

SEQUENCE LISTING

<110> Sanofi

<120> TRISPECIFIC ANTI-CD38, ANTI-CD28, AND ANTI-CD3 BINDING
PROTEINS AND METHODS OF USE FOR TREATING VIRAL INFECTION

<130> 18395-20321.40

<140> Not Yet Assigned

<141> Concurrently Herewith

<150> EP 19306097.7

<151> 2019-09-11

<150> US 62/831,608

<151> 2019-04-09

<150> US 62/831,572

<151> 2019-04-09

<150> PCT/US2018/055084

<151> 2018-10-09

<160> 132

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1

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

		115					120					125				
Cys	Pro	Asp	Trp	Arg	Lys	Asp	Cys	Ser	Asn	Asn	Pro	Val	Ser	Val	Phe	
	130					135					140					
Trp	Lys	Thr	Val	Ser	Arg	Arg	Phe	Ala	Glu	Ala	Ala	Cys	Asp	Val	Val	
145					150					155					160	
His	Val	Met	Leu	Asn	Gly	Ser	Arg	Ser	Lys	Ile	Phe	Asp	Lys	Asn	Ser	
			165						170					175		
Thr	Phe	Gly	Ser	Val	Glu	Val	His	Asn	Leu	Gln	Pro	Glu	Lys	Val	Gln	
		180					185						190			
Thr	Leu	Glu	Ala	Trp	Val	Ile	His	Gly	Gly	Arg	Glu	Asp	Ser	Arg	Asp	
	195					200					205					
Leu	Cys	Gln	Asp	Pro	Thr	Ile	Lys	Glu	Leu	Glu	Ser	Ile	Ile	Ser	Lys	
	210					215					220					
Arg	Asn	Ile	Gln	Phe	Ser	Cys	Lys	Asn	Ile	Tyr	Arg	Pro	Asp	Lys	Phe	
225					230					235					240	
Leu	Gln	Cys	Val	Lys	Asn	Pro	Glu	Asp	Ser	Ser	Cys	Thr	Ser	Glu	Ile	
			245					250						255		

<210> 2
 <211> 265
 <212> PRT
 <213> Homo sapiens

<400> 2

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

		195					200					205				
Leu	Cys	Gln	Asp	Pro	Thr	Ile	Lys	Glu	Leu	Glu	Ser	Ile	Ile	Ser	Lys	
	210					215					220					
Arg	Asn	Ile	Gln	Phe	Ser	Cys	Lys	Asn	Ile	Tyr	Arg	Pro	Asp	Lys	Phe	
225					230					235					240	
Leu	Gln	Cys	Val	Lys	Asn	Pro	Glu	Asp	Ser	Ser	Cys	Thr	Ser	Glu	Ile	
			245						250					255		
Ser	Ala	Ser	His	His	His	His	His	His								
		260					265									

<210> 3
 <400> 3
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<210> 4
 <211> 265
 <212> PRT
 <213> Macaca fascicularis

<400> 4

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

Arg	Asn	Ile	Arg	Phe	Phe	Cys	Lys	Asn	Ile	Tyr	Arg	Pro	Asp	Lys	Phe
225					230					235					240
Leu	Gln	Cys	Val	Lys	Asn	Pro	Glu	Asp	Ser	Ser	Cys	Leu	Ser	Gly	Ile
				245					250					255	
Ser	Ala	Ser	His	His	His	His	His	His							
			260					265							

<210> 5
 <211> 119
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 6
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

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

<210> 7

<211> 449

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 7

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

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

Gly

<210> 8
 <211> 218
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 8

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

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

<210> 9

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 9

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

<210> 10

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 10

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

<210> 11

<211> 446

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 11

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

				165					170				175			
Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	
			180					185					190			
Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	
		195					200					205				
Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	
	210					215					220					
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Ala	Gly	Pro	Asp	Val	
225					230					235					240	
Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	
			245					250						255		
Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	
			260					265					270			
Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	
		275					280					285				
Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	
	290					295					300					
Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	
305					310					315					320	
Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Leu	Pro	Glu	Glu	Lys	Thr	Ile	
			325					330						335		
Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	
		340						345					350			
Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	
		355					360					365				
Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	
	370					375					380					
Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	
385					390					395					400	
Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	
			405					410						415		
Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	
			420					425					430			
His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly			
		435					440					445				

<210> 12
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 12
 Ala 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 Gly Ile Arg Asn Asp
 20 25 30

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

<210> 13
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 13															
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Val	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
		20					25					30			
Ala	Met	His	Trp	Val	Lys	Glu	Ala	Pro	Gly	Gln	Arg	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Tyr	Ile	Tyr	Pro	Gly	Gln	Gly	Gly	Thr	Asn	Tyr	Asn	Gln	Lys	Phe
	50					55				60					
Gln	Gly	Arg	Ala	Thr	Leu	Thr	Ala	Asp	Thr	Ser	Ala	Ser	Thr	Ala	Tyr
65					70					75					80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Phe	Cys
				85					90					95	
Ala	Arg	Thr	Gly	Gly	Leu	Arg	Arg	Ala	Tyr	Phe	Thr	Tyr	Trp	Gly	Gln
			100					105					110		
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser								

115

120

<210> 14

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 14

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

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<210> 15

<211> 449

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 15

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

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			100					105				110			
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val
			115					120				125			
Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala
			130				135					140			
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
145					150					155					160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
			165					170						175	
Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro
			180					185					190		
Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys
			195				200					205			
Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp
			210			215					220				
Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Ala	Gly
225				230						235					240
Pro	Asp	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile
			245					250						255	
Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu
			260					265					270		
Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His
		275				280					285				
Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg
		290				295					300				
Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys
305				310						315					320
Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Leu	Pro	Glu	Glu
			325						330					335	
Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr
		340					345						350		
Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu
		355				360						365			
Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp
		370			375						380				
Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val
385				390						395					400
Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp
			405					410						415	
Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His
		420					425						430		
Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro
		435				440						445			

Gly

<210> 16
 <211> 218
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 16

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

<210> 17

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 17

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

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

<210> 18
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 18															
Asp	Ile	Val	Leu	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro	Gly
1			5					10					15		
Glu	Arg	Ala	Thr	Ile	Ser	Cys	Arg	Ala	Ser	Glu	Ser	Val	Asp	Ser	Tyr
		20					25					30			
Gly	Asn	Gly	Phe	Met	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro
	35					40					45				
Arg	Leu	Leu	Ile	Tyr	Leu	Ala	Ser	Ser	Arg	Ala	Thr	Gly	Ile	Pro	Ala
	50				55				60						
Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser
65				70					75					80	
Pro	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Asn	Lys
			85					90						95	
Glu	Asp	Pro	Trp	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Glu	Ile	Lys	
		100					105					110			

<210> 19
 <211> 449
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 19															
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Val	Lys	Pro	Gly	Ala
1			5					10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Phe

			20					25				30					
Asn	Met	His	Trp	Val	Lys	Glu	Ala	Pro	Gly	Gln	Arg	Leu	Glu	Trp	Ile		
		35					40					45					
Gly	Tyr	Ile	Tyr	Pro	Gly	Asn	Gly	Gly	Thr	Asn	Tyr	Asn	Gln	Lys	Phe		
	50					55					60						
Gln	Gly	Arg	Ala	Thr	Leu	Thr	Ala	Asp	Thr	Ser	Ala	Ser	Thr	Ala	Tyr		
65					70					75					80		
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Phe	Cys		
			85						90					95			
Ala	Arg	Thr	Gly	Gly	Leu	Arg	Arg	Ala	Tyr	Phe	Thr	Tyr	Trp	Gly	Gln		
			100					105					110				
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val		
	115						120					125					
Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala		
130						135					140						
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser		
145					150					155					160		
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val		
			165					170						175			
Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro		
		180						185					190				
Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys		
	195					200					205						
Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp		
	210					215					220						
Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Ala	Gly		
225					230					235					240		
Pro	Asp	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile		
			245					250						255			
Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu		
		260					265						270				
Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His		
	275					280					285						
Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg		
	290					295					300						
Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys		
305				310					315						320		
Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Leu	Pro	Glu	Glu		
			325					330						335			
Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr		
		340					345						350				
Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu		
	355					360						365					
Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp		
	370				375					380							
Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val		
385				390					395						400		
Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp		
			405					410					415				
Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His		

		420						425					430		
Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro
		435					440					445			
Gly															

<210> 20
 <211> 218
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 20

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

<210> 21
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 21

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

<210> 22

<211> 449

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 22

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

Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
145					150					155					160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
			165					170							175
Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro
		180					185						190		
Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys
	195					200					205				
Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp
	210				215					220					
Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Ala	Gly
225				230					235						240
Pro	Asp	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile
			245					250						255	
Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu
	260						265					270			
Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His
	275					280					285				
Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg
	290				295						300				
Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys
305				310					315						320
Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Leu	Pro	Glu	Glu
			325					330						335	
Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr
	340						345					350			
Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu
	355					360					365				
Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp
	370				375					380					
Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val
385				390					395						400
Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp
			405					410						415	
Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His
	420						425					430			
Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro
	435					440					445				

Gly

<210> 23
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 23

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

<210> 24

<211> 449

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 24

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

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

Gly

<210> 25

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 25

Ser Leu Tyr Asn Thr Val Ala Thr Leu

1

5

<210> 26
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 26
Asn Leu Val Pro Met Val Ala Thr Val
1 5

<210> 27
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 27
Gly Leu Cys Thr Leu Val Ala Met Leu
1 5

<210> 28
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 28
Gly Ile Leu Gly Phe Val Phe Thr Leu
1 5

<210> 29
<400> 29
000

<210> 30
<211> 256
<212> PRT
<213> Macaca fascicularis

<400> 30

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

<210> 31

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 31

Gly	Tyr	Thr	Phe	Thr	Ser	Phe	Asn
1				5			

<210> 32

<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 32
Ile Tyr Pro Gly Asn Gly Gly Thr
1 5

<210> 33
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 33
Ala Arg Thr Gly Gly Leu Arg Arg Ala Tyr Phe Thr Tyr
1 5 10

<210> 34
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 34
Glu Ser Val Asp Ser Tyr Gly Asn Gly Phe
1 5 10

<210> 35
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 35
Leu Ala Ser
1

<210> 36
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 36
Gln Gln Asn Lys Glu Asp Pro Trp Thr
1 5

<210> 37
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 37
Gly Tyr Thr Phe Thr Ser Tyr Ala
1 5

<210> 38
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 38
Ile Tyr Pro Gly Gln Gly Gly Thr
1 5

<210> 39
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 39
Gln Ser Val Ser Ser Tyr Gly Gln Gly Phe
1 5 10

<210> 40
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 40
Gly Ala Ser
1

<210> 41
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 41
Gly Phe Thr Phe Ser Ser Tyr Gly
1 5

<210> 42
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 42
Ile Trp Tyr Asp Gly Ser Asn Lys
1 5

<210> 43
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 43

Ala Arg Met Phe Arg Gly Ala Phe Asp Tyr
1 5 10

<210> 44
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 44
Gln Gly Ile Arg Asn Asp
1 5

<210> 45
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 45
Ala Ala Ser
1

<210> 46
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 46
Leu Gln Asp Tyr Ile Tyr Tyr Pro Thr
1 5

<210> 47
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 47

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

<210> 48

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 48

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

<210> 49

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 49

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

<210> 50

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 50

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	Gln	Ala	Ser	Gln	Asn	Ile	Tyr	Val	Trp
		20					25					30			
Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
	35					40						45			
Tyr	Lys	Ala	Ser	Asn	Leu	His	Thr	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	Ile	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Gly	Gln	Thr	Tyr	Pro	Tyr
				85					90					95	
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys					
			100					105							

<210> 51

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 51

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

<210> 52

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 52

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

<210> 53

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

<220>
<223> Synthetic Construct

<400> 53
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Thr Lys Ala
20 25 30
Trp Met His Trp Val Arg Gln Ala Pro Gly Lys Gln Leu Glu Trp Val
35 40 45
Ala Gln Ile Lys Asp Lys Ser Asn Ser Tyr Ala Thr Tyr Tyr Ala Asp
50 55 60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80
Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
85 90 95
Tyr Cys Arg Gly Val Tyr Tyr Ala Leu Ser Pro Phe Asp Tyr Trp Gly
100 105 110
Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 54
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 54
Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
1 5 10 15
Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Val His Asn
20 25 30
Asn Ala Asn Thr Tyr Leu Ser Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Gln Ser Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Gly Gln Gly
85 90 95
Thr Gln Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 55
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 55
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 56
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 56
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 57
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 57
Thr Lys Gly Pro Ser
1 5

<210> 58
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 58
Gly Gln Pro Lys Ala Ala Pro

1

5

<210> 59

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 59

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

<210> 60

<211> 570

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 60

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

<211> 338
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 61

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

Glu Cys

<210> 62

<211> 446

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 62

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

290		295		300											
Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys
305					310					315					320
Cys	Lys	Val	Ser	Asn	Lys	Gly	Leu	Pro	Ser	Ser	Ile	Glu	Lys	Thr	Ile
				325					330						335
Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro
			340					345						350	
Pro	Cys	Gln	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Trp	Cys	Leu
		355					360					365			
Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn
370						375					380				
Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser
385					390					395					400
Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg
			405					410						415	
Trp	Gln	Glu	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu
			420					425					430		
His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Leu	Gly		
		435					440						445		

<210> 63

<211> 218

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 63

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

Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr
				165					170					175	
Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys
			180					185					190		
His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro
		195					200					205			
Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys						
	210					215									

<210> 64
 <211> 573
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 64

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

				245					250				255			
Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	
			260					265					270			
Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	
		275					280					285				
Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	
	290					295					300					
Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	
305					310					315					320	
Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	
			325						330					335		
Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	
			340					345					350			
Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Ala	Ala	Gly	Gly	Pro	Ser	Val	Phe	
		355					360					365				
Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	
	370					375					380					
Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	
385					390					395					400	
Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	
			405						410					415		
Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	
			420					425				430				
Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	
	435					440						445				
Lys	Val	Ser	Asn	Lys	Ala	Leu	Ala	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	
	450					455					460					
Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Cys	Thr	Leu	Pro	Pro	
465					470				475					480		
Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Ser	Cys	Ala	Val	
			485					490					495			
Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	
			500					505				510				
Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	
		515					520					525				
Gly	Ser	Phe	Phe	Leu	Val	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	
	530					535				540						
Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	
545					550					555					560	
Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly				
			565					570								

<210> 65

<211> 449

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 65

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Val	Lys	Pro	Gly	Ala
1			5						10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
			20					25					30		
Ala	Met	His	Trp	Val	Lys	Glu	Ala	Pro	Gly	Gln	Arg	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Tyr	Ile	Tyr	Pro	Gly	Gln	Gly	Gly	Thr	Asn	Tyr	Asn	Gln	Lys	Phe
	50					55					60				
Gln	Gly	Arg	Ala	Thr	Leu	Thr	Ala	Asp	Thr	Ser	Ala	Ser	Thr	Ala	Tyr
65					70					75					80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Phe	Cys
				85					90					95	
Ala	Arg	Thr	Gly	Gly	Leu	Arg	Arg	Ala	Tyr	Phe	Thr	Tyr	Trp	Gly	Gln
			100					105					110		
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val
		115					120					125			
Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala
	130					135					140				
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
145					150					155					160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
			165					170					175		
Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro
			180					185					190		
Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys
		195				200						205			
Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp
	210					215					220				
Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Ala	Ala	Gly	Gly
225					230					235					240
Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile
			245						250					255	
Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu
			260					265					270		
Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His
	275						280					285			
Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg
	290					295					300				
Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys
305					310					315					320
Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Ala	Ala	Pro	Ile	Glu
			325						330					335	
Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr
		340						345					350		
Thr	Leu	Pro	Pro	Cys	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu
		355					360					365			
Trp	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp
	370					375					380				

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

<210> 66
 <211> 573
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 66															
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Val	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
		20					25					30			
Tyr	Ile	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile
	35					40						45			
Gly	Ser	Ile	Tyr	Pro	Gly	Asn	Val	Asn	Thr	Asn	Tyr	Ala	Gln	Lys	Phe
50					55					60					
Gln	Gly	Arg	Ala	Thr	Leu	Thr	Val	Asp	Thr	Ser	Ile	Ser	Thr	Ala	Tyr
65				70					75					80	
Met	Glu	Leu	Ser	Arg	Leu	Arg	Ser	Asp	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90					95		
Thr	Arg	Ser	His	Tyr	Gly	Leu	Asp	Trp	Asn	Phe	Asp	Val	Trp	Gly	Lys
		100					105						110		
Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Gln	Val	Gln	Leu	Val	Glu	Ser	
	115					120					125				
Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg	Ser	Leu	Arg	Leu	Ser	Cys	Ala
130					135					140					
Ala	Ser	Gly	Phe	Thr	Phe	Thr	Lys	Ala	Trp	Met	His	Trp	Val	Arg	Gln
145				150					155					160	
Ala	Pro	Gly	Lys	Gln	Leu	Glu	Trp	Val	Ala	Gln	Ile	Lys	Asp	Lys	Ser
			165					170					175		
Asn	Ser	Tyr	Ala	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr
		180					185						190		
Ile	Ser	Arg	Asp	Asp	Ser	Lys	Asn	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser
	195					200						205			
Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Arg	Gly	Val	Tyr	Tyr
210					215						220				
Ala	Leu	Ser	Pro	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val

225					230					235				240
Ser	Ser	Arg	Thr	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu
				245					250					255
Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys
			260					265					270	
Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser
		275					280					285		Gly
Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser
	290					295					300			Ser
Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser
305					310					315				320
Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn
				325					330					335
Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His
			340					345					350	Thr
Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val
		355					360					365		Phe
Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr
	370					375					380			Pro
Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu
385					390					395				400
Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys
				405					410					415
Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Asn	Ala	Ser	Arg	Val	Val	Ser
			420				425					430		Val
Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys
	435					440						445		Cys
Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile
	450					455					460			Ser
Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Cys	Thr	Leu	Pro
465					470				475					480
Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Ser	Cys	Ala
			485					490					495	Val
Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn
		500						505				510		Gly
Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	515					520					525			
Gly	Ser	Phe	Phe	Leu	Val	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg
	530					535				540				Trp
Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu
545					550				555					560
Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly		
				565					570					

<210> 67
 <211> 449
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 67

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Val	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
			20					25					30		
Ala	Met	His	Trp	Val	Lys	Glu	Ala	Pro	Gly	Gln	Arg	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Tyr	Ile	Tyr	Pro	Gly	Gln	Gly	Gly	Thr	Asn	Tyr	Asn	Gln	Lys	Phe
	50					55					60				
Gln	Gly	Arg	Ala	Thr	Leu	Thr	Ala	Asp	Thr	Ser	Ala	Ser	Thr	Ala	Tyr
65					70					75					80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Phe	Cys
				85					90					95	
Ala	Arg	Thr	Gly	Gly	Leu	Arg	Arg	Ala	Tyr	Phe	Thr	Tyr	Trp	Gly	Gln
			100					105					110		
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val
		115					120					125			
Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala
	130					135					140				
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
145					150					155					160
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
			165					170						175	
Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro
			180					185					190		
Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys
	195					200						205			
Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp
	210					215					220				
Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly
225					230					235					240
Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile
			245						250					255	
Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu
		260					265						270		
Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His
	275					280					285				
Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Asn	Ala	Ser	Arg
	290					295					300				
Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys
305					310					315					320
Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu
			325						330					335	
Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr
		340					345						350		
Thr	Leu	Pro	Pro	Cys	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu
		355					360					365			

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

Gly

<210> 68

<211> 443

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 68

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

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

<210> 69

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 69

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

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

<210> 70

<211> 446

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 70

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

				165					170				175			
Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	
			180					185					190			
Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	
		195					200					205				
Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	
	210					215					220					
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Ala	Ala	Gly	Gly	Pro	Ser	Val	
225					230				235						240	
Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	
			245					250						255		
Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	
			260					265					270			
Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	
		275					280					285				
Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	
	290					295					300					
Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	
305					310					315					320	
Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Ala	Ala	Pro	Ile	Glu	Lys	Thr	Ile	
				325				330						335		
Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	
		340						345					350			
Pro	Cys	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Trp	Cys	Leu	
		355					360					365				
Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	
	370					375					380					
Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	
385					390					395					400	
Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	
			405					410						415		
Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	
			420					425					430			
His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly			
		435					440					445				

<210> 71

<211> 446

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 71

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

Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ala	Val	Ile	Trp	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	Asp	Ser	Val
	50					55					60				
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Gly	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
65					70					75					80
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Met	Phe	Arg	Gly	Ala	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu
			100					105				110			
Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu
		115					120					125			
Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys
	130					135					140				
Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser
145					150					155					160
Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser
				165					170					175	
Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser
			180					185				190			
Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn
		195					200					205			
Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His
	210					215					220				
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val
225					230					235					240
Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr
				245					250					255	
Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu
			260					265					270		
Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys
		275					280					285			
Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Asn	Ala	Ser	Arg	Val	Val	Ser
		290				295					300				
Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys
305					310					315					320
Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile
				325					330					335	
Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro
			340					345					350		
Pro	Cys	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Trp	Cys	Leu
		355					360					365			
Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn
		370				375					380				
Gly	Gln	Pro	Glu	Asn	Asn	Tyr									

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
435 440 445

<210> 72
<211> 1710
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 72
cagggtgcagc tgggtgcagtc tggcgccgag gtcgtgaaac ctggcgccctc tgtgaagggtg 60
tcctgcaagg ccagcggcta cacctttacc agctactaca tccactgggt gcgccaggcc 120
cctggacagg gactggaatg gatcggcagc atctaccccg gcaacgtgaa caccaactac 180
gccagaagt tccagggcag agccaccctg accgtggaca ccagcatcag caccgcctac 240
atggaactga gccggctgag aagcgacgac accgccgtgt actactgcac ccggtcccac 300
tacggcctgg attggaactt cgacgtgtgg ggcaagggca ccaccgtgac agtgtctagc 360
agccagggtgc agctgggtgga atctggcggc ggagtggtgc agcctggcag aagcctgaga 420
ctgagctgtg ccgccagcgg cttcaccttc accaaggcct ggatgcactg ggtgcgccag 480
gccctggaa agcagctgga atgggtggcc cagatcaagg acaagagcaa cagctacgcc 540
acctactacg ccgacagcgt gaagggccgg ttaccatca gccgggacga cagcaagaac 600
accctgtacc tgcagatgaa cagcctgcgg gccgaggaca ccgccgtgta ctactgtcgg 660
ggcgtgtact atgccctgag ccccttcgat tactggggcc aggggaaccct cgtgaccgtg 720
tctagtcgga ccgccagcac aaagggccca tcggtgttcc ctctggcccc ttgcagcaga 780
agcaccagcg aatctacagc cgccctgggc tgccctcgtga aggactactt tcccagagccc 840
gtgaccgtgt cctggaactc tggcgctctg acaagcggcg tgcacacctt tccagccgtg 900
ctccagagca gcggcctgta ctctctgagc agcgtcgtga cagtgtcccag cagcagcctg 960
ggcaccaaga cctacacctg taacgtggac cacaagccca gcaacaccaa ggtggacaag 1020
cgggtggaat ctaagtacgg ccctccctgc cctccttgcc cagcccctga agctgccggc 1080
ggaccctccg tgttcctgtt cccccaaaag cccaaggaca ccctgatgat cagccggacc 1140
cccgaagtga cctgcgtggt ggtggatgtg tcccaggaag atcccagagt gcagttcaat 1200
tgggtacgtgg acggcgtgga agtgcacaac gccaagacca agcccagaga ggaacagttc 1260
aacagcacct accgggtggt gtccgtgctg accgtgctgc accaggactg gctgaacggc 1320
aaagagtaca agtgcaagggt gtccaacaag ggcctgcca gctccatcga gaaaaccatc 1380
agcaaggcca agggccagcc ccgcgagcct caagtgtgta ccctgcccc tagccaggaa 1440
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<210> 73
<211> 1014
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 73

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<210> 74

<211> 1338

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 74

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<210> 75

<211> 654

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 75

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cagcagaagc ccggccagcc cccagactg ctgatctatg gcgccagcag cagagccaca 180
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<210> 76

<211> 1719

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 76

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<210> 77

<211> 1347

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 77

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cagcagggca	acgtgttcag	ctgctccgtg	atgcacgagg	ccctgcacaa	ccactacacc	1320
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<210> 78

<211> 1719

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 78

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aagtcccggg ggcagcaggg caacgtgttc agctgctccg tgatgcacga ggccctgcac 1680
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<210> 79

<211> 1347

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 79

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<210> 80

<211> 1329

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 80

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cctggcaaag	gactggaatg	ggtggccgtg	atttggtacg	acggcagcaa	caagtactac	180
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<211> 642
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 81
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<210> 82
<211> 1338
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 82
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tgcgtgggtg tggatgtgtc ccacgaggac cctgaagtga agttcaattg gtacgtggac 840
ggcgtgggaag tgcacaacgc caagaccaag ccaagagagg aacagtacaa cagcacctac 900
cgggtgggtg ccgtgctgac cgtgctgcac caggactggc tgaacggcaa agagtacaag 960
tgcaagggtg ccaacaaggc cctggccgcc cccatcgaga aaacctcag caaggccaag 1020
ggccagcccc gcgaaccca ggtgtacaca ctgcccccat gcagggacga gctgaccaag 1080
aaccagggtg ccctgtggtg tctggtgaaa ggcttctacc cctccgatat cgccgtggaa 1140

tgggagagca	acggccagcc	cgagaacaac	tacaagacca	ccccccctgt	gctggacagc	1200
gacggctcat	tcttcctgta	ctccaagctg	acagtggaca	agtcccgggtg	gcagcagggc	1260
aacgtgttca	gctgctccgt	gatgcacgag	gccctgcaca	accactacac	ccagaagtcc	1320
ctgagcctga	gccccggc					1338

<210> 83

<211> 1338

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 83

cagggtgcagc	tgggtggaaag	cggcggaggc	gtgggtgcagc	ctggcaggtc	tctgagactg	60
agctgtgccg	ccagcggctt	caccttcagc	agctacggaa	tgacttgggt	gcgccaggcc	120
cctggcaaaag	gactggaatg	ggtggccgtg	atttggtagc	acggcagcaa	caagtactac	180
gccgacagcg	tgaagggccg	gttcaccatc	agcggcgaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgcg	ggccgaggac	accgccgtgt	actactgcgc	cagaatgttc	300
agaggcgccct	tcgactactg	gggccagggc	acactcgtga	ccgtgtctag	tgcgtcgacc	360
aagggcccat	cggctcttccc	cctggcaccc	tcctccaaga	gcacctctgg	gggcacagcg	420
gccctgggct	gcctggtcaa	ggactacttc	cccgaaccgg	tgacgggtgtc	gtggaactca	480
ggcgccctga	ccagcggcgt	gcacaccttc	ccggctgtcc	tacagtcctc	aggactctac	540
tccctcagca	gcgtggtgac	cgtgccctcc	agcagcttgg	gcaccagac	ctacatctgc	600
aacgtgaatc	acaagcccag	caacaccaag	gtggacaaga	aagttgagcc	caaatcttgt	660
gacaaaactc	acacatgccc	accgtgcccc	gcacctgaac	tcctggggggg	accgtcagtc	720
ttcctcttcc	ccccaaaacc	caaggacacc	ctcatgatct	cccggacccc	tgaggtcaca	780
tgcggtggtg	tggacgtgag	ccacgaagac	cctgagggtca	agttcaactg	gtatgttgac	840
ggcgtggagg	tgcataatgc	caagacaaaag	ccgcgggagg	agcagtacaa	caatgcctcc	900
cgtgtggtca	gcgtcctcac	cgtcctgcac	caggactggc	tgaatggcaa	ggagtacaag	960
tgcaaggctc	ccaacaaaagc	cctcccagcc	cccatcgaga	aaaccatctc	caaagccaaa	1020
gggcagcccc	gagaaccaca	ggtgtacacc	ctgcccccat	gccgggatga	gctgaccaag	1080
aatcaagtca	gcctgtggtg	cctggtaaaa	ggcttctatc	ccagcgacat	cgccgtggag	1140
tgggagagca	atgggcagcc	ggagaacaac	tacaagacca	cgctcccgt	gctggactcc	1200
gacggctcct	tcttcctcta	ctcaaaactc	accgtggaca	agagcaggtg	gcagcagggg	1260
aacgtcttct	catgctccgt	gatgcatgag	gctctgcaca	accactacac	gcagaagagc	1320
ctctccctgt	ctccgggt					1338

<210> 84

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 84

Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg
1				5					10					15	
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Thr	Lys	Ala

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

<210> 85
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

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

<210> 86
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 86																
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Val	Lys	Pro	Gly	Ala	

1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser
20 25

<210> 87
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 87
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Ser Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser
20 25

<210> 88
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 88
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Met Ser Cys Lys Ala Ser
20 25

<210> 89
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 89
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser
20 25

<210> 90
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 90
Met His Trp Val Lys Glu Ala Pro Gly Gln Arg Leu Glu Trp Ile Gly
1 5 10 15
Tyr

<210> 91
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 91
Met His Trp Val Lys Glu Ala Pro Gly Gln Gly Leu Glu Trp Ile Gly
1 5 10 15
Tyr

<210> 92
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 92
Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala
1 5 10 15
Val

<210> 93
<211> 38
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 93

Asn	Tyr	Asn	Gln	Lys	Phe	Gln	Gly	Arg	Ala	Thr	Leu	Thr	Ala	Asp	Thr
1				5					10					15	
Ser	Ala	Ser	Thr	Ala	Tyr	Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp
			20					25					30		
Thr	Ala	Val	Tyr	Phe	Cys										
			35												

<210> 94

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 94

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

<210> 95

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 95

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

<210> 96

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 96

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

<210> 97

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 97

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

<210> 98

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 98

Ala	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						
			20					25							

<210> 99

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 99

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

Tyr

$\langle 210 \rangle$ 100

<211> 16

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Synthetic Construct

<400> 100

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

$\langle 210 \rangle$ 101

<211> 36

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Synthetic Construct

<400> 101

Ser Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
1 5 10 15

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

Val Tyr Tyr Cys
35

$\langle 210 \rangle$ 102

<211> 36

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Synthetic Construct

<400> 102

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
1 5 10 15

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

Thr Tyr Tyr Cys
35

<210> 103
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 103
Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
1 5 10

<210> 104
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 104
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
1 5 10

<210> 105
<211> 159
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

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

Leu	Thr	Trp	Cys	Gly	Glu	Phe	Asn	Thr	Ser	Lys	Ile	Asn	Tyr	Gln	Ser
		115					120					125			
Cys	Pro	Asp	Trp	Arg	Lys	Asp	Cys	Ser	Asn	Asn	Pro	Val	Ser	Val	Phe
		130				135					140				
Trp	Lys	Thr	Val	Ser	Arg	Arg	His	Phe	Trp	Glu	Cys	Gly	Ser	Pro	
145					150					155					

<210> 106
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 106

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

<210> 107
 <211> 450
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 107

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

Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu
		355					360					365			
Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp
	370					375					380				
Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val
385					390					395					400
Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp
			405					410						415	
Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His
		420					425						430		
Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro
		435					440					445			
Gly	Lys														
	450														

<210> 108
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 108
 Gly Tyr Thr Phe Thr Ser Tyr Tyr
 1 5

<210> 109
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 109
 Ile Tyr Pro Gly Asn Val Asn Thr
 1 5

<210> 110
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 110
Thr Arg Ser His Tyr Gly Leu Asp Trp Asn Phe Asp Val
1 5 10

<210> 111
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 111
Gln Asn Ile Tyr Val Trp
1 5

<210> 112
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 112
Lys Ala Ser
1

<210> 113
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 113
Gln Gln Gly Gln Thr Tyr Pro Tyr
1 5

<210> 114
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 114

Gly Phe Ser Leu Ser Asp Tyr Gly
1 5

<210> 115

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 115

Ile Trp Ala Gly Gly Gly Thr
1 5

<210> 116

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 116

Ala Arg Asp Lys Gly Tyr Ser Tyr Tyr Tyr Ser Met Asp Tyr
1 5 10

<210> 117

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 117

Glu Ser Val Glu Tyr Tyr Val Thr Ser Leu
1 5 10

<210> 118

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 118

Ala Ala Ser

1

<210> 119

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 119

Gln Gln Ser Arg Lys Val Pro Tyr Thr

1

5

<210> 120

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 120

Gly Phe Thr Phe Thr Lys Ala Trp

1

5

<210> 121

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 121

Ile Lys Asp Lys Ser Asn Ser Tyr Ala Thr

1

5

10

<210> 122

<211> 12

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 122
Arg Gly Val Tyr Tyr Ala Leu Ser Pro Phe Asp Tyr
1 5 10

<210> 123
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 123
Gln Ser Leu Val His Asn Asn Ala Asn Thr Tyr
1 5 10

<210> 124
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 124
Lys Val Ser
1

<210> 125
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 125
Gly Gln Gly Thr Gln Tyr Pro Phe Thr
1 5

<210> 126
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 126
Gly Phe Thr Phe Thr Lys Ala Trp
1 5

<210> 127
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 127
Ile Lys Asp Lys Ser Asn Ser Tyr Ala Thr
1 5 10

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