

SEQUENCE LISTING

<110> Genentech, Inc.
F. Hoffman-La Roche AG

<120> ANTI-TRYPTASE ANTIBODIES, COMPOSITIONS THEREOF, AND USES THEREOF

<130> 50474-112W02

<150> US 62/457,722
<151> 2017-02-10

<160> 128

<170> PatentIn version 3.5

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<222> (1)..(1)
<223> X is Asp or Ser

<220>
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<222> (2)..(2)
<223> X is Tyr or Phe

<220>
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<222> (5)..(5)
<223> X is Val or His

<400> 1

Xaa Xaa Gly Met Xaa
1 5

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<400> 2

Phe	Ile	Ser	Ser	Gly	Ser	Ser	Thr	Val	Tyr	Tyr	Ala	Asp	Thr	Met	Lys
1				5					10					15	

Gly

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<221> MOD_RES

<222> (2)..(2)

<223> X is Asn or Asp

<220>

<221> MOD_RES

<222> (3)..(3)

<223> X is Tyr or Asn

<220>

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<222> (4)..(4)

<223> X is Asp or Tyr

<400> 3

Arg	Xaa	Xaa	Xaa	Asp	Trp	Tyr	Phe	Asp	Val
1				5					10

<210> 4

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<400> 4

Ser Ala Ser Ser Ser Val Thr Tyr Met Tyr
1 5 10

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<400> 5

Arg Thr Ser Asp Leu Ala Ser
1 5

<210> 6

<211> 9

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<400> 6

Gln His Tyr His Ser Tyr Pro Leu Thr
1 5

<210> 7

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<400> 7

Asp Tyr Gly Met Val
1 5

<210> 8
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<400> 8

Arg Asn Tyr Asp Asp Trp Tyr Phe Asp Val
1 5 10

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<400> 9

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 Gly Phe Thr Phe Ser Asp Tyr
20 25 30

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

Ala Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

Thr Arg Arg Asn Tyr Asp Asp Trp Tyr Phe Asp Val Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

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<400> 10

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 Ser Ala Ser Ser Ser Val Thr Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Pro Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln His Tyr His Ser Tyr Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

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<400> 11

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 Gly Phe Thr Phe Ser
20 25 30

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<400> 12

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

<210> 13

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<400> 13

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 Thr Arg
20 25 30

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<400> 14

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

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<400> 15

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
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<400> 16

Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Pro Trp Ile Tyr
1 5 10 15

<210> 17

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<400> 17

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

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

<210> 18
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<400> 18

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
1 5 10

<210> 19
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<400> 19

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

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

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

Ala Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

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

Thr Thr Val Thr Val Ser Ser
115

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<400> 20

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

Glu Lys Val Thr Ile Ser Cys Ser Ala Ser Ser Ser Val Thr Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln His Tyr His Ser Tyr Pro Leu Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 21
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<400> 21

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

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

<210> 22
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<400> 22

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

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<400> 23

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

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

<210> 24
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<400> 24

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

<210> 25
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<400> 25

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

Glu Lys Val Thr Ile Ser Cys
20

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<400> 26

Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
1 5 10 15

<210> 27
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<400> 27

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser
1 5 10 15

Leu Thr Ile Ser Ser Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys
20 25 30

<210> 28
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<400> 28

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
1 5 10

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<400> 29

Arg Asp Asn Tyr Asp Trp Tyr Phe Asp Val
1 5 10

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<400> 30

Gly Tyr Ala Ile Thr
1 5

<210> 31

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<400> 31

Gly Ile Ser Ser Ala Ala Thr Thr Phe Tyr Ser Ser Trp Ala Lys Ser
1 5 10 15

<210> 32

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<400> 32

Asp Pro Arg Gly Tyr Gly Ala Ala Leu Asp Arg Leu Asp Leu
1 5 10

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<400> 33

Gln Ser Ile Lys Ser Val Tyr Asn Asn Arg Leu Gly
1 5 10

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<400> 34

Glu Thr Ser Ile Leu Thr Ser
1 5

<210> 35
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<400> 35

Ala Gly Gly Phe Asp Arg Ser Gly Asp Thr Thr
1 5 10

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<400> 36

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 Arg Phe Ser Leu Ile Gly Tyr
20 25 30

Ala Ile Thr Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Gly Ile Ser Ser Ala Ala Thr Thr Phe Tyr Ser Ser Trp Ala Lys
50 55 60

Ser Arg Val Thr Ile Ser Arg 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 Pro Arg Gly Tyr Gly Ala Ala Leu Asp Arg Leu Asp Leu Trp
100 105 110

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

<210> 37
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<400> 37

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 Ser Ile Lys Ser Val Tyr Asn Asn
20 25 30

Arg Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
35 40 45

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

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
65 70 75 80

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Gly Gly Phe Asp Arg Ser
85 90 95

Gly Asp Thr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 38
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<400> 38

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 Arg Phe Ser Leu Ile
20 25 30

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<222> (2)..(2)
<223> X is Ile or Val

<400> 39

Trp Xaa Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
1 5 10

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<222> (2)..(2)
<223> X is Val or Ser

<220>
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<222> (6)..(6)
<223> X is Arg or Val

<220>
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<222> (13)..(13)
<223> X is Val or Phe

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<222> (29)..(29)
<223> X is Tyr or Phe

<400> 40

Arg	Xaa	Thr	Ile	Ser	Xaa	Asp	Thr	Ser	Lys	Asn	Gln	Xaa	Ser	Leu	Lys
1				5					10					15	

Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Xaa	Cys	Ala	Arg
			20					25					30		

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<400> 41

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

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<213> Artificial Sequence

<220>
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<400> 42

Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
1 5 10

<210> 43
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<400> 43

Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Val Ser Leu Lys
1 5 10 15

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

<210> 44
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<213> Artificial Sequence

<220>
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<400> 44

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 Val Ser Arg Phe Ser Leu Ile
20 25 30

<210> 45

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<400> 45

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

<210> 46
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<400> 46

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

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

<210> 47
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<400> 47

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 Arg Phe Ser Leu Ile Gly Tyr
20 25 30

Ala Ile Thr Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile

	35		40		45												
Gly	Gly	Ile	Ser	Ser	Ala	Ala	Thr	Thr	Phe	Tyr	Ser	Ser	Trp	Ala	Lys		
	50					55					60						
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu		
65					70					75					80		
Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala		
				85					90					95			
Arg	Asp	Pro	Arg	Gly	Tyr	Gly	Ala	Ala	Leu	Asp	Arg	Leu	Asp	Leu	Trp		
			100					105						110			
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser								
		115					120										
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<400>	48																
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	Arg	Phe	Ser	Leu	Ile	Gly	Tyr		
			20					25					30				
Ala	Ile	Thr	Trp	Val	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile		
		35					40					45					
Gly	Gly	Ile	Ser	Ser	Ala	Ala	Thr	Thr	Phe	Tyr	Ser	Ser	Trp	Ala	Lys		
	50					55					60						
Ser	Arg	Ser	Thr	Ile	Ser	Arg	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	Phe	Cys
				85					90					95

Arg	Asp	Pro	Arg	Gly	Tyr	Gly	Ala	Ala	Leu	Asp	Arg	Leu	Asp	Leu	Trp
			100					105					110		

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

<210> 49
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<400> 49

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	Arg	Phe	Ser	Leu	Ile	Gly	Tyr
			20					25					30		

Ala	Ile	Thr	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35					40					45			

Gly	Gly	Ile	Ser	Ser	Ala	Ala	Thr	Thr	Phe	Tyr	Ser	Ser	Trp	Ala	Lys
	50					55					60				

Ser	Arg	Val	Thr	Ile	Ser	Val	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	Pro	Arg	Gly	Tyr	Gly	Ala	Ala	Leu	Asp	Arg	Leu	Asp	Leu	Trp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	100		105		110
Gly	Gln	Gly	Thr	Leu	Val
	115			Thr	Val
				120	Ser
					Ser

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<400> 50

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	Arg	Phe	Ser	Leu	Ile	Gly	Tyr
			20					25					30		

Ala	Ile	Thr	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35					40					45			

Gly	Gly	Ile	Ser	Ser	Ala	Ala	Thr	Thr	Phe	Tyr	Ser	Ser	Trp	Ala	Lys
	50					55					60				

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

Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85					90					95	

Arg	Asp	Pro	Arg	Gly	Tyr	Gly	Ala	Ala	Leu	Asp	Arg	Leu	Asp	Leu	Trp
			100					105					110		

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

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<220>
<223> Synthetic Construct

<400> 51

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 Val Ser Arg Phe Ser Leu Ile Gly Tyr
20 25 30

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

Gly Gly Ile Ser Ser Ala Ala Thr Thr Phe Tyr Ser Ser Trp Ala Lys
50 55 60

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

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

Arg Asp Pro Arg Gly Tyr Gly Ala Ala Leu Asp Arg Leu Asp Leu Trp
100 105 110

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

<210> 52
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<400> 52

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

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

Ile Thr Trp Val Arg Gln Ser Pro Glu Asn Gly Leu Glu Trp Ile Gly
35 40 45

Gly Ile Ser Ser Ala Ala Thr Thr Phe Tyr Ser Ser Trp Ala Lys Ser
50 55 60

Arg Ser Thr Ile Thr Arg Asn Thr Asn Glu Asn Thr Val Thr Leu Lys
65 70 75 80

Met Thr Ser Leu Thr Ala Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg
85 90 95

Asp Pro Arg Gly Tyr Gly Ala Ala Leu Asp Arg Leu Asp Leu Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

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<400> 53

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

Gly Thr Val Ser Ile Ser Cys Gln Ser Ile Lys Ser Val Tyr Asn Asn
20 25 30

Arg Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu
35 40 45

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

Gly Ser Gly Ser Glu Thr Gln Phe Thr Leu Thr Ile Ser Asp Val Gln
65 70 75 80

Cys Asp Asp Ala Ala Thr Tyr Phe Cys Ala Gly Gly Phe Asp Arg Ser
85 90 95

Gly Asp Thr Thr Phe Gly Gly Gly Thr Glu Val Val Val Lys
100 105 110

<210> 54
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<400> 54

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

Leu Thr Leu Thr Cys Thr Val Ser Arg Phe Ser Leu Ile
20 25

<210> 55
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<400> 55

Trp Val Arg Gln Ser Pro Glu Asn Gly Leu Glu Trp Ile Gly

1 5 10

<210> 56
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<400> 56

Arg Ser Thr Ile Thr Arg Asn Thr Asn Glu Asn Thr Val Thr Leu Lys
1 5 10 15

Met Thr Ser Leu Thr Ala Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg
20 25 30

<210> 57
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<400> 57

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

<210> 58
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<400> 58

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

Asp Arg Val Thr Ile Thr Cys Gln Ser Ile Lys Ser Val Tyr Asn Asn

	20		25		30										
Arg	Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Pro	Pro	Lys	Leu	Leu
	35						40				45				
Ile	Tyr	Glu	Thr	Ser	Ile	Leu	Thr	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser
	50					55					60				
Gly	Ser	Gly	Ser	Glu	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln
65					70					75					80
Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Phe	Cys	Ala	Gly	Gly	Phe	Asp	Arg	Ser
				85					90					95	
Gly	Asp	Thr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys		
			100					105					110		
<210>	59														
<211>	110														
<212>	PRT														
<213>	Artificial Sequence														
<220>															
<223>	Synthetic Construct														
<400>	59														
Ala	Ala	Val	Leu	Thr	Gln	Thr	Pro	Ala	Ser	Val	Ser	Ala	Ala	Val	Gly
1				5					10					15	
Gly	Thr	Val	Ser	Ile	Ser	Cys	Gln	Ser	Ile	Lys	Ser	Val	Tyr	Asn	Asn
			20					25					30		
Arg	Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys	Leu	Leu
	35						40				45				
Ile	Tyr	Glu	Thr	Ser	Ile	Leu	Thr	Ser	Gly	Val	Pro	Ser	Arg	Phe	Lys
	50					55					60				
Gly	Ser	Gly	Ser	Glu	Thr	Gln	Phe	Thr	Leu	Thr	Ile	Ser	Asp	Val	Gln

65

70

75

80

Ala Asp Asp Ala Ala Thr Tyr Phe Cys Ala Gly Gly Phe Asp Arg Ser
 85 90 95

Gly Asp Thr Thr Phe Gly Gly Gly Thr Glu Val Val Val Lys
 100 105 110

<210> 60
 <211> 23
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>
 <221> MOD_RES
 <222> (2)..(2)
 <223> X is Ile or Ala

<220>
 <221> MOD_RES
 <222> (4)..(4)
 <223> X is Met or Leu

<400> 60

Asp Xaa Gln Xaa 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> 61
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>

<221> MOD_RES
<222> (9)..(9)
<223> X is Ala or Pro

<400> 61

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

<210> 62
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<220>
<221> MOD_RES
<222> (12)..(12)
<223> X is Gly or Glu

<220>
<221> MOD_RES
<222> (31)..(31)
<223> X is Tyr or Phe

<400> 62

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

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

<210> 63
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 63

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

1 5 10

<210> 64
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 64

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> 65
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 65

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

<210> 66
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 66

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

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

20

25

30

<210> 67
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 67

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

Gly Thr Val Ser Ile Ser Cys
20

<210> 68
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 68

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

<210> 69
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<220>
<221> MOD_RES
<222> (24)..(24)
<223> X is Cys or Ala

<400> 69

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

Leu Thr Ile Ser Asp Val Gln Xaa Asp Asp Ala Ala Thr Tyr Phe Cys
20 25 30

<210> 70
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 70

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

<210> 71
<211> 275
<212> PRT
<213> Homo sapiens

<400> 71

Met Leu Asn Leu Leu Leu Leu Ala Leu Pro Val Leu Ala Ser Arg Ala
1 5 10 15

Tyr Ala Ala Pro Ala Pro Gly Gln Ala Leu Gln Arg Val Gly Ile Val
20 25 30

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

Arg Val His Gly Pro Tyr Trp Met His Phe Cys Gly Gly Ser Leu Ile
50 55 60

His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro Asp Val
65 70 75 80

Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His Leu Tyr
85 90 95

Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His Pro Gln
100 105 110

Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu Leu Glu
115 120 125

Glu Pro Val Asn Val Ser Ser His Val His Thr Val Thr Leu Pro Pro
130 135 140

Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr Gly Trp
145 150 155 160

Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Pro Phe Pro Leu Lys
165 170 175

Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala Lys Tyr
180 185 190

His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Val Arg Asp Asp
195 200 205

Met Leu Cys Ala Gly Asn Thr Arg Arg Asp Ser Cys Gln Gly Asp Ser
210 215 220

Gly Gly Pro Leu Val Cys Lys Val Asn Gly Thr Trp Leu Gln Ala Gly
225 230 235 240

Val Val Ser Trp Gly Glu Gly Cys Ala Gln Pro Asn Arg Pro Gly Ile
245 250 255

Tyr Thr Arg Val Thr Tyr Tyr Leu Asp Trp Ile His His Tyr Val Pro
260 265 270

Lys Lys Pro
275

<210> 72
<211> 275
<212> PRT
<213> Homo sapiens

<400> 72

Met Leu Asn Leu Leu Leu Ala Leu Pro Val Leu Ala Ser Arg Ala
1 5 10 15

Tyr Ala Ala Pro Ala Pro Gly Gln Ala Leu Gln Arg Val Gly Ile Val
20 25 30

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

Arg Val His Gly Pro Tyr Trp Met His Phe Cys Gly Gly Ser Leu Ile
50 55 60

His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro Asp Val
65 70 75 80

Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His Leu Tyr
85 90 95

Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His Pro Gln
100 105 110

Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu Leu Glu
115 120 125

Glu Pro Val Lys Val Ser Ser His Val His Thr Val Thr Leu Pro Pro
130 135 140

Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr Gly Trp
145 150 155 160

Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Pro Phe Pro Leu Lys

165																170																175															
Gln	Val	Lys	Val	Pro	Ile	Met	Glu	Asn	His	Ile	Cys	Asp	Ala	Lys	Tyr																																
			180				185						190																																		
His	Leu	Gly	Ala	Tyr	Thr	Gly	Asp	Asp	Val	Arg	Ile	Val	Arg	Asp	Asp																																
			195				200						205																																		
Met	Leu	Cys	Ala	Gly	Asn	Thr	Arg	Arg	Asp	Ser	Cys	Gln	Gly	Asp	Ser																																
			210				215						220																																		
Gly	Gly	Pro	Leu	Val	Cys	Lys	Val	Asn	Gly	Thr	Trp	Leu	Gln	Ala	Gly																																
225					230						235																																				
Val	Val	Ser	Trp	Gly	Glu	Gly	Cys	Ala	Gln	Pro	Asn	Arg	Pro	Gly	Ile																																
			245						250						255																																
Tyr	Thr	Arg	Val	Thr	Tyr	Tyr	Leu	Asp	Trp	Ile	His	His	Tyr	Val	Pro																																
			260						265						270																																
Lys	Lys	Pro																																													
			275																																												
<210>																73																															
<211>																233																															
<212>																PRT																															
<213>																Homo sapiens																															
<400>																73																															
Met	Leu	Asn	Leu	Leu	Leu	Leu	Ala	Leu	Pro	Val	Leu	Ala	Ser	Arg	Ala																																
1			5						10						15																																
Tyr	Ala	Ala	Pro	Ala	Pro	Gly	Gln	Ala	Leu	Gln	Arg	Val	Gly	Ile	Val																																
			20						25						30																																
Gly	Gly	Gln	Glu	Ala	Pro	Arg	Ser	Lys	Trp	Pro	Trp	Gln	Val	Ser	Leu																																
			35						40						45																																

Arg Val Arg Asp Arg Tyr Trp Met His Phe Cys Gly Gly Ser Leu Ile
50 55 60

His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro Asp Val
65 70 75 80

Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His Leu Tyr
85 90 95

Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His Pro Gln
100 105 110

Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu Leu Glu
115 120 125

Glu Pro Val Asn Val Ser Ser His Val His Thr Val Thr Leu Pro Pro
130 135 140

Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr Gly Trp
145 150 155 160

Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Pro Phe Pro Leu Lys
165 170 175

Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala Lys Tyr
180 185 190

His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Val Arg Asp Asp
195 200 205

Met Leu Cys Ala Gly Asn Thr Arg Arg Asp Ser Cys Gln Val Ala Thr
210 215 220

Ala Pro His Thr Phe Pro Ala Pro Ser
225 230

<210> 74

<211> 21

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 74
gatggtgact gttccagttg c 21

<210> 75
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 75
cattggtgag ggtgcccag ttc 23

<210> 76
<211> 448
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 76

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 Gly Phe Thr Phe Ser Asp Tyr
20 25 30

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

Ala Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

Thr Arg Arg Asn Tyr Asp Asp Trp Tyr Phe Asp Val Trp Gly Gln Gly
100 105 110

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

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

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

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

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

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

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

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro
225 230 235 240

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
245 250 255

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
260 265 270

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

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

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
305 310 315 320

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
325 330 335

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

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

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

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

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

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
420 425 430

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

<210> 77

<211> 213

<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 Ser Ala Ser Ser Ser Val Thr Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Pro Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln His Tyr His Ser Tyr Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro
100 105 110

Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr
115 120 125

Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys
130 135 140

Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu
145 150 155 160

Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser
165 170 175

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

Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe
195 200 205

Asn Arg Gly Glu Cys
210

<210> 78
<211> 445
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 78

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 Gly Phe Thr Phe Ser Asp Tyr
20 25 30

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

Ala Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

Thr Arg Arg Asn Tyr Asp Asp Trp Tyr Phe Asp Val Trp Gly Gln Gly
100 105 110

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

Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu
130 135 140

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

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

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

Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro
195 200 205

Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro
210 215 220

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
225 230 235 240

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
245 250 255

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
260 265 270

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275 280 285

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

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305 310 315 320

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
325 330 335

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
340 345 350

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
355 360 365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
370 375 380

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

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

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
420 425 430

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

<210> 79
<211> 213
<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 Ser Ala Ser Ser Ser Val Thr Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Pro Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln His Tyr His Ser Tyr Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro
100 105 110

Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr
115 120 125

Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys
130 135 140

Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu
145 150 155 160

Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser
165 170 175

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

Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe
195 200 205

Asn Arg Gly Glu Cys
210

<210> 80
<211> 451

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 80

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 Arg Phe Ser Leu Ile Gly Tyr
20 25 30

Ala Ile Thr Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Gly Ile Ser Ser Ala Ala Thr Thr Phe Tyr Ser Ser Trp Ala Lys
50 55 60

Ser Arg Val Thr Ile Ser Arg 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 Pro Arg Gly Tyr Gly Ala Ala Leu Asp Arg Leu Asp Leu Trp
100 105 110

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Ser Pro Gly
450

<210> 81
<211> 217
<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 Gln Ser Ile Lys Ser Val Tyr Asn Asn
20 25 30

Arg Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
35 40 45

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

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
65 70 75 80

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Gly Gly Phe Asp Arg Ser
85 90 95

Gly Asp Thr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr
100 105 110

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu
115 120 125

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

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
145 150 155 160

Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr
165 170 175

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His
180 185 190

Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val
195 200 205

Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 82
<211> 448
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 82

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 Arg Phe Ser Leu Ile Gly Tyr
20 25 30

Ala Ile Thr Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Gly Ile Ser Ser Ala Ala Thr Thr Phe Tyr Ser Ser Trp Ala Lys
50 55 60

Ser Arg Val Thr Ile Ser Arg 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 Pro Arg Gly Tyr Gly Ala Ala Leu Asp Arg Leu Asp Leu Trp
100 105 110

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

Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr
130 135 140

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

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

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

Val Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp
195 200 205

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

Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro
225 230 235 240

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
245 250 255

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp
260 265 270

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

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

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
305 310 315 320

Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys
325 330 335

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

Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr
355 360 365

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

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

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

Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu
420 425 430

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

<210> 83
<211> 217
<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 Gln Ser Ile Lys Ser Val Tyr Asn Asn
20 25 30

Arg Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
35 40 45

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

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
65 70 75 80

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ala Gly Gly Phe Asp Arg Ser
85 90 95

Gly Asp Thr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr
100 105 110

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu
115 120 125

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

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
145 150 155 160

Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr
165 170 175

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His
180 185 190

Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val
195 200 205

Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 84
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 84

Ala Tyr Ser Val Asn
1 5

<210> 85
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 85

Met	Ile	Trp	Gly	Asp	Gly	Lys	Ile	Val	Tyr	Asn	Ser	Ala	Leu	Lys	Ser
1				5					10					15	

<210> 86

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 86

Asp	Gly	Tyr	Tyr	Pro	Tyr	Ala	Met	Asp	Asn
1				5					10

<210> 87

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 87

Arg	Ala	Ser	Lys	Ser	Val	Asp	Ser	Tyr	Gly	Asn	Ser	Phe	Met	His
1				5					10					15

<210> 88

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 88

Leu	Ala	Ser	Asn	Leu	Glu	Ser
1				5		

<210> 89

<211> 9

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 89

Gln Gln Asn Asn Glu Asp Pro Arg Thr
1 5

<210> 90
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 90

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

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

Ser Val Asn Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu Trp Leu
35 40 45

Ala Met Ile Trp Gly Asp Gly Lys Ile Val Tyr Asn Ser Ala Leu Lys
50 55 60

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

Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Gly Asp Gly Tyr Tyr Pro Tyr Ala Met Asp Asn Trp Gly Gln Gly Ser
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 91
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 91

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

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Val Asp Ser Tyr
20 25 30

Gly Asn Ser 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 Asp
50 55 60

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

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

Glu Asp Pro Arg Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 92
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 92

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 Gly Ile Ser Ser Tyr
20 25 30

Leu Ala 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 Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ser Tyr Pro Phe
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 93

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 93

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 Gly Ser Ile Ser Ser Gly
20 25 30

Gly Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
35 40 45

Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

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

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Arg Phe Asp Tyr Trp Gly Gln Phe Thr Leu Val Thr Val Ser
100 105 110

Ser

<210> 94
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 94

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 Gly Phe Thr Phe Ser Ser Tyr
20 25 30

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

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

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

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

Ala Arg Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 95
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 95

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
1 5 10 15

Cys Gln Gln Tyr Tyr Ser Tyr Pro Phe Thr Phe Gly Gln Gly Thr Lys
20 25 30

Val Glu Ile Lys
35

<210> 96
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 96

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

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

Thr Glu Val Val Val Lys
35

<210> 97
<211> 245
<212> PRT
<213> Homo sapiens

<400> 97

Ile Val Gly Gly Gln Glu Ala Pro Arg Ser Lys Trp Pro Trp Gln Val
1 5 10 15

Ser Leu Arg Val His Gly Pro Tyr Trp Met His Phe Cys Gly Gly Ser
20 25 30

Leu Ile His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro
35 40 45

Asp Val Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His
50 55 60

Leu Tyr Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His
65 70 75 80

Pro Gln Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu
85 90 95

Leu Glu Glu Pro Val Asn Val Ser Ser His Val His Thr Val Thr Leu
100 105 110

Pro Pro Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr
115 120 125

Gly Trp Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Pro Phe Pro
130 135 140

Leu Lys Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala
145 150 155 160

Lys Tyr His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Val Arg
165 170 175

Asp Asp Met Leu Cys Ala Gly Asn Thr Arg Arg Asp Ser Cys Gln Gly
180 185 190

Asp Ser Gly Gly Pro Leu Val Cys Lys Val Asn Gly Thr Trp Leu Gln
195 200 205

Ala Gly Val Val Ser Trp Gly Glu Gly Cys Ala Gln Pro Asn Arg Pro
210 215 220

Gly Ile Tyr Thr Arg Val Thr Tyr Tyr Leu Asp Trp Ile His His Tyr
225 230 235 240

Val Pro Lys Lys Pro
245

<210> 98
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 98

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 Gly Phe Thr Phe Ser Asp Tyr
20 25 30

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

Gly Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

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

Thr Leu Val Thr Val Ser Ser
115

<210> 99
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 99

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 Gly Phe Thr Phe Ser Asp Tyr
20 25 30

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

Ala Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

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

Thr Leu Val Thr Val Ser Ser
115

<210> 100

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 100

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 Gly Phe Thr Phe Ser Ser Phe
20 25 30

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

Ala Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

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

Thr Leu Val Thr Val Ser Ser
115

<210> 101
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 101

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 Gly Phe Thr Phe Ser Asp Tyr
20 25 30

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

Ala Phe Ile Ser Ser Gly Ser Ser Thr Val Tyr Tyr Ala Asp Thr Met
50 55 60

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

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

Thr Arg Arg Asp Asn Tyr Asp Trp Tyr Phe Asp Val Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

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

<220>
<223> Synthetic Construct

<400> 102

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

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Thr Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
35 40 45

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

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln His Tyr His Ser Tyr Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 103

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 103

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

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Thr Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Pro Trp Ile Tyr

35

40

45

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

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
 65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln His Tyr His Ser Tyr Pro Leu Thr
 85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 104

<211> 357

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 104

gaagtgcagc tggcgggaaag cggcggcggc ctggtgcagc caggcggcag cctgcgcctg 60

agctgcgccg ccagcggcctt caccttcagc gattatggca tggcgtgggt gcgccaggcc 120

ccaggcaaag gcctggaatg ggtggccttc atcagcagcg gcagcagcac cgtgtattat 180

gccgatacca tgaaaggccg cttcaccatc agccgcgata acagcaaaaa caccctgtat 240

ctgcagatga acagcctgcg cgccgaagat accgccgtgt attattgcac ccgccgaac 300

tacgatgatt ggtatttcga tgtgtggggc cagggcaccc tggcgtaccgt ctcgagt 357

<210> 105

<211> 318

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 105

gatataccaga tgacccagag cccaagcagc ctgagcgcca gcgtgggcga tcgctgacc	60
atcacctgca gcgccagcag cagcgtgacc tatatgtatt ggtatcagca gaaaccaggc	120
aaaagcccaa aaccatggat ctatcgacc agcgatctgg ccagcggcgt gccaaagccgc	180
ttcagcggca gcggcagcgg caccgatttc accctgacca tcagcagcct gcagccagaa	240
gatttcgcca cctattattg ccagcactat cacagctatc cactgacctt cggccagggt	300
accaaggtgg agatcaaa	318

<210> 106
 <211> 1347
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 106	
gaagtgcagc tgggtggaaag cggcggcggc ctggtgcagc caggcggcag cctgcgccctg	60
agctgcgccg ccagcggcctt caccttcagc gattatggca tgggtgtgggt gcgccaggcc	120
ccaggcaaag gcctggaatg ggtggccttc atcagcagcg gcagcagcac cgtgtattat	180
gccgatacca tgaaaggccg cttcaccatc agccgcgata acagcaaaaa caccctgtat	240
ctgcagatga acagcctgcg cgccgaagat accgccgtgt attattgcac ccgccgaac	300
tacgatgatt ggtatttcga tgtgtggggc cagggcaccc tgggtgaccgt ctcgagtgcc	360
tccaccaagg gcccatcggc cttccccctg gcaccctcct ccaagagcac ctctgggggc	420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg	480
aactcaggcg ccctgaccag cggcgtgcac accttcccgg ctgtcctaca gtcctcagga	540
ctctactccc tcagcagcgt ggtgactgtg ccctctagca gcttgggcac ccagacctac	600
atctgcaacg tgaatcacia gccagcaac accaaggtgg acaagaaagt tgagcccaaa	660
tcttgtgaca aaactcacac atgcccaccg tgcccagcac ctgaactcct ggggggaccg	720
tcagtcttcc tcttcccccc aaaaccaag gacaccctca tgatctcccg gacccttag	780
gtcacatgcg tgggtggtgga cgtgagccac gaagaccctg aggtcaagtt caactggtac	840

gtggacggcg tggaggtgca taatgccaag acaaagccgc gggaggagca gtacaacagc	900
acgtaccgtg tggtcagcgt cctcaccgtc ctgcaccagg actggctgaa tggcaaggag	960
tacaagtgca aggtctccaa caaagccctc ccagccccc a tcgagaaaac catctccaaa	1020
gccaaagggc agccccgaga accacaggtg tacaccctgc ccccatcccg ggaagagatg	1080
accaagaacc aggtcagcct gacctgcctg gtcaaaggct tctatcccag cgacatcgcc	1140
gtggagtggg agagcaatgg gcagccggag aacaactaca agaccacgcc tcccgtgctg	1200
gactccgacg gctccttctt cctctacagc aagctcaccg tggacaagag cagggtggcag	1260
caggggaacg tcttctcatg ctccgtgatg catgaggctc tgcacaacca ctacacgcag	1320
aagagcctct ccctgtctcc gggtaaa	1347

<210> 107
 <211> 639
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 107	
gatatccaga tgaccagag cccaagcagc ctgagcgcca gcgtgggcga tcgcgtgacc	60
atcacctgca gcgccagcag cagcgtgacc tatatgtatt ggtatcagca gaaaccaggc	120
aaaagcccaa aaccatggat ctatcgacc agcgatctgg ccagcggcgt gccaaagccgc	180
ttcagcggca gcggcagcgg caccgatttc accctgacca tcagcagcct gcagccagaa	240
gatttcgcca cctattattg ccagcactat cacagctatc cactgacctt cggccagggt	300
accaaggtgg agatcaaacg aactgtggct gcaccatctg tcttcatctt cccgccatct	360
gatgagcagt tgaaatctgg aactgcttct gttgtgtgcc tgctgaataa cttctatccc	420
agagaggcca aagtacagtg gaagggtgat aacgccctcc aatcgggtaa ctcccaggag	480
agtgtcacag agcaggacag caaggacagc acctacagcc tcagcagcac cctgacgctg	540
agcaaagcag actacgagaa acacaaagtc tacgcctgcg aagtcacca tcagggcctg	600
agctcgcccc tcacaaagag cttcaacagg ggagagtgt	639

<210> 108
<211> 1338
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 108
gaagtgcagc tgggtgaaag cggcggcggc ctggtgcagc caggcggcag cctgcgcctg 60
agctgcgccg ccagcggcctt caccttcagc gattatggca tgggtgtgggt gcgccaggcc 120
ccaggcaaag gcctggaatg ggtggccttc atcagcagcg gcagcagcac cgtgtattat 180
gccgatacca tgaaaggccg cttcaccatc agccgcgata acagcaaaaa caccctgtat 240
ctgcagatga acagcctgcg cgccgaagat accgccgtgt attattgcac ccgccgaac 300
tacgatgatt ggtatttcga tgtgtggggc cagggcacc cttgtgaccgt ctcgagtgcc 360
tccaccaagg gcccatcggg cttccccctg gcaccctgct cccgcagtac ttctgagtcc 420
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480
aactcaggcg ccctgaccag cggcgtgcac accttcccgg ctgtcctaca gtcctcagga 540
ctctactccc tcagcagcgt ggtgactgtg ccctctagca gcttgggcac caagacctac 600
acgtgcaacg tggatcaciaa gcccagcaac accaagggtg acaaacgcgt tgagtccaaa 660
tatgggtcccc catgcccacc atgcccagca cctgagttcc tgggggggacc atcagtcttc 720
ctgttcccc caaaaccaa ggacactctc atgatctccc ggaccctga ggtcacgtgc 780
gtggtggtgg acgtgagcca ggaagacccc gaggtccagt tcaactggta cgtggatggc 840
gtggaggtgc ataatgcaa gacaaagccg cgggaggagc agttcaacag cacgtaccgt 900
gtggtcagcg tcctcaccgt cctgcaccag gactggctga acggcaagga gtacaagtgc 960
aaggctctca acaaaggcct ccgctcctcc atcgagaaaa ccatctcaa agccaaaggg 1020
cagccccgag agccacaggt gtacaccctg ccccatccc aggaggagat gaccaagaac 1080
caggtcagcc tgacctgcct ggtcaaaggc ttctaccca gcgacatcgc cgtggagtgg 1140
gagagcaatg ggcagccgga gaacaactac aagaccacgc ctcccgtgct ggactccgac 1200

ggctccttct tcctctacag caggctaacc gtggacaaga gcaggtggca ggaggggaat	1260
gtcttttcat gctccgtgat gcatgaggct ctgcacaacc actacacaca gaagagcctc	1320
tccctgtctc tgggtaaa	1338

<210> 109
 <211> 366
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 109	
gaagtgcagc tgggtgaaag cggcccaggc ctggtgaaac caagcgaac cctgagcctg	60
acctgcaccg tgagccgctt cagcctgatc ggctatgcc aacactggat ccgccagcca	120
ccaggcaaag gcctggaatg gatcggcggc atcagcagcg ccgccaccac cttctatagc	180
agctggggcca aaagccgctg gaccatcagc cgcgatacca gcaaaaacca ggtgagcctg	240
aaactgagca gcgtgaccgc cgccgatacc gccgtgtatt attgcgcccg cgatccacgc	300
ggctatggcg ccgccctgga tcgcctggat ctgtggggcc agggcacctt ggtgaccgtc	360
tcgagt	366

<210> 110
 <211> 330
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 110	
gatatccaga tgaccagag cccaagcagc ctgagcgcca gcgtgggcga tcgcgtgacc	60
atcacctgcc agagcatcaa aagcgtgtat aacaaccgcc tgggctggta tcagcagaaa	120
ccaggcaaag ccccaaaact gctgatctat gaaaccagca tcctgaccag cggcgtgcc	180
agccgcttca gcggcagcgg cagcggcacc gatttcaccc tgaccatcag cagcctgcag	240
ccagaagatt tcgccaccta ttattgcgcc ggcggcttcg atcgagcgg cgataccacc	300

ttcggccagg gtaccaaggt ggagatcaaa

330

<210> 111

<211> 1356

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 111

gaagtgcagc tggtggaaag cggcccaggc ctggtgaaac caagcgaac cctgagcctg	60
acctgcaccg tgagccgctt cagcctgata ggctatgcca tcacctggat ccgccagcca	120
ccaggcaaag gcctggaatg gatcggcggc atcagcagcg ccgccaccac cttctatagc	180
agctgggcca aaagccgcgt gaccatcagc cgcgatacca gcaaaaacca ggtgagcctg	240
aaactgagca gcgtgaccgc cgccgatacc gccgtgtatt attgcgcccg cgatccacgc	300
ggctatggcg ccgccctgga tcgcctggat ctgtggggcc agggcaccct ggtgaccgtc	360
tcgagtgcct ccaccaaggg cccatcggtc tttcccctgg caccctctc caagagcacc	420
tctgggggca cagcggccct gggctgcctg gtcaaggact acttccccga accggtgacg	480
gtgtcgtgga actcaggcgc cctgaccagc ggcgtgcaca cttcccggc tgtcctacag	540
tcctcaggac tctactccct cagcagcgtg gtgactgtgc cctctagcag cttgggcacc	600
cagacctaca tctgcaacgt gaatcacaag ccagcaaca ccaaggtgga caagaaagtt	660
gagcccaaat cttgtgacaa aactcacaca tgcccaccgt gcccagcacc tgaactcctg	720
gggggaccgt cagtcttcct cttccccca aaaccaagg acaccctcat gatctcccgg	780
acccttgagg tcacatgcgt ggtggtggac gtgagccacg aagaccctga ggtcaagttc	840
aactggtacg tggacggcgt ggaggtgcat aatgccaaga caaagccgcg ggaggagcag	900
tacaacagca cgtaccgtgt ggtcagcgtc ctcaccgtcc tgcaccagga ctggctgaat	960
ggcaaggagt acaagtgcaa ggtctccaac aaagccctcc cagcccccat cgagaaaacc	1020
atctccaaag ccaaagggca gccccgagaa ccacaggtgt acaccctgcc cccatcccgg	1080
gaagagatga ccaagaacca ggtcagcctg acctgcctgg tcaaaggctt ctatcccagc	1140

gacatcgccg tggagtggga gagcaatggg cagccggaga acaactacaa gaccacgcct	1200
cccgtgctgg actccgacgg ctctttcttc ctctacagca agctcaccgt ggacaagagc	1260
aggtggcagc aggggaacgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac	1320
tacacgcaga agagcctctc cctgtctccg ggtaaa	1356

<210> 112
 <211> 651
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 112	
gatatccaga tgaccagag cccaagcagc ctgagcgcca gcgtgggcga tcgcgtgacc	60
atcacctgcc agagcatcaa aagcgtgtat aacaaccgcc tgggctggta tcagcagaaa	120
ccaggcaaag ccccaaaact gctgatctat gaaaccagca tcctgaccag cggcgtgcc	180
agccgcttca gcggcagcgg cagcggcacc gatttcaccc tgaccatcag cagcctgcag	240
ccagaagatt tcgccaccta ttattgcgcc ggcggcttcg atcgagcgg cgataccacc	300
ttcggccagg gtaccaaggt ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcac	360
ttcccgccat ctgatgagca gttgaaatct ggaactgctt ctgttgtgtg cctgctgaat	420
aacttctatc ccagagaggc caaagtacag tggaaggtgg ataacgccct ccaatcgggt	480
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc	540
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc	600
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg t	651

<210> 113
 <211> 1347
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 113

gaagtgcagc tgggtggaaag cggcccaggc ctggtgaaac caagcgaac cctgagcctg	60
acctgcaccg tgagccgctt cagcctgata ggctatgcc a tcacctggat ccgccagcca	120
ccaggcaaag gcctggaatg gatcggcggc atcagcagcg ccgccaccac cttctatagc	180
agctggggcca aaagccgcgt gaccatcagc cgcgatacca gcaaaaaacca ggtgagcctg	240
aaactgagca gcgtgaccgc cgccgatacc gccgtgtatt attgcgcccg cgatccacgc	300
ggctatggcg ccgccctgga tcgcctggat ctgtggggcc agggcaccct ggtgaccgtc	360
tcgagtgcct ccaccaaggg cccatcggtc ttccccctgg caccctgctc ccgcagtact	420
tctgagtcca cagcggccct gggctgcctg gtcaaggact acttccccga accggtgacg	480
gtgtcgtgga actcaggcgc cctgaccagc ggcgtgcaca ccttcccggc tgtcctacag	540
tcctcaggac tctactccct cagcagcgtg gtgactgtgc cctctagcag cttgggcacc	600
aagacctaca cgtgcaacgt ggatcacaag cccagcaaca ccaaggtgga caaacgcgtt	660
gagtccaaat atgggtcccc atgcccacca tgcccagcac ctgagttcct ggggggacca	720
tcagtcttcc tggtcccccc aaaacccaag gacacttca tgatctcccg gaccctgag	780
gtcacgtgcg tgggtggtgga cgtgagccag gaagaccccg aggtccagtt caactggtac	840
gtggatggcg tggaggtgca taatgccaag acaaagccgc gggaggagca gttcaacagc	900
acgtaccgtg tggtcagcgt cctcaccgtc ctgcaccagg actggctgaa cggcaaggag	960
tacaagtgca aggtctccaa caaaggcctc ccgtcctcca tcgagaaaac catctccaaa	1020
gccaaagggc agccccgaga gccacagggtg tacaccctgc ccccatcca ggaggagatg	1080
accaagaacc aggtcagcct gacctgcctg gtcaaaggct tctaccccag cgacatgcc	1140
gtggagtggg agagcaatgg gcagccggag aacaactaca agaccacgcc tcccgtgctg	1200
gactccgacg gctccttctt cctctacagc aggctaaccg tggacaagag cagggtggcag	1260
gaggggaatg tcttctcatg ctccgtgatg catgaggctc tgcacaacca ctacacacag	1320
aagagcctct ccctgtctct gggtaaa	1347

<210> 114

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 114

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

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

Ser Val Asn Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu Trp Leu
35 40 45

Ala Met Ile Trp Gly Asp Gly Lys Ile Val Tyr Asn Ser Ala Leu Lys
50 55 60

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

Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Gly Asp Gly Tyr Tyr Pro Tyr Ala Met Asp Asn Trp Gly Gln Gly Ser
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 115

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 115

Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ser Val Ser Leu Gly

1	5	10	15
Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Val Asp Ser Tyr	20	25	30
Gly Asn Ser 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 Asp	50	55	60
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser	65	70	75
Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Asn Asn	85	90	95
Glu Asp Pro Arg Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys	100	105	110
<210> 116			
<211> 256			
<212> PRT			
<213> Homo sapiens			
<400> 116			
Ile Val Gly Gly Gln Glu Ala Pro Arg Ser Lys Trp Pro Trp Gln Val	5	10	15
1			
Ser Leu Arg Val His Gly Pro Tyr Trp Met His Phe Cys Gly Gly Ser	20	25	30
Leu Ile His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro	35	40	45
Asp Val Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His	50	55	60

Leu Tyr Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His
65 70 75 80

Pro Gln Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu
85 90 95

Leu Glu Glu Pro Val Lys Val Ser Ser His Val His Thr Val Thr Leu
100 105 110

Pro Pro Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr
115 120 125

Gly Trp Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Pro Phe Pro
130 135 140

Leu Lys Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala
145 150 155 160

Lys Tyr His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Val Arg
165 170 175

Asp Asp Met Leu Cys Ala Gly Asn Thr Arg Arg Asp Ser Cys Gln Gly
180 185 190

Asp Ser Gly Gly Pro Leu Val Cys Lys Val Asn Gly Thr Trp Leu Gln
195 200 205

Ala Gly Val Val Ser Trp Gly Glu Gly Cys Ala Gln Pro Asn Arg Pro
210 215 220

Gly Ile Tyr Thr Arg Val Thr Tyr Tyr Leu Asp Trp Ile His His Tyr
225 230 235 240

Val Pro Lys Lys Pro Gly Asn Ser Asp Tyr Lys Asp Asp Asp Asp Lys
245 250 255

<210> 117

<211> 256

<212> PRT

<213> Homo sapiens

<400> 117

Ile Val Gly Gly Gln Glu Ala Pro Arg Ser Lys Trp Pro Trp Gln Val
1 5 10 15

Ser Leu Arg Val Arg Asp Arg Tyr Trp Met His Phe Cys Gly Gly Ser
20 25 30

Leu Ile His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro
35 40 45

Asp Val Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His
50 55 60

Leu Tyr Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His
65 70 75 80

Pro Gln Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu
85 90 95

Leu Glu Glu Pro Val Asn Val Ser Ser His Val His Thr Val Thr Leu
100 105 110

Pro Pro Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr
115 120 125

Gly Trp Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Phe Pro
130 135 140

Leu Lys Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala
145 150 155 160

Lys Tyr His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Val Arg
165 170 175

Asp Asp Met Leu Cys Ala Gly Asn Thr Arg Arg Asp Ser Cys Gln Gly

	180		185		190										
Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Lys	Val	Asn	Gly	Thr	Trp	Leu	Gln
	195						200				205				
Ala	Gly	Val	Val	Ser	Trp	Gly	Glu	Gly	Cys	Ala	Gln	Pro	Asn	Arg	Pro
	210					215					220				
Gly	Ile	Tyr	Thr	Arg	Val	Thr	Tyr	Tyr	Leu	Asp	Trp	Ile	His	His	Tyr
225					230					235					240
Val	Pro	Lys	Lys	Pro	Gly	Asn	Ser	Asp	Tyr	Lys	Asp	Asp	Asp	Asp	Lys
				245					250					255	
<210> 118															
<211> 256															
<212> PRT															
<213> Homo sapiens															
<400> 118															
Ile	Val	Gly	Gly	Gln	Glu	Ala	Pro	Arg	Ser	Lys	Trp	Pro	Trp	Gln	Val
1				5					10					15	
Ser	Leu	Arg	Val	Arg	Asp	Arg	Tyr	Trp	Met	His	Phe	Cys	Gly	Gly	Ser
			20					25					30		
Leu	Ile	His	Pro	Gln	Trp	Val	Leu	Thr	Ala	Ala	His	Cys	Leu	Gly	Pro
		35					40					45			
Asp	Val	Lys	Asp	Leu	Ala	Ala	Leu	Arg	Val	Gln	Leu	Arg	Glu	Gln	His
	50					55					60				
Leu	Tyr	Tyr	Gln	Asp	Gln	Leu	Leu	Pro	Val	Ser	Arg	Ile	Ile	Val	His
65					70					75				80	
Pro	Gln	Phe	Tyr	Ile	Ile	Gln	Thr	Gly	Ala	Asp	Ile	Ala	Leu	Leu	Glu
				85					90					95	

Leu Glu Glu Pro Val Asn Ile Ser Ser Arg Val His Thr Val Met Leu
100 105 110

Pro Pro Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr
115 120 125

Gly Trp Gly Asp Val Asp Asn Asp Glu Pro Leu Ser Pro Pro Phe Pro
130 135 140

Leu Lys Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala
145 150 155 160

Lys Tyr His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Ile Arg
165 170 175

Asp Asp Met Leu Cys Ala Gly Asn Ser Gln Arg Asp Ser Cys Lys Gly
180 185 190

Asp Ser Gly Gly Pro Leu Val Cys Lys Val Asn Gly Thr Trp Leu Gln
195 200 205

Ala Gly Val Val Ser Trp Asp Glu Gly Cys Ala Gln Pro Asn Arg Pro
210 215 220

Gly Ile Tyr Thr Arg Val Thr Tyr Tyr Leu Asp Trp Ile His His Tyr
225 230 235 240

Val Pro Lys Lys Pro Gly Asn Ser Asp Tyr Lys Asp Asp Asp Asp Lys
245 250 255

<210> 119

<211> 268

<212> PRT

<213> *Macaca fascicularis*

<400> 119

Ala Leu Pro Val Leu Val Ser Pro Ala His Ala Ala Pro Ala Pro Gly
1 5 10 15

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

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

Met His Phe Cys Gly Gly Ser Leu Ile His Pro Gln Trp Val Leu Thr
50 55 60

Ala Ala His Cys Val Gly Pro Asp Val Lys Asp Leu Ala Asp Leu Arg
65 70 75 80

Val Gln Leu Arg Glu Gln His Leu Tyr Tyr Gln Asp Gln Leu Leu Pro
85 90 95

Val Ser Arg Ile Ile Val His Pro Gln Phe Tyr Ala Val Gln Ile Gly
100 105 110

Ala Asp Ile Ala Leu Leu Glu Leu Glu Glu Pro Val Asn Val Ser Ser
115 120 125

His Val His Thr Val Thr Leu Pro Pro Ala Leu Glu Thr Phe Pro Pro
130 135 140

Gly Thr Pro Cys Trp Val Thr Gly Trp Gly Asp Val Asp Asn Asp Val
145 150 155 160

Arg Leu Pro Pro Pro Tyr Pro Leu Lys Glu Val Glu Val Pro Ile Val
165 170 175

Glu Asn Gln Leu Cys Asp Ala Glu Tyr His Thr Gly Leu His Thr Gly
180 185 190

Asp Ser Phe Arg Ile Val Arg Asp Asp Met Leu Cys Ala Gly Ser Glu
195 200 205

Lys His Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Lys

210

215

220

Val Asn Gly Thr Trp Leu Gln Ala Gly Val Val Ser Trp Gly Glu Gly
 225 230 235 240

Cys Ala Leu Pro Asn Arg Pro Gly Ile Tyr Thr Arg Val Thr Tyr Tyr
 245 250 255

Leu Asp Trp Ile His Arg Tyr Val Pro Glu Lys Pro
 260 265

<210> 120
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 120

Ser Phe Ser Met Ser
 1 5

<210> 121
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<400> 121

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

Gly

<210> 122
 <211> 10
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 122

Ala	Asn	Tyr	Gly	Asn	Trp	Phe	Phe	Glu	Val
1				5				10	

<210> 123

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 123

Arg	Ala	Ser	Glu	Ser	Val	Ala	Lys	Tyr	Gly	Leu	Ser	Leu	Leu	Asn
1				5					10					15

<210> 124

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 124

Ala	Ala	Ser	Asn	Arg	Gly	Ser
1			5			

<210> 125

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 125

Gln Gln Ser Lys Glu Val Pro Phe Thr

1

5

<210> 126
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 126

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 Gly Phe Thr Phe Ser Ser Phe
20 25 30

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

Ala Thr Ile Ser Gly Gly Lys Thr Phe Thr Asp Tyr Val Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp 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

Thr Arg Ala Asn Tyr Gly Asn Trp Phe Phe Glu Val Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 127
<211> 111
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 127

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu Ser Val Ala Lys Tyr
20 25 30

Gly Leu Ser Leu Leu Asn Trp Phe Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Arg Leu Leu Ile Phe Ala Ala Ser Asn Arg Gly Ser 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

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Ser Lys
85 90 95

Glu Val Pro Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 128

<211> 260

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 128

Ala Gly Ser Thr His His His His His His Asp Asp Asp Asp Lys Ile
1 5 10 15

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

Leu Arg Val His Gly Pro Tyr Trp Met His Phe Cys Gly Gly Ser Leu
35 40 45

Ile His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro Asp
50 55 60

Val Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His Leu
65 70 75 80

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

Gln Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu Leu
100 105 110

Glu Glu Pro Val Asn Val Ser Ser His Val His Thr Val Thr Leu Pro
115 120 125

Pro Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr Gly
130 135 140

Trp Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Pro Phe Pro Leu
145 150 155 160

Lys Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala Lys
165 170 175

Tyr His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Val Arg Asp
180 185 190

Asp Met Leu Cys Ala Gly Asn Thr Arg Arg Asp Ser Cys Gln Gly Asp
195 200 205

Ser Gly Gly Pro Leu Val Cys Lys Val Asn Gly Thr Trp Leu Gln Ala
210 215 220

Gly Val Val Ser Trp Gly Glu Gly Cys Ala Gln Pro Asn Arg Pro Gly

225

230

235

240

Ile Tyr Thr Arg Val Thr Tyr Tyr Leu Asp Trp Ile His His Tyr Val
245 250 255

Pro Lys Lys Pro
260