

146392029140SEQLIST

SEQUENCE LISTING

<110> Genentech, Inc.
 F. HOFFMANN-LA ROCHE AG
 DU, Changchun
 KIM, Jeong
 ZHU, Jing
 BEVERS III, Jack
 WALSH, Kevin
 DE ALMEIDA, Patricia
 ANDYA, James
 SHEN, Ye

<120> ANTI-OX40 ANTIBODIES AND METHODS OF USE

<130> 146392029140

<140> Not Yet Assigned

<141> Concurrently Herewith

<150> US 61/973,193

<151> 2014-03-31

<150> US 61/989,448

<151> 2014-05-06

<150> US 62/073,873

<151> 2014-10-31

<150> US 62/080,171

<151> 2014-11-14

<160> 209

<170> FastSEQ for Windows Version 4.0

<210> 1

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<212> PRT

<213> Homo sapiens

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Leu	His	Cys	Val	Gly	Asp	Thr	Tyr	Pro	Ser	Asn	Asp	Arg	Cys	Cys	His
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Glu	Cys	Arg	Pro	Gly	Asn	Gly	Met	Val	Ser	Arg	Cys	Ser	Arg	Ser	Gln
			20					25					30		

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

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Asp Ser Tyr Met Ser
  1      5

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Asp	Met	Tyr	Pro	Asp	Asn	Gly	Asp	Ser	Ser	Tyr	Asn	Gln	Lys	Phe	Arg
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Glu															

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Ala	Pro	Arg	Trp	Tyr	Phe	Ser	Val
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<400> 5

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

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<400> 6

Tyr	Thr	Ser	Arg	Leu	Arg	Ser
1			5			

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<400> 7
 Gln Gln Gly His Thr Leu Pro Pro Thr
 1 5

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 Asp Ala Tyr Met Ser
 1 5

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 Glu Ser Tyr Met Ser
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Asp	Met	Tyr	Pro	Asp	Asn	Ala	Asp	Ser	Ser	Tyr	Asn	Gln	Lys	Phe	Arg
1				5				10						15	
Glu															

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Asp	Met	Tyr	Pro	Asp	Asn	Ala	Asp	Ala	Ser	Tyr	Asn	Gln	Lys	Phe	Arg
1				5				10						15	
Glu															

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Asp	Met	Tyr	Pro	Asp	Asn	Gly	Asp	Ala	Ser	Tyr	Asn	Gln	Lys	Phe	Arg
1				5				10						15	
Glu															

<210> 13

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<400> 13

Asp	Met	Tyr	Pro	Asp	Ser	Gly	Asp	Ser	Ser	Tyr	Asn	Gln	Lys	Phe	Arg
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Glu

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<400> 14
 Asp Met Tyr Pro Asp Asn Gly Ser Ser Ser Tyr Asn Gln Lys Phe Arg
 1 5 10 15
 Glu

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 Ala Pro Arg Trp Tyr Phe Ser Ala
 1 5

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 Ala Pro Arg Trp Tyr Ala Ser Val
 1 5

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<400> 17

Ala Pro Arg Trp Ala Phe Ser Val
1 5

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<400> 18

Ala Pro Ala Trp Tyr Phe Ser Val
1 5

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Ala Pro Arg Trp Tyr Phe Ala Val
1 5

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<400> 20

Ala Pro Arg Ala Tyr Phe Ser Val
1 5

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<400> 21
 Ala Ala Arg Trp Tyr Phe Ser Val
 1 5

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<400> 22
 Gln Gln Gly His Thr Leu Pro Ala Thr
 1 5

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<400> 23
 Gln Gln Gly His Thr Ala Pro Pro Thr
 1 5

<210> 24
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<400> 24

Gln Gln Gly Ala Thr Leu Pro Pro Thr
1 5

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<400> 25

Gln Gln Gly His Ala Leu Pro Pro Thr
1 5

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<400> 26

Gln Gln Ala His Thr Leu Pro Pro Thr
1 5

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<400> 27

Gln Gln Gly His Thr Leu Ala Pro Thr
1 5

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<400> 28

Gln Ala Gly His Thr Leu Pro Pro Thr
1 5

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<400> 29

Asn Tyr Leu Ile Glu
1 5

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Val Ile Asn Pro Gly Ser Gly Asp Thr Tyr Tyr Ser Glu Lys Phe Lys
1 5 10 15
Gly

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<400> 31

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

Gly

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<400> 32
Val Ile Asn Pro Gly Ser Gly Asp Gln Tyr Tyr Ser Glu Lys Phe Lys
1 5 10 15
Gly

<210> 33
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<400> 33
Asp Arg Leu Asp Tyr
1 5

<210> 34
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<400> 34
Ala Arg Leu Asp Tyr
1 5

<210> 35
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<400> 35

Asp Ala Leu Asp Tyr
1 5

<210> 36

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<400> 36

Asp Arg Ala Asp Tyr
1 5

<210> 37

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<400> 37

His Ala Ser Gln Asp Ile Ser Ser Tyr Ile Val
1 5 10

<210> 38

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<400> 38

His Gly Thr Asn Leu Glu Asp
1 5

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<400> 39
 His Gly Thr Asn Leu Glu Ser
 1 5

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<400> 40
 His Gly Thr Asn Leu Glu Glu
 1 5

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<400> 41
 His Gly Thr Asn Leu Glu Gln
 1 5

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Val His Tyr Ala Gln Phe Pro Tyr Thr
1 5

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Ala His Tyr Ala Gln Phe Pro Tyr Thr
1 5

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<400> 44

Val Ala Tyr Ala Gln Phe Pro Tyr Thr
1 5

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<400> 45

Val His Ala Ala Gln Phe Pro Tyr Thr
1 5

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<400> 46

Val His Tyr Ala Ala Phe Pro Tyr Thr
1 5

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<223> Synthetic Construct

<400> 47

Val His Tyr Ala Gln Ala Pro Tyr Thr
1 5

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<223> Synthetic Construct

<400> 48

Val His Tyr Ala Gln Phe Ala Tyr Thr
1 5

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<400> 49

Val His Tyr Ala Gln Phe Pro Ala Thr
1 5

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 Asp Tyr Gly Val Leu
 1 5

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<400> 51
 Met Ile Trp Ser Gly Gly Thr Thr Asp Tyr Asn Ala Ala Phe Ile Ser
 1 5 10 15

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<400> 52
 Glu Glu Met Asp Tyr
 1 5

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Arg Ala Ser Gln Asp Ile Ser Asn Phe Leu Asn
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Tyr Thr Ser Arg Leu His Ser
1 5

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Gln Gln Gly Asn Thr Leu Pro Trp Thr
1 5

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<400> 56

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

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

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<400> 57
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Tyr Thr Ser Arg Leu Arg Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly His Thr Leu Pro Pro
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 58
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 <212> PRT
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<400> 58
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
20 25 30
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile

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

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<213> Artificial Sequence
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<220>
<223> Synthetic Construct

<400> 60
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

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

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

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146392029140SEQLIST

<223> Synthetic Construct

<400> 62

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

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

<210> 64

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146392029140SEQLIST

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<223> Synthetic Construct

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

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

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<210> 66
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 66
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Asp Met Tyr Pro Asp Asn Gly Asp Ser Ser Tyr Asn Gln Lys Phe
 50 55 60
 Arg Glu Arg Val Thr Ile Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Val Leu Ala Pro Arg Trp Tyr Phe Ser Val Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Thr Val Ser Ser
 115

<210> 67
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 67
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Thr Val Lys Leu Leu Ile
 35 40 45
 Tyr Tyr Thr Ser Arg Leu Arg Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Lys Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

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Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Gly His Thr Leu Pro Pro
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 68

<211> 117

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

<210> 69

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 69

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

146392029140SEQLIST

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

<210> 70
 <211> 117
 <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 Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ala
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Asp Met Tyr Pro Asp Asn Gly Asp Ser Ser Tyr Asn Gln Lys Phe
 50 55 60
 Arg Glu Arg Val Thr Ile Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Val Leu Ala Pro Arg Trp Tyr Phe Ser Val Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Thr Val Ser Ser
 115

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

<220>
 <223> Synthetic Construct

<400> 71
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

146392029140SEQLIST

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

<210> 72

<211> 117

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

<210> 73

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

146392029140SEQLIST

<400> 73

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

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<210> 74

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 74

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

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<210> 75

<211> 107

<212> PRT

146392029140SEQLIST

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 75

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

<210> 76

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 76

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

146392029140SEQLIST

<210> 77
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 77
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Tyr Thr Ser Arg Leu Arg Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly His Thr Leu Pro Pro
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 78
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 78
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Asp Met Tyr Pro Asp Asn Gly Asp Ala Ser Tyr Asn Gln Lys Phe
 50 55 60
 Arg Glu Arg Val Thr Ile Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Val Leu Ala Pro Arg Trp Tyr Phe Ser Val Trp Gly Gln Gly Thr Leu

146392029140SEQLIST

Val Thr Val Ser Ser
100 105 110
115

<210> 79
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 79
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Tyr Thr Ser Arg Leu Arg Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly His Thr Leu Pro Pro
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 80
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

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

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

<210> 81
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 81															
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10						15	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Asp	Ile	Ser	Asn	Tyr
		20					25					30			
Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
	35					40					45				
Tyr	Tyr	Thr	Ser	Arg	Leu	Arg	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50				55					60					
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65				70				75						80	
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Gly	His	Thr	Leu	Pro	Pro
			85					90					95		
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
			100					105							

<210> 82
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 82															
Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5				10						15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Asp	Ser
		20					25					30			
Tyr	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile

146392029140SEQLIST

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

<210> 83
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 83															
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Asp	Ile	Ser	Asn	Tyr
		20					25					30			
Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
	35					40				45					
Tyr	Tyr	Thr	Ser	Arg	Leu	Arg	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
50				55				60							
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65				70				75						80	
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Gly	His	Thr	Leu	Pro	Pro
			85					90					95		
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
			100					105							

<210> 84
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 84															
Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala

146392029140SEQLIST

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

<210> 85

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 85

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

<210> 86

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

146392029140SEQLIST

<223> Synthetic Construct

<400> 86

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

<210> 87

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 87

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

<210> 88

<211> 117

146392029140SEQLIST

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Synthetic Construct

<400> 88

[illegible]

<210> 89

<211> 107

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Synthetic Construct

<400> 89

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

146392029140SEQLIST

<210> 90
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 91
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 91
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Tyr Thr Ser Arg Leu Arg Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

146392029140SEQLIST

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Ala Thr Leu Pro Pro
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 92

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 92

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

<210> 93

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 93

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

146392029140SEQLIST

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

<210> 94
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 94
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Asp Met Tyr Pro Asp Asn Gly Asp Ser Ser Tyr Asn Gln Lys Phe
 50 55 60
 Arg Glu Arg Val Thr Ile Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Val Leu Ala Pro Arg Trp Tyr Phe Ser Val Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Thr Val Ser Ser
 115

<210> 95
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 95
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

146392029140SEQLIST

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

<210> 96

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 96

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

<210> 97

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

146392029140SEQLIST

<400> 97

```

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

```

<210> 98

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 98

```

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

```

<210> 99

<211> 107

<212> PRT

146392029140SEQLIST

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 99

```

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

```

<210> 100

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 100

```

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

```

146392029140SEQLIST

<210> 101
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 102
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

146392029140SEQLIST

100
 Val Thr Val Ser Ser
 115

<210> 103
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 103
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
 20 25 30
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Tyr Thr Ser Arg Leu Arg Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly His Thr Leu Pro Pro
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 104
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 104
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Asp Met Tyr Pro Asp Asn Gly Asp Ser Ser Tyr Asn Gln Lys Phe
 50 55 60
 Arg Glu Arg Val Thr Ile Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr

146392029140SEQLIST

```

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

```

<210> 105
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

```

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

```

<210> 106
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

```

<400> 106
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1          5          10          15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
          20          25          30
Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile

```

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```

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

```

<210> 107

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 107

```

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

```

<210> 108

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 108

```

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

```

146392029140SEQLIST

```

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

```

<210> 109

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 109

```

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

```

<210> 110

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

146392029140SEQLIST

<223> Synthetic Construct

<400> 110

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

<210> 111

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 111

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

<210> 112

<211> 117

146392029140SEQLIST

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 112

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

<210> 113

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 113

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

146392029140SEQLIST

<210> 114
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 114
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Ser
 20 25 30
 Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Asp Met Tyr Pro Asp Asn Gly Asp Ser Ser Tyr Asn Gln Lys Phe
 50 55 60
 Arg Glu Arg Val Thr Ile Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Leu Ala Pro Arg Trp Tyr Phe Ser Val Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Thr Val Ser Ser
 115

<210> 115
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

146392029140SEQLIST

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly His Thr Leu Pro Pro
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 116

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 116

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

<210> 117

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 117

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

146392029140SEQLIST

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

<210> 118
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 118
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Tyr
20 25 30
Leu Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45
Gly Val Ile Asn Pro Gly Ser Gly Asp Thr Tyr Tyr Ser Glu Lys Phe
50 55 60
Lys Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80
Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Asp Arg Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
100 105 110
Ser Ser

<210> 119
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 119
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

146392029140SEQLIST

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

<210> 120

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 120

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

<210> 121

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

146392029140SEQLIST

<400> 121

```

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

```

<210> 122

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 122

```

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

```

<210> 123

<211> 107

<212> PRT

146392029140SEQLIST

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 123

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

<210> 124

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 124

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

146392029140SEQLIST

<210> 125
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 126
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 126
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Tyr
 20 25 30
 Leu Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Val Ile Asn Pro Gly Ser Gly Asp Thr Tyr Tyr Ser Glu Lys Phe
 50 55 60
 Lys Gly Arg Val Thr Leu Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Arg Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val

146392029140SEQLIST

100 105 110
Ser Ser

<210> 127
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 127

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

<210> 128
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 128

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

146392029140SEQLIST

65					70					75				80	
Leu	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Asp	Arg	Leu	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val
			100					105					110		
Ser	Ser														

<210> 129
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 129															
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Ala	Ser	Gln	Asp	Ile	Ser	Ser	Tyr
		20					25					30			
Ile	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ser	Phe	Lys	Gly	Leu	Ile
	35					40					45				
Tyr	His	Gly	Thr	Asn	Leu	Glu	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50				55			60							
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65				70				75					80		
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Val	His	Tyr	Ala	Gln	Phe	Pro	Tyr
			85				90						95		
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
		100					105								

<210> 130
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 130															
Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5				10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ala	Phe	Thr	Asn	Tyr
		20					25					30			
Leu	Ile	Glu	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile

146392029140SEQLIST

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

<210> 131

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 131

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

<210> 132

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 132

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

146392029140SEQLIST

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

<210> 133
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 133			
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly			
1	5	10	15
Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Asp Ile Ser Ser Tyr			
20	25	30	
Ile Val Trp Tyr Gln Gln Lys Pro Gly Lys Ser Phe Lys Gly Leu Ile			
35	40	45	
Tyr His Gly Thr Asn Leu Glu Gln Gly Val Pro Ser Arg Phe Ser Gly			
50	55	60	
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro			
65	70	75	80
Glu Asp Phe Ala Thr Tyr Tyr Cys Val His Tyr Ala Gln Phe Pro Tyr			
85	90	95	
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys			
100	105		

<210> 134
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>

146392029140SEQLIST

<223> Synthetic Construct

<400> 134

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

<210> 135

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 135

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

<210> 136

<211> 114

146392029140SEQLIST

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 136

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

<210> 137

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 137

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

146392029140SEQLIST

<210> 138
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 138
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Tyr
 20 25 30
 Leu Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Val Ile Asn Pro Gly Ser Gly Asp Thr Tyr Tyr Ser Glu Lys Phe
 50 55 60
 Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Arg Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
 100 105 110
 Ser Ser

<210> 139
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 139
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Asp Ile Ser Ser Tyr
 20 25 30
 Ile Val Trp Tyr Gln Gln Lys Pro Gly Lys Ser Phe Lys Gly Leu Ile
 35 40 45
 Tyr His Gly Thr Asn Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

146392029140SEQLIST

Glu Asp Phe Ala Thr Tyr Tyr Cys Val His Tyr Ala Gln Phe Pro Tyr
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 140
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

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

<210> 141
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 141
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Asp Ile Ser Ser Tyr
20 25 30
Ile Val Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Leu Leu Ile
35 40 45

146392029140SEQLIST

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

<210> 142
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 142
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Tyr
20 25 30
Leu Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45
Gly Val Ile Asn Pro Gly Ser Gly Asp Thr Tyr Tyr Ser Glu Lys Phe
50 55 60
Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80
Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Asp Arg Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
100 105 110
Ser Ser

<210> 143
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 143
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

146392029140SEQLIST

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

<210> 144

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 144

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

<210> 145

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

146392029140SEQLIST

<400> 145

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

```

<210> 146

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 146

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

```

<210> 147

<211> 107

<212> PRT

146392029140SEQLIST

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 147

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

<210> 148

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 148

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

146392029140SEQLIST

<210> 149
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 149
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Asp Ile Ser Ser Tyr
 20 25 30
 Ile Val Trp Tyr Gln Gln Lys Pro Gly Lys Ser Phe Lys Gly Leu Ile
 35 40 45
 Tyr His Gly Thr Asn Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Val Ala Tyr Ala Gln Phe Pro Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 150
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 150
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Tyr
 20 25 30
 Leu Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Val Ile Asn Pro Gly Ser Gly Asp Thr Tyr Tyr Ser Glu Lys Phe
 50 55 60
 Lys Gly Arg Val Thr Leu Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Arg Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val

146392029140SEQLIST

100

105

110

Ser Ser

<210> 151

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 151

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

<210> 152

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 152

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

146392029140SEQLIST

65					70					75				80	
Leu	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Asp	Arg	Leu	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val
			100					105					110		
Ser	Ser														

<210> 153
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 153															
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	His	Ala	Ser	Gln	Asp	Ile	Ser	Ser	Tyr
		20					25					30			
Ile	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ser	Phe	Lys	Gly	Leu	Ile
	35					40					45				
Tyr	His	Gly	Thr	Asn	Leu	Glu	Asp	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50				55				60						
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65				70				75					80		
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Val	His	Tyr	Ala	Ala	Phe	Pro	Tyr
			85				90						95		
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
		100					105								

<210> 154
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 154															
Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5				10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ala	Phe	Thr	Asn	Tyr
		20					25					30			
Leu	Ile	Glu	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile

146392029140SEQLIST

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

<210> 155

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 155

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

<210> 156

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 156

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

146392029140SEQLIST

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

<210> 157
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 157			
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly			
1	5	10	15
Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Asp Ile Ser Ser Tyr			
20	25	30	
Ile Val Trp Tyr Gln Gln Lys Pro Gly Lys Ser Phe Lys Gly Leu Ile			
35	40	45	
Tyr His Gly Thr Asn Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly			
50	55	60	
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro			
65	70	75	80
Glu Asp Phe Ala Thr Tyr Tyr Cys Val His Tyr Ala Gln Phe Ala Tyr			
85	90	95	
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys			
100	105		

<210> 158
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>

146392029140SEQLIST

<223> Synthetic Construct

<400> 158

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

<210> 159

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 159

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

<210> 160

<211> 114

146392029140SEQLIST

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 160

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

<210> 161

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 161

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

146392029140SEQLIST

<210> 162
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 162
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Tyr
 20 25 30
 Leu Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Val Ile Asn Pro Gly Ser Gly Asp Thr Tyr Tyr Ser Glu Lys Phe
 50 55 60
 Lys Gly Arg Val Thr Leu Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Ala Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
 100 105 110
 Ser Ser

<210> 163
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 163
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys His Ala Ser Gln Asp Ile Ser Ser Tyr
 20 25 30
 Ile Val Trp Tyr Gln Gln Lys Pro Gly Lys Ser Phe Lys Gly Leu Ile
 35 40 45
 Tyr His Gly Thr Asn Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

146392029140SEQLIST

Glu Asp Phe Ala Thr Tyr Tyr Cys Val His Tyr Ala Gln Phe Pro Tyr
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 164

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 164

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

<210> 165

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 165

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

146392029140SEQLIST

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

<210> 166
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 166
 Glu Val Gln Leu Val Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Asp Tyr
 20 25 30
 Gly Val Leu Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Met Ile Trp Ser Gly Gly Thr Thr Asp Tyr Asn Ala Ala Phe Ile
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Val
 85 90 95
 Arg Glu Glu Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
 100 105 110
 Ser

<210> 167
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 167
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

146392029140SEQLIST

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

<210> 168

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 168

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

<210> 169

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

146392029140SEQLIST

<400> 169

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

```

<210> 170

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 170

```

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

```

<210> 171

<211> 107

<212> PRT

146392029140SEQLIST

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 171

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

<210> 172

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> 1

<223> Xaa = D or E

<220>

<221> VARIANT

<222> 2

<223> Xaa = S or A

<400> 172

Xaa	Xaa	Tyr	Met	Ser
1			5	

<210> 173

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> 6

<223> Xaa = N or S

<220>

<221> VARIANT

<222> 7

<223> Xaa = A or G

<220>

<221> VARIANT

<222> 8

<223> Xaa = D or S

<220>

<221> VARIANT

<222> 9

<223> Xaa = A or S

<400> 173

Asp Met Tyr Pro Asp Xaa Xaa Xaa Xaa Ser Tyr Asn Gln Lys Phe Arg

1

5

10

15

Glu

<210> 174

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> 5

<223> Xaa = Y or A

<220>

<221> VARIANT

<222> 6

<223> Xaa = A or F

<220>

<221> VARIANT

<222> 7

<223> Xaa = S or A

<220>

<221> VARIANT

<222> 8

<223> Xaa = A or V

<400> 174

Ala Pro Arg Trp Xaa Xaa Xaa Xaa
1 5

<210> 175

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> 2

<223> Xaa = A or Q

<220>

<221> VARIANT

<222> 3

<223> Xaa = A or G

<220>

<221> VARIANT

<222> 4

<223> Xaa = A or H

<220>

<221> VARIANT

<222> 5

<223> Xaa = A or T

<220>

<221> VARIANT

<222> 6

146392029140SEQLIST

<223> Xaa = A or L

<220>

<221> VARIANT

<222> 7

<223> Xaa = A or P

<220>

<221> VARIANT

<222> 8

<223> Xaa = A or P

<400> 175

Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Thr
1 5

<210> 176

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> 9

<223> Xaa = T, A or Q

<400> 176

Val Ile Asn Pro Gly Ser Gly Asp Xaa Tyr Tyr Ser Glu Lys Phe Lys
1 5 10 15
Gly

<210> 177

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> 7

146392029140SEQLIST

<223> Xaa = S, E, or Q

<400> 177

His Gly Thr Asn Leu Glu Xaa
1 5

<210> 178

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> 1

<223> Xaa = V or A

<220>

<221> VARIANT

<222> 2

<223> Xaa = H or A

<220>

<221> VARIANT

<222> 9

<223> Xaa = Y or A

<400> 178

Xaa Xaa Tyr Ala Gln Phe Pro Tyr Xaa
1 5

<210> 179

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 179

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

146392029140SEQLIST

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

<210> 180

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 180

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

<210> 181

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 181

146392029140SEQLIST

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

<210> 182

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 182

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

<210> 183

<211> 117

<212> PRT

<213> Artificial Sequence

146392029140SEQLIST

<220>

<223> Synthetic Construct

<400> 183

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

<210> 184

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 184

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

146392029140SEQLIST

<210> 185
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 185
 Glu 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
 20 25

<210> 186
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 186
 Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 1 5 10

<210> 187
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 187
 Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15
 Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 20 25 30

<210> 188
 <211> 11
 <212> PRT
 <213> Artificial Sequence

146392029140SEQLIST

<220>

<223> Synthetic Construct

<400> 188

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

<210> 189

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 189

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

<210> 190

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 190

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

<210> 191

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 191

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

146392029140SEQLIST

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
 20 25 30

<210> 192
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 192
 Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 1 5 10

<210> 193
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 193
 Asp Met Tyr Pro Asp Ala Ala Ala Ala Ser Tyr Asn Gln Lys Phe Arg
 1 5 10 15
 Glu

<210> 194
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 194
 Ala Pro Arg Trp Ala Ala Ala Ala
 1 5

<210> 195
 <211> 9
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 195

Gln Ala Ala Ala Ala Ala Ala Thr
1 5

<210> 196

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 196

Ala Leu Ala Pro Arg Trp Tyr Phe Ser Val
1 5 10

<210> 197

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 197

Ala Arg Ala Arg Leu Asp Tyr
1 5

<210> 198

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 198

Ala Arg Asp Ala Leu Asp Tyr
1 5

146392029140SEQLIST

<210> 199
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 199
 Ala Arg Asp Arg Ala Asp Tyr
 1 5

<210> 200
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 200
 Ala Arg Asp Arg Leu Asp Tyr
 1 5

<210> 201
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 201
 Val Ala Ala Pro Arg Trp Tyr Phe Ser Val
 1 5 10

<210> 202
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

146392029140SEQLIST

<400> 202

Val Leu Ala Ala Arg Trp Tyr Phe Ser Val
1 5 10

<210> 203

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 203

Val Leu Ala Pro Ala Trp Tyr Phe Ser Val
1 5 10

<210> 204

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 204

Val Leu Ala Pro Arg Ala Tyr Phe Ser Val
1 5 10

<210> 205

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 205

Val Leu Ala Pro Arg Trp Ala Phe Ser Val
1 5 10

<210> 206

<211> 10

<212> PRT

<213> Artificial Sequence

146392029140SEQLIST

<220>

<223> Synthetic Construct

<400> 206

Val	Leu	Ala	Pro	Arg	Trp	Tyr	Ala	Ser	Val
1				5					10

<210> 207

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 207

Val	Leu	Ala	Pro	Arg	Trp	Tyr	Phe	Ala	Val
1				5					10

<210> 208

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 208

Val	Leu	Ala	Pro	Arg	Trp	Tyr	Phe	Ser	Ala
1				5					10

<210> 209

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 209

Val	Leu	Ala	Pro	Arg	Trp	Tyr	Phe	Ser	Val
1				5					10