp Glu Ala Asp Tyr Cys Gln Val Trp Asp Ser Ser Ser Glu Tyr
 85 90 95
 Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys
 100 105 110
 Ala Asn Pro Thr Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln
 115 120 125
 Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro Gly
 130 135 140

Ala	Val	Thr	Val	Ala	Trp	Lys	Ala	Asp	Gly	Ser	Pro	Val	Lys	Ala	Gly
145					150					155					160
Val	Glu	Thr	Thr	Lys	Pro	Ser	Lys	Gln	Ser	Asn	Asn	Lys	Tyr	Ala	Ala
				165					170					175	
Ser	Ser	Tyr	Leu	Ser	Leu	Thr	Pro	Glu	Gln	Trp	Lys	Ser	His	Arg	Ser
			180					185					190		
Tyr	Ser	Cys	Gln	Val	Thr	His	Glu	Gly	Ser	Thr	Val	Glu	Lys	Thr	Val
		195					200					205			
Ala	Pro	Thr	Glu	Cys	Ser	Pro	Ile	Lys	Thr	Asp	Val	Ile	Thr	Met	Asp
	210					215					220				
Pro	Lys	Asp	Asn	Cys	Ser	Lys	Asp	Ala	Asn	Asp	Thr	Leu	Leu	Leu	Gln
225					230					235					240
Leu	Thr	Asn	Thr	Ser	Ala	Tyr	Leu	Val	Tyr	Leu	Leu	Leu	Leu	Leu	Lys
				245					250					255	
Ser	Val	Val	Tyr	Phe	Val	Ile	Val	Thr	Cys	Cys	Leu	Leu	Arg	Arg	Thr
			260					265					270		
Ala	Phe	Cys	Cys	Asn	Gly	Glu	Lys	Ser							
		275					280								

<210> 76
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 76	Ser	Arg	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly
1					5					10					15	
	Ser	Leu	Glu	Met	Ala											
				20												

<210> 77
 <211> 260
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 77	Leu	Pro	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ala	Pro	Gly	Lys
1					5					10					15	
	Thr	Ala	Arg	Ile	Thr	Cys	Gly	Gly	Asn	Asn	Ile	Gly	Ser	Lys	Ser	Val
				20					25					30		
	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Val	Leu	Val	Val	Tyr
			35					40					45			
	Asp	Asp	Ser	Asp	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
		50					55				60					
	Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Arg	Val	Glu	Ala	Gly
65					70					75					80	
	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Val	Trp	Asp	Ser	Ser	Ser	Asp	Tyr
				85						90					95	
	Val	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu	Gly	Ser	Arg	Gly
				100					105					110		
	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Leu	Glu
			115					120					125			
	Met	Ala	Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro
		130					135					140				
	Gly	Glu	Ser	Leu	Lys	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Ser	Phe	Thr
145					150						155				160	
	Ser	Tyr	Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu
				165						170					175	
	Trp	Met	Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro
				180					185					190		

Ser	Phe	Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr
		195					200					205			
Ala	Tyr	Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr
	210					215					220				
Tyr	Cys	Ala	Arg	Gln	Val	Trp	Gly	Trp	Gln	Gly	Gly	Met	Tyr	Pro	Arg
	225				230					235					240
Ser	Asn	Trp	Trp	Tyr	Asn	Leu	Asp	Ser	Trp	Gly	Gln	Gly	Thr	Leu	Val
				245					250					255	
Thr	Val	Ser	Ser												
			260												

<210> 78
 <211> 245
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 79
 <211> 250
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

Gln	Ser	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Ala	Ala	Pro	Gly	Gln
1				5					10					15	
Arg	Val	Thr	Ile	Ser	Cys	Ser	Gly	Thr	Arg	Ser	Asn	Ile	Gly	Ser	Asp
			20					25					30		

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

<210> 80
 <211> 368
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

225	Ser	Asn	Trp	Trp	Tyr	230	Asn	Leu	Asp	Ser	Trp	235	Gly	Gln	Gly	Thr	Leu	240	Val
					245						250						255		
Thr	Val	Ser	Ser	Ala	Ala	Ala	Ile	Glu	Val	Met	Tyr	Pro	Pro	Pro	Pro	Tyr			
			260																
Leu	Asp	Asn	Glu	Lys	Ser	Asn	Gly	Thr	Ile	Ile	His	Val	Lys	Gly	Lys				
		275																	
His	Leu	Cys	Pro	Ser	Pro	Leu	Phe	Pro	Gly	Pro	Ser	Lys	Pro	Phe	Trp				
		290																	
Val	Leu	Val	Val	Val	Gly	Gly	Val	Leu	Ala	Cys	Leu	Leu	Val	Thr	Val				
					310														
Ala	Phe	Ile	Ile	Phe	Trp	Val	Arg	Ser	Lys	Arg	Ser	Arg	Leu	Leu	His				
				325															
Ser	Asp	Tyr	Met	Asn	Met	Thr	Pro	Arg	Arg	Pro	Gly	Pro	Thr	Arg	Lys				
			340																
His	Tyr	Gln	Pro	Tyr	Ala	Pro	Pro	Arg	Asp	Phe	Ala	Ala	Tyr	Arg	Ser				
		355					360					365							

<210> 81

<211> 353

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 81

Gln	Ile	Val	Leu	Ser	Gln	Ser	Pro	Ala	Ile	Leu	Ser	Asp	Gly	Glu	Lys				
1				5					10					15					
Val	Thr	Met	Thr	Cys	Arg	Ala	Ser	Ser	Ser	Val	Ser	Tyr	Ile	His	Trp				
			20					25					30						
Phe	Gln	Gln	Lys	Pro	Gly	Ser	Ser	Pro	Lys	Pro	Trp	Ile	Tyr	Ala	Thr				
		35					40					45							
Ser	Asn	Leu	Ala	Ser	Gly	Val	Pro	Val	Arg	Phe	Ser	Gly	Ser	Gly	Ser				
	50					55					60								
Gly	Thr	Ser	Tyr	Ser	Leu	Thr	Ile	Ser	Arg	Val	Glu	Ala	Glu	Asp	Ala				
				70						75					80				
Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Trp	Thr	Ser	Asn	Pro	Pro	Thr	Phe	Gly				
				85					90					95					
Gly	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Arg	Ser	Arg	Gly	Gly	Gly	Gly	Ser				
			100					105					110						
Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Leu	Glu	Gln	Val	Gln	Leu				
		115					120					125							
Gln	Gln	Pro	Gly	Ala	Glu	Leu	Val	Lys	Pro	Gly	Ala	Ser	Val	Lys	Met				
		130				135					140								
Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr	Asn	Met	His	Trp				
				150						155				160					
Val	Lys	Gln	Thr	Pro	Gly	Arg	Gly	Leu	Glu	Trp	Ile	Gly	Ala	Ile	Tyr				
				165					170					175					
Pro	Gly	Asn	Gly	Asp	Thr	Ser	Tyr	Asn	Gln	Lys	Phe	Lys	Gly	Lys	Ala				
		180						185					190						
Thr	Leu	Thr	Ala	Asp	Lys	Ser	Ser	Ser	Thr	Ala	Tyr	Met	Gln	Leu	Ser				
		195					200					205							
Ser	Leu	Thr	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Ser	Thr				
		210				215					220								
Tyr	Tyr	Gly	Gly	Asp	Trp	Tyr	Phe	Asn	Val	Trp	Gly	Ala	Gly	Thr	Thr				
				230						235					240				
Val	Thr	Val	Ser	Ser	Ala	Ala	Ala	Ile	Glu	Val	Met	Tyr	Pro	Pro	Pro				
				245					250					255					
Tyr	Leu	Asp	Asn	Glu	Lys	Ser	Asn	Gly	Thr	Ile	Ile	His	Val	Lys	Gly				
			260					265					270						
Lys	His	Leu	Cys	Pro	Ser	Pro	Leu	Phe	Pro	Gly	Pro	Ser	Lys	Pro	Phe				
		275					280					285							
Trp	Val	Leu	Val	Val	Val	Gly	Gly	Val	Leu	Ala	Cys	Leu	Leu	Val	Thr				
		290				295					300								
Val	Ala	Phe	Ile	Ile	Phe	Trp	Val	Arg	Ser	Lys	Arg	Ser	Arg	Leu	Leu				
				310						315					320				

His	Ser	Asp	Tyr	Met	Asn	Met	Thr	Pro	Arg	Arg	Pro	Gly	Pro	Thr	Arg
				325					330					335	
Lys	His	Tyr	Gln	Pro	Tyr	Ala	Pro	Pro	Arg	Asp	Phe	Ala	Ala	Tyr	Arg
			340					345					350		
Ser															

<210> 82
 <211> 358
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 82															
Gln	Ser	Val	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Ala	Ala	Pro	Gly	Gln
1				5					10					15	
Arg	Val	Thr	Ile	Ser	Cys	Ser	Gly	Thr	Arg	Ser	Asn	Ile	Gly	Ser	Asp
			20					25					30		
Tyr	Val	Ser	Trp	Tyr	Gln	His	Leu	Pro	Gly	Thr	Ala	Pro	Lys	Leu	Leu
		35					40					45			
Val	Tyr	Gly	Asp	Asn	Leu	Arg	Pro	Ser	Gly	Ile	Pro	Asp	Arg	Phe	Ser
	50					55					60				
Ala	Ser	Lys	Ser	Gly	Thr	Ser	Ala	Thr	Leu	Gly	Ile	Thr	Gly	Leu	Gln
65					70					75					80
Thr	Gly	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gly	Thr	Trp	Asp	Tyr	Thr	Leu
			85						90					95	
Asn	Gly	Val	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu	Gly	Ser
			100					105					110		
Arg	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
		115				120						125			
Leu	Glu	Met	Ala	Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val
	130					135					140				
Gln	Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr
145					150					155					160
Phe	Ser	Ser	Tyr	Ala	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly
				165					170					175	
Leu	Glu	Trp	Val	Ser	Val	Ile	Tyr	Ser	Gly	Gly	Ser	Ser	Thr	Tyr	Tyr
			180					185					190		
Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys
		195					200					205			
Asn	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala
	210					215					220				
Val	Tyr	Tyr	Cys	Ala	Arg	Thr	Ser	Tyr	Leu	Asn	His	Gly	Asp	Tyr	Trp
225					230					235					240
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ala	Ala	Ile	Glu	Val
				245					250					255	
Met	Tyr	Pro	Pro	Pro	Tyr	Leu	Asp	Asn	Glu	Lys	Ser	Asn	Gly	Thr	Ile
			260					265					270		
Ile	His	Val	Lys	Gly	Lys	His	Leu	Cys	Pro	Ser	Pro	Leu	Phe	Pro	Gly
		275					280					285			
Pro	Ser	Lys	Pro	Phe	Trp	Val	Leu	Val	Val	Val	Gly	Gly	Val	Leu	Ala
	290					295					300				
Cys	Leu	Leu	Val	Thr	Val	Ala	Phe	Ile	Ile	Phe	Trp	Val	Arg	Ser	Lys
305					310					315					320
Arg	Ser	Arg	Leu	Leu	His	Ser	Asp	Tyr	Met	Asn	Met	Thr	Pro	Arg	Arg
				325					330					335	
Pro	Gly	Pro	Thr	Arg	Lys	His	Tyr	Gln	Pro	Tyr	Ala	Pro	Pro	Arg	Asp
			340					345					350		
Phe	Ala	Ala	Tyr	Arg	Ser										
		355													

<210> 83
 <211> 180
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 83

```
ggaggaaaaa ctgtttcata cagaaggcgt ggaggaaaaa ctgtttcata cagaaggcgt 60
ggaggaaaaa ctgtttcata cagaaggcgt ggaggaaaaa ctgtttcata cagaaggcgt 120
ggaggaaaaa ctgtttcata cagaaggcgt ggaggaaaaa ctgtttcata cagaaggcgt 180
```

<210> 84

<211> 149

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 84

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gccgccccga ctgcatctgc gtgttccaat tcgccaatga caagacgctg ggcgggggttt 60
gtgtcatcat agaactaaag acatgcaa atattttcttc cggggacacc gccagcaaac 120
gcgagcaacg ggccacgggg atgaagcag 149
```

<210> 85

<211> 335

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 85

```
ggaggaaaaa ctgtttcata cagaaggcgt ggaggaaaaa ctgtttcata cagaaggcgt 60
ggaggaaaaa ctgtttcata cagaaggcgt ggaggaaaaa ctgtttcata cagaaggcgt 120
ggaggaaaaa ctgtttcata cagaaggcgt ggaggaaaaa ctgtttcata cagaaggcgt 180
ctcgaaggccg ccccgactgc atctgcgtgt tccaattcgc caatgacaag acgctgggcg 240
gggtttgtgt catcatagaa ctaaagacat gcaaatatat ttcttcgagg gacaccgcca 300
gcaaacgcga gcaacggggc acggggatga agcag 335
```

<210> 86

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 86

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

<210> 87

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

<220>
 <223> Synthetic Construct

<400> 87
 Gln Arg Arg Lys Tyr Arg Ser Asn Lys Gly Glu Ser Pro Val Glu Pro
 1 5 10 15
 Ala Glu Pro Cys Arg Tyr Ser Cys Pro Arg Glu Glu Glu Gly Ser Thr
 20 25 30
 Ile Pro Ile Gln Glu Asp Tyr Arg Lys Pro Glu Pro Ala Cys Ser Pro
 35 40 45

<210> 88
 <211> 264
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 88
 Ala Pro Pro Leu Gly Thr Gln Pro Asp Cys Asn Pro Thr Pro Glu Asn
 1 5 10 15
 Gly Glu Ala Pro Ala Ser Thr Ser Pro Thr Gln Ser Leu Leu Val Asp
 20 25 30
 Ser Gln Ala Ser Lys Thr Leu Pro Ile Pro Thr Ser Ala Pro Val Ser
 35 40 45
 Ser Thr Gly Lys Pro Val Leu Asp Ala Gly Pro Val Leu Phe Trp Val
 50 55 60
 Ile Leu Val Leu Val Val Val Gly Ser Ser Ala Phe Leu Leu Cys
 65 70 75 80
 His Arg Arg Ala Cys Arg Lys Arg Ile Arg Gln Lys Leu His Leu Cys
 85 90 95
 Tyr Pro Val Gln Thr Ser Gln Pro Lys Leu Glu Leu Val Asp Ser Arg
 100 105 110
 Pro Arg Arg Ser Ser Thr Gln Leu Arg Ser Gly Ala Ser Val Thr Glu
 115 120 125
 Pro Val Ala Glu Glu Arg Gly Leu Met Ser Gln Pro Leu Met Cys His
 130 135 140
 Ser Val Gly Ala Ala Tyr Leu Glu Ser Leu Pro Leu Gln Asp Asp Ala
 145 150 155 160
 Gly Gly Pro Ser Ser Pro Arg Asp Leu Pro Glu Pro Arg Val Ser Thr
 165 170 175
 Glu His Thr Asn Asn Lys Ile Glu Lys Ile Tyr Ile Met Lys Ala Asp
 180 185 190
 Thr Val Ile Val Gly Thr Val Lys Ala Glu Leu Pro Glu Gly Arg Gly
 195 200 205
 Leu Ala Gly Pro Ala Glu Pro Glu Leu Glu Glu Glu Leu Glu Ala Asp
 210 215 220
 His Thr Pro His Tyr Pro Glu Gln Glu Thr Glu Pro Pro Leu Gly Ser
 225 230 235 240
 Cys Ser Asp Val Met Leu Ser Val Glu Glu Glu Gly Lys Glu Asp Pro
 245 250 255
 Leu Pro Thr Ala Ala Ser Gly Lys
 260

<210> 89
 <211> 184
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 89
 His Arg Arg Ala Cys Arg Lys Arg Ile Arg Gln Lys Leu His Leu Cys
 1 5 10 15
 Tyr Pro Val Gln Thr Ser Gln Pro Lys Leu Glu Leu Val Asp Ser Arg
 20 25 30
 Pro Arg Arg Ser Ser Thr Gln Leu Arg Ser Gly Ala Ser Val Thr Glu
 35 40 45
 Pro Val Ala Glu Glu Arg Gly Leu Met Ser Gln Pro Leu Met Cys His
 50 55 60
 Ser Val Gly Ala Ala Tyr Leu Glu Ser Leu Pro Leu Gln Asp Asp Ala
 65 70 75 80
 Gly Gly Pro Ser Ser Pro Arg Asp Leu Pro Glu Pro Arg Val Ser Thr
 85 90 95
 Glu His Thr Asn Asn Lys Ile Glu Lys Ile Tyr Ile Met Lys Ala Asp
 100 105 110
 Thr Val Ile Val Gly Thr Val Lys Ala Glu Leu Pro Glu Gly Arg Gly
 115 120 125
 Leu Ala Gly Pro Ala Glu Pro Glu Leu Glu Glu Leu Glu Ala Asp
 130 135 140
 His Thr Pro His Tyr Pro Glu Gln Glu Thr Glu Pro Pro Leu Gly Ser
 145 150 155 160
 Cys Ser Asp Val Met Leu Ser Val Glu Glu Glu Gly Lys Glu Asp Pro
 165 170 175
 Leu Pro Thr Ala Ser Gly Lys
 180

<210> 90
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 90
 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 Phe Trp Val Leu Val Val
 35 40 45
 Val Gly Gly Val Leu Ala Cys Leu Leu Val Thr Val Ala Phe Ile Ile
 50 55 60
 Phe Trp Val Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met
 65 70 75 80
 Asn Met Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro
 85 90 95
 Tyr Ala Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser
 100 105

<210> 91
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 91
 Ala Ala Ala Thr Gly Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
 1 5 10 15
 Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
 20 25 30
 Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
 35 40 45

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

<210> 92
 <211> 99
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 92
 Ala Ala Ala Thr Gly Pro Ala Asp Leu Ser Pro Gly Ala Ser Ser Val
 1 5 10 15
 Thr Pro Pro Ala Pro Ala Arg Glu Pro Gly His Ser Pro Gln Ile Ile
 20 25 30
 Ser Phe Phe Leu Ala Leu Thr Ser Thr Ala Leu Leu Phe Leu Leu Phe
 35 40 45
 Phe Leu Thr Leu Arg Phe Ser Val Val Lys Arg Gly Arg Lys Lys Leu
 50 55 60
 Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
 65 70 75 80
 Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Gly Gly
 85 90 95
 Cys Glu Leu

<210> 93
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 93
 Ala Ala Ala Thr Gly Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
 1 5 10 15
 Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
 20 25 30
 Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
 35 40 45
 Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
 50 55 60
 Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Gln Arg Arg Lys Tyr Arg
 65 70 75 80
 Ser Asn Lys Gly Glu Ser Pro Val Glu Pro Ala Glu Pro Cys Arg Tyr
 85 90 95
 Ser Cys Pro Arg Glu Glu Glu Gly Ser Thr Ile Pro Ile Gln Glu Asp
 100 105 110
 Tyr Arg Lys Pro Glu Pro Ala Cys Ser Pro
 115 120

<210> 94
 <211> 124
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 94

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

<210> 95

<211> 258

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 95

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

Gly Lys

<210> 96
 <211> 269
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 96
 Ala Ala Ala Thr Gly Ala Pro Pro Leu Gly Thr Gln Pro Asp Cys Asn
 1 5 10 15
 Pro Thr Pro Glu Asn Gly Glu Ala Pro Ala Ser Thr Ser Pro Thr Gln
 20 25 30
 Ser Leu Leu Val Asp Ser Gln Ala Ser Lys Thr Leu Pro Ile Pro Thr
 35 40 45
 Ser Ala Pro Val Ser Ser Thr Gly Lys Pro Val Leu Asp Ala Gly Pro
 50 55 60
 Val Leu Phe Trp Val Ile Leu Val Leu Val Val Val Gly Ser Ser
 65 70 75 80
 Ala Phe Leu Leu Cys His Arg Arg Ala Cys Arg Lys Arg Ile Arg Gln
 85 90 95
 Lys Leu His Leu Cys Tyr Pro Val Gln Thr Ser Gln Pro Lys Leu Glu
 100 105 110
 Leu Val Asp Ser Arg Pro Arg Arg Ser Ser Thr Gln Leu Arg Ser Gly
 115 120 125
 Ala Ser Val Thr Glu Pro Val Ala Glu Glu Arg Gly Leu Met Ser Gln
 130 135 140
 Pro Leu Met Cys His Ser Val Gly Ala Ala Tyr Leu Glu Ser Leu Pro
 145 150 155 160
 Leu Gln Asp Asp Ala Gly Gly Pro Ser Ser Pro Arg Asp Leu Pro Glu
 165 170 175
 Pro Arg Val Ser Thr Glu His Thr Asn Asn Lys Ile Glu Lys Ile Tyr
 180 185 190
 Ile Met Lys Ala Asp Thr Val Ile Val Gly Thr Val Lys Ala Glu Leu
 195 200 205
 Pro Glu Gly Arg Gly Leu Ala Gly Pro Ala Glu Pro Glu Leu Glu Glu
 210 215 220
 Glu Leu Glu Ala Asp His Thr Pro His Tyr Pro Glu Gln Glu Thr Glu
 225 230 235 240
 Pro Pro Leu Gly Ser Cys Ser Asp Val Met Leu Ser Val Glu Glu Glu
 245 250 255
 Gly Lys Glu Asp Pro Leu Pro Thr Ala Ala Ser Gly Lys
 260 265

<210> 97
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 97
 Ala Ala Ala Thr Gly Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
 1 5 10 15
 Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
 20 25 30
 Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
 35 40 45
 Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
 50 55 60
 Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Ala Leu Tyr Leu Leu Arg
 65 70 75 80
 Arg Asp Gln Arg Leu Pro Pro Asp Ala His Lys Pro Pro Gly Gly Gly
 85 90 95
 Ser Phe Arg Thr Pro Ile Gln Glu Glu Gln Ala Asp Ala His Ser Thr
 100 105 110

Leu Ala Lys Ile
115

<210> 98
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 98
Ala Ala Ala Thr Gly Asp Arg Asp Pro Pro Ala Thr Gln Pro Gln Glu
1 5 10 15
Thr Gln Gly Pro Pro Ala Arg Pro Ile Thr Val Gln Pro Thr Glu Ala
20 25 30
Trp Pro Arg Thr Ser Gln Gly Pro Ser Trp Val Glu Val Pro Gly Gly
35 40 45
Arg Ala Val Ala Ala Ile Leu Gly Leu Gly Leu Val Leu Gly Leu Leu
50 55 60
Gly Pro Leu Ala Ile Leu Leu Ala Leu Tyr Leu Leu Arg Arg Asp Gln
65 70 75 80
Arg Leu Pro Pro Asp Ala His Lys Pro Pro Gly Gly Gly Ser Phe Arg
85 90 95
Thr Pro Ile Gln Glu Glu Gln Ala Asp Ala His Ser Thr Leu Ala Lys
100 105 110
Ile

<210> 99
<211> 129
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 99
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60
Gln Gly Gln Val Thr Ile Ala Asp Lys Ser Ile Ser Thr Ala Tyr Leu
65 70 75 80
Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95
Arg Gln Val Trp Gly Trp Gln Gly Gly Met Tyr Pro Arg Ser Asn Trp
100 105 110
Trp Tyr Asn Leu Asp Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser
115 120 125
Ser

<210> 100
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 100
 Leu Pro Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15
 Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile Gly Ser Lys Ser Val
 20 25 30
 His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Val Tyr
 35 40 45
 Asp Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60
 Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80
 Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp Tyr
 85 90 95
 Val Val Phe Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 101
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 101
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
 20 25 30
 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Ser Ala Ala Trp Met Asp Ser Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser
 115

<210> 102
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 102
 Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Thr Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser His Asp Ile Arg Asn Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile
 35 40 45
 Tyr Ala Asn Leu Gln Thr Gly Val Pro Ser Arg Phe Ser Gly Arg Gly
 50 55 60
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
 65 70 75 80
 Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Gly Leu Pro Leu Thr Phe
 85 90 95
 Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 100 105

<210> 103
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 103
 Ala Ala Ala
 1

<210> 104
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 104
 Ala Ala Ala Thr Gly
 1 5

<210> 105
 <211> 500
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 105
 Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 1 5 10 15
 Arg Val Thr Ile Ser Cys Ser Gly Thr Arg Ser Asn Ile Gly Ser Asp
 20 25 30
 Tyr Val Ser Trp Tyr Gln His Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45
 Val Tyr Gly Asp Asn Leu Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
 50 55 60
 Ala Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
 65 70 75 80
 Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Tyr Thr Leu
 85 90 95
 Asn Gly Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Ser
 100 105 110
 Arg Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
 115 120 125
 Leu Glu Met Ala Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
 130 135 140
 Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
 145 150 155 160
 Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
 165 170 175
 Leu Glu Trp Val Ser Val Ile Tyr Ser Gly Gly Ser Ser Thr Tyr Tyr
 180 185 190
 Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys
 195 200 205
 Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala
 210 215 220
 Val Tyr Tyr Cys Ala Arg Thr Ser Tyr Leu Asn His Gly Asp Tyr Trp
 225 230 235 240
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser Thr Ser Gly Gly Gly Gly
 245 250 255

Ser	Asp	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly
			260					265					270		
Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Arg
		275					280					285			
Tyr	Thr	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp
	290					295					300				
Ile	Gly	Tyr	Ile	Asn	Pro	Ser	Arg	Gly	Tyr	Thr	Asn	Tyr	Ala	Asp	Ser
305					310					315					320
Val	Lys	Gly	Arg	Phe	Thr	Ile	Thr	Thr	Asp	Lys	Ser	Thr	Ser	Thr	Ala
				325					330					335	
Tyr	Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Thr	Tyr	Tyr
			340					345					350		
Cys	Ala	Arg	Tyr	Tyr	Asp	Asp	His	Tyr	Cys	Leu	Asp	Tyr	Trp	Gly	Gln
		355					360					365			
Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Gly	Glu	Gly	Thr	Ser	Thr	Gly	Ser
	370					375					380				
Gly	Gly	Ser	Gly	Gly	Ser	Gly	Gly	Ala	Asp	Asp	Ile	Val	Leu	Thr	Gln
385					390					395					400
Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser
				405					410					415	
Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Tyr	Met	Asn	Trp	Tyr	Gln	Gln	Lys
			420					425					430		
Pro	Gly	Lys	Ala	Pro	Lys	Arg	Trp	Ile	Tyr	Asp	Thr	Ser	Lys	Val	Ala
		435					440					445			
Ser	Gly	Val	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Tyr
	450					455					460				
Ser	Leu	Thr	Ile	Asn	Ser	Leu	Glu	Ala	Glu	Asp	Ala	Ala	Thr	Tyr	Tyr
465					470					475					480
Cys	Gln	Gln	Trp	Ser	Ser	Asn	Pro	Leu	Thr	Phe	Gly	Gly	Gly	Thr	Lys
				485					490					495	
Val	Glu	Ile	Lys												
			500												