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 <150> PCT/CN2018/081079
 <151> 2018-03-29
 <160> 166
 <170> PatentIn version 3.5

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Ser Tyr Asp Met Ser
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Thr Ile Ser Asp Gly Gly Gly Tyr Ile Tyr Tyr Ser Asp Ser Val Lys
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Gly

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

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

Asp Met Ser Trp Val Arg Gln Thr Pro Glu Lys Ser Leu Glu Trp Val
35 40 45

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Ser Val Thr Val Ser Ser
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys 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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser 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 Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys 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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser 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 Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys 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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys 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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser 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 Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

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

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

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Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Lys	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		
Asp	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Ser	Leu	Glu	Trp	Val
		35				40						45			
Ala	Thr	Ile	Ser	Asp	Gly	Gly	Gly	Tyr	Ile	Tyr	Tyr	Ser	Asp	Ser	Val

50

55

60

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser
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<400> 14

Glu Val Gln Leu Leu 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

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

Ser Thr Ile Ser Asp Gly Gly Gly Tyr Ile Tyr Tyr Ser 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 Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly

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Thr Thr Val Thr Val Ser Ser
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<400> 15

Glu Val Gln Leu Leu 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

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

Ala Thr Ile Ser Asp Gly Gly Gly Tyr Ile Tyr Tyr Ser 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 Ile Cys
85 90 95

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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<400> 16

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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<400> 18

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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<400> 19

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
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<400> 20

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

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<400> 21

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

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

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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		
Asp	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35				40						45			
Ala	Thr	Ile	Ser	Asp	Gly	Gly	Gly	Tyr	Ile	Tyr	Tyr	Ser	Asp	Ser	Val

50

55

60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser 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 Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

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<400> 23

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly

100

105

110

Thr Leu Val Thr Val Ser Ser
115

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<400> 24

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

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<212> PRT

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<400> 25

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 26

<211> 119

<212> PRT

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<400> 26

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

Asp Met Ser Trp Val Arg Gln Thr Pro Glu Lys Ser Leu Glu Trp Val
35 40 45

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

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<400> 27

Asp Ile Val Met Thr Gln Ser His Lys Phe Met Ser Thr Ser Val Gly
1 5 10 15

Asp Arg Val Ser Ile Ser Cys Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
50 55 60

Ser Gly Ser 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 Thr Thr Pro Leu
85 90 95

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

<210> 28
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<212> PRT
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<400> 28

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 29
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 29

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 30

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 30

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 31

<211> 108

<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 31

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr 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 His Tyr Thr Thr Pro Leu
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 32

<211> 108
<212> PRT
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<400> 32

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr 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 His Tyr Thr Thr Pro Leu
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 33
<211> 108
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<400> 33

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 Ser Cys Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr 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 His Tyr Thr Thr Pro Leu
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg
100 105

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cccgagaaga gcctggagtg ggtggccacc atcagcgatg gcggcggcta catctactac 180
agcgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa caacctgtac 240
ctgcagatga gcagcctgag gagcaggac accgccctgt acatctgcgc cagggagttc 300
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cctggcaaag gcctggagt ggtgagcacc atctccgatg gcggcggcta catctattac	180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac	240
ctgcagatga acagcctgag ggccgaggac accgccgtgt actactgcgc cagggagttc	300
ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gagcagc	357

<210> 36
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 36	
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cctggcaaag gcctggagt ggtggccacc atctccgatg gcggcggcta catctattac	180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac	240
ctgcagatga acagcctgag ggccgaggac accgccgtgt actactgcgc cagggagttc	300
ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gagcagc	357

<210> 37
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 37	
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agctgcgctg ccagcggctt caccttcagc agctacgaca tgagctgggt gagacaggcc	120
cctggcaaaa gcctggagt ggtggccacc atctccgatg gcggcggcta catctattac	180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac	240
ctgcagatga acagcctgag ggccgaggac accgccgtgt acatctgcgc cagggagttc	300
ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gagcagc	357

<210> 38
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 38
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agctgcgctg ccagcggctt caccttcagc agctacgaca tgagctggat cagacaggcc 120
cctggcaaag gcctggagt ggtgagcacc atctccgatg gcggcggcta catctattac 180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt actactgcgc caggaggttc 300
ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

<210> 39
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 39
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agctgcgctg ccagcggctt caccttcagc agctacgaca tgagctggat cagacaggcc 120
cctggcaaag gcctggagt ggtggccacc atctccgatg gcggcggcta catctattac 180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt actactgcgc caggaggttc 300
ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

<210> 40
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 40

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agctgcgctg	ccagcggctt	caccttcagc	agctacgaca	tgagctgggt	gagacaggcc	120
cctggcaaaa	gcctggagtg	ggtggccacc	atctccgatg	gcggcggcta	catctattac	180
tccgacagcg	tgaagggcag	gttcaccatc	agcagggaca	acgccaagaa	cagcctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	acatctgcgc	cagggagttc	300
ggcaaaaggt	acgccctgga	ctactggggc	cagggcacaa	ccgtgaccgt	gagcagc	357

<210> 41
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

gaggtgcagc	tgctggagag	cggaggagga	ctggtgcaac	ccggaggcag	cctgagactg	60
agctgcgctg	ccagcggctt	caccttcagc	agctacgaca	tgagctgggt	gagacaggcc	120
cctggcaaag	gcctggagtg	ggtgagcacc	atctccgatg	gcggcggcta	catctattac	180
tccgacagcg	tgaagggcag	gttcaccatc	agcagggaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	actactgcgc	cagggagttc	300
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<210> 42
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

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agctgcgctg	ccagcggctt	caccttcagc	agctacgaca	tgagctgggt	gagacaggcc	120
cctggcaaaa	gcctggagtg	ggtggccacc	atctccgatg	gcggcggcta	catctattac	180
tccgacagcg	tgaagggcag	gttcaccatc	agcagggaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	acatctgcgc	cagggagttc	300

ggcaaaaggt acgccctgga ctactggggc cagggcacia ccgtgaccgt gagcagc 357

<210> 43
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 43
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cctggcaaag gcctggagt ggtgagcacc atctccgatg gcggcggcta catctattac 180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac 240
ctgcagatga acagcctgag ggatgaggac accgccgtgt actactgcgc cagggagttc 300
ggcaaaaggt acgccctgga ctactggggc cagggcacia ccgtgaccgt gagcagc 357

<210> 44
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 44
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agctgcgctg ccagcggctt caccttcagc agctacgaca tgagctgggt gagacaggcc 120
cctggcaaag gcctggagt ggtggccacc atctccgatg gcggcggcta catctattac 180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac 240
ctgcagatga acagcctgag ggatgaggac accgccgtgt actactgcgc cagggagttc 300
ggcaaaaggt acgccctgga ctactggggc cagggcacia ccgtgaccgt gagcagc 357

<210> 45
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 45
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 cctggcaaaa gcctggagt ggtggccacc atctccgatg gcggcggcta catctattac 180
 tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac 240
 ctgcagatga acagcctgag ggatgaggac accgccgtgt acatctgcgc caggaggttc 300
 ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

<210> 46
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 46
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 cctggcaaaa gcctggagt ggtggccacc atctccgaag gcggcggcta catctattac 180
 tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac 240
 ctgcagatga acagcctgag ggatgaggac accgccgtgt acatctgcgc caggaggttc 300
 ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

<210> 47
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 47
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 agctgcgctg ccagcggctt caccttcagc agctacgaca tgagctgggt gagacaggcc 120
 cctggcaaaa gcctggagt ggtggccacc atctccgatg cggcggcta catctattac 180
 tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac 240

ctgcagatga acagcctgag ggatgaggac accgccgtgt acatctgcgc cagggagttc	300
ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gaggcagc	357

<210> 48
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 48	
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agctgcgctg ccagcggctt caccttcagc agctacgaca tgagctgggt gagacaggcc	120
cctggcaaaa gcctggagtg ggtggccacc atctccgatg ttggcggcta catctattac	180
tccgacagcg tgaagggcag gttcaccatc agcagggaca acgccaagaa cagcctgtac	240
ctgcagatga acagcctgag ggatgaggac accgccgtgt acatctgcgc cagggagttc	300
ggcaaaaggt acgccctgga ctactggggc cagggcacaa ccgtgaccgt gaggcagc	357

<210> 49
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 49	
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cctggaaagg gcctggagtg ggtggccacc atctccgacg gaggcggcta catctactac	180
tccgactccg tgaagggcag gttcaccatc tcccgggaca acgccaagaa ctccctgtac	240
ctgcagatga actctctcag ggctgaggac accgccgtgt attactgcgc cagggagttt	300
ggcaagaggt acgccctgga ttactggggc cagggcacac tggtgacagt gagctcc	357

<210> 50
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 50

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cctggaaagg gcctggagt ggtggccacc atctccgacg gaggcggcta catctactac 180

tccgactccg tgaagggcag gttcaccatc tcccgggaca acgccaagaa ctccctgtac 240

ctgcagatga actctctcag ggctgaggac accgccgtgt atatctgcgc caggagagttt 300

ggcaagaggt acgccctgga ttactggggc cagggcacac tggtagacagt gagctcc 357

<210> 51

<211> 357

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 51

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tcctgtgccg cttccggctt caccttcagc tcctacgata tgagctgggt gaggcaggct 120

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tccgactccg tgaagggcag gttcaccatc tcccgggaca acgccaagaa caacctgtac 240

ctgcagatga actctctcag ggctgaggac accgccgtgt atatctgcgc caggagagttt 300

ggcaagaggt acgccctgga ttactggggc cagggcacac tggtagacagt gagctcc 357

<210> 52

<211> 357

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 52

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tcctgtgccg cttccggctt caccttcagc tcctacgata tgagctgggt gaggcagacc 120

cctgagaaga gcctggagt ggtggccacc atctccgacg gaggcggcta catctactac 180

tccgactccg tgaagggcag gttcaccatc tcccgggaca acgccaagaa caacctgtac	240
ctgcagatga actctctcag ggctgaggac accgccgtgt atatctgcgc cagggagttt	300
ggcaagaggt acgccctgga ttactggggc cagggcacac tggtgacagt gagctcc	357

<210> 53
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 53	
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cctggaaagg gcctggagtg ggtggccacc atctccgacg gaggcggcta catctactac	180
tccgactccg tgaagggcag gttcaccatc tcccgggaca acgccaagaa ctccctgtac	240
ctgcagatga actctctcag ggctgaggac accgccgtgt atatctgcgc cagggagttt	300
ggcaagaggt acgccctgga ttactggggc cagggcacaa ccgtgacagt gagctcc	357

<210> 54
 <211> 321
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 54	
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ggccagagcc ccaagctgct gatctacagc accagcagca ggtacaccgg cgtgcccagc	180
aggttcacag gaagcggcag cggcaccgac ttcaccttca ccatcagcag cgtgcaggcc	240
gaggacctgg ccgtgtacta ctgccagcag cactacacca cccctctgac cttcggcgcc	300
ggcaccaagc tggagctgaa g	321

<210> 55
 <211> 321
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 55

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ggcaaggccc ccaagctgct gatctacagc accagcagca ggtacaccgg cgtgcccagc 180

aggtttagcg gaagcggcag cggcaccgac ttcaccttca ccatcagcag cctgcagccc 240

gaggacatcg ccacctacta ctgccagcag cactacacca cccctctgac cttcggccag 300

ggcaccaagc tggagatcaa g 321

<210> 56

<211> 321

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<213> Artificial Sequence

<220>

<223> Synthetic

<400> 56

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atcacctgca aggccagcca ggatgtgacc cctgccgtgg cctggtacca gcagaagccc 120

ggcaagtccc ccaagctgct gatctacagc accagcagca ggtacaccgg cgtgcccagc 180

aggtttagcg gaagcggcag cggcaccgac ttcaccttca ccatcagcag cctgcagccc 240

gaggacatcg ccacctacta ctgccagcag cactacacca cccctctgac cttcggccag 300

ggcaccaagc tggagatcaa g 321

<210> 57

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 57

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atcacctgca aggccagcca ggacgtgaca cctgctgtgg cctggtatca acagaagcct 120

ggcaaggctc ctaagctcct gatctacagc acatcctccc ggtacaccgg agtgccctcc	180
aggttttagcg gcagcggctc cggcaccgat ttcaccctga ccatttcctc cctgcagccc	240
gaggacttcg ccacctacta ctgccagcag cactacacca caccctgac cttcggccag	300
ggcaccaagc tggagatcaa gcgg	324

<210> 58
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 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 58	
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ggcaaggctc ctaagctcct gatctacagc acatcctccc ggtacaccgg agtgcccagc	180
aggtttaccg gcagcggctc cggcaccgat ttcaccctga ccatttcctc cctgcagccc	240
gaggacttcg ccacctacta ctgccagcag cactacacca caccctgac cttcggccag	300
ggcaccaagc tggagatcaa gcgg	324

<210> 59
 <211> 324
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 59	
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ggccagagcc ctaagctcct gatctacagc acatcctccc ggtacaccgg agtgcccagc	180
aggtttaccg gcagcggctc cggcaccgat ttcaccctga ccatttcctc cctgcagccc	240
gaggacttcg ccacctacta ctgccagcag cactacacca caccctgac cttcggccag	300
ggcaccaagc tggagatcaa gcgg	324

<210> 60

<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 60
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atcagctgca aggccagcca ggacgtgaca cctgctgtgg cctggatatca acagaagcct 120
ggccagagcc ctaagctcct gatctacagc acatcctccc ggtacaccgg agtgcccgac 180
aggtttaccg gcagcggctc cggcaccgat ttcaccctga ccatttcctc cctgcagccc 240
gaggacttcg ccacctacta ctgccagcag cactacacca caccctgac cttcggccag 300
ggcaccaagc tggagatcaa gcgg 324

<210> 61
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 61

Thr Tyr Asp Met Ser
1 5

<210> 62
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 62

Cys Tyr Asp Met Ser
1 5

<210> 63
<211> 5
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 63

Ser Phe Asp Met Ser
1 5

<210> 64

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 64

Ser His Asp Met Ser
1 5

<210> 65

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 65

Ser Trp Asp Met Ser
1 5

<210> 66

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 66

Ser Tyr Asp Met Thr
1 5

<210> 67

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 67

Ser	Tyr	Asp	Met	Cys
1				5

<210> 68

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 68

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

Gly

<210> 69

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 69

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

Gly

<210> 70

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 70

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

Gly

<210> 71

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 71

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

Gly

<210> 72

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 72

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

Gly

<210> 73

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 73

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

Gly

<210> 74

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 74

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

Gly

<210> 75

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 75

Thr Ile Ser Asp Gly Gly Gly Tyr Ile Tyr Tyr Ser Asp Ser Leu Lys
1 5 10 15

Gly

<210> 76

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 76

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

Gly

<210> 77

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 77

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

Gly

<210> 78

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 78

Gln Phe Gly Lys Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 79

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 79

Asp Phe Gly Lys Arg Tyr Ala Leu Asp Tyr

1	5	10
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<210> 80
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 80

Asn	Phe	Gly	Lys	Arg	Tyr	Ala	Leu	Asp	Tyr
1				5					10

<210> 81
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 81

Glu	Tyr	Gly	Lys	Arg	Tyr	Ala	Leu	Asp	Tyr
1				5					10

<210> 82
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 82

Glu	His	Gly	Lys	Arg	Tyr	Ala	Leu	Asp	Tyr
1				5					10

<210> 83
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 83

Glu Trp Gly Lys Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 84
<211> 10
<212> PRT
<213> Artificial Sequence

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<400> 84

Glu Phe Ala Lys Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 85
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<220>
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<400> 85

Glu Phe Pro Lys Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 86
<211> 10
<212> PRT
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<220>
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<400> 86

Glu Phe Gly Arg Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 87
<211> 10
<212> PRT
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<220>
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<400> 87

Glu Phe Gly Lys Lys Tyr Ala Leu Asp Tyr
1 5 10

<210> 88

<211> 10

<212> PRT

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<220>

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<400> 88

Glu Phe Gly Lys Arg Phe Ala Leu Asp Tyr
1 5 10

<210> 89

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 89

Glu Phe Gly Lys Arg His Ala Leu Asp Tyr
1 5 10

<210> 90

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

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<400> 90

Glu Phe Gly Lys Arg Trp Ala Leu Asp Tyr
1 5 10

<210> 91

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

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<400> 91

Lys Ala Thr Gln Asp Val Thr Pro Ala Val Ala
1 5 10

<210> 92

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 92

Lys Ala Cys Gln Asp Val Thr Pro Ala Val Ala
1 5 10

<210> 93

<211> 7

<212> PRT

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<220>

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<400> 93

Thr Thr Ser Ser Arg Tyr Thr
1 5

<210> 94

<211> 7

<212> PRT

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<220>

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<400> 94

Cys Thr Ser Ser Arg Tyr Thr
1 5

<210> 95

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

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<400> 95

Ser Ser Ser Ser Arg Tyr Thr
1 5

<210> 96

<211> 7

<212> PRT

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<400> 96

Ser Met Ser Ser Arg Tyr Thr
1 5

<210> 97

<211> 7

<212> PRT

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<220>

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<400> 97

Ser Val Ser Ser Arg Tyr Thr
1 5

<210> 98

<211> 7

<212> PRT

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<220>

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<400> 98

Ser Thr Thr Ser Arg Tyr Thr
1 5

<210> 99

<211> 7
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<213> Artificial Sequence

<220>
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<400> 99

Ser Thr Cys Ser Arg Tyr Thr
1 5

<210> 100
<211> 7
<212> PRT
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<220>
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<400> 100

Ser Thr Ser Thr Arg Tyr Thr
1 5

<210> 101
<211> 7
<212> PRT
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<220>
<223> Synthetic

<400> 101

Ser Thr Ser Cys Arg Tyr Thr
1 5

<210> 102
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 102

Ser Thr Ser Ser Lys Tyr Thr
1 5

<210> 103
<211> 7
<212> PRT
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<220>
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<400> 103

Ser Thr Ser Ser Arg Phe Thr
1 5

<210> 104
<211> 7
<212> PRT
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<220>
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<400> 104

Ser Thr Ser Ser Arg His Thr
1 5

<210> 105
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
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<400> 105

Ser Thr Ser Ser Arg Trp Thr
1 5

<210> 106
<211> 9
<212> PRT
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<220>
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<400> 106

Glu Gln His Tyr Thr Thr Pro Leu Thr

1

5

<210> 107
<211> 9
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<220>
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<400> 107

Asp Gln His Tyr Thr Thr Pro Leu Thr
1 5

<210> 108
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 108

Asn Gln His Tyr Thr Thr Pro Leu Thr
1 5

<210> 109
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 109

Gln Glu His Tyr Thr Thr Pro Leu Thr
1 5

<210> 110
<211> 9
<212> PRT
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<220>
<223> Synthetic

<400> 110

Gln Asp His Tyr Thr Thr Pro Leu Thr
1 5

<210> 111
<211> 9
<212> PRT
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<220>
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<400> 111

Gln Asn His Tyr Thr Thr Pro Leu Thr
1 5

<210> 112
<211> 357
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<213> Artificial Sequence

<220>
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<400> 112
gaagtgaaac tgggtggagtc tgggggagac ttagtgaagc ctggagggtc cctgaaactc 60
tcctgtgcag cctctggatt cactttcagt agctatgaca tgtcttgggt tcgccagact 120
ccggagaaga gtctggagtg ggtcgcaacc attagtgatg gtggtggtta catctactat 180
tcagacagtg tgaaggggcg atttaccatc tccagagaca atgccaagaa caacctgtac 240
ctgcaaatga gcagtctgag gtctgaggac acggccttgt atatttgtgc aagagaattt 300
ggtaagcgct atgctttgga ctactggggt caaggaacct cagtcaccgt ctcctca 357

<210> 113
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
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<400> 113

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

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

Asp Met Ser Trp Val Arg Gln Thr Pro Glu Lys Ser Leu Glu Trp Val
35 40 45

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Ser Val Thr
115

<210> 114
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 114
gacattgtga tgaccagtc tcacaaattc atgtccacat cggtaggaga cagggtcagc 60
atctcctgca aggccagtca ggatgtgact cctgctgtcg cctggtatca acagaagcca 120
ggacaatctc ctaaactact gatttactcc acatcctccc ggtacactgg agtcctgat 180
cgcttcactg gcagtggatc tgggacggat ttcactttca ccatcagcag tgtgcaggct 240
gaagacctgg cagtttatta ctgtcagcaa cattatacta ctccgctcac gttcgggtgct 300
gggaccaagc tggagctgaa a 321

<210> 115
<211> 107
<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 115

Asp Ile Val Met Thr Gln Ser His Lys Phe Met Ser Thr Ser Val Gly
1 5 10 15

Asp Arg Val Ser Ile Ser Cys Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
50 55 60

Ser Gly Ser 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 Thr Thr Pro Leu
85 90 95

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

<210> 116

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 116

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

Gly

<210> 117

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

<220>
<223> Synthetic

<400> 117

Glu Leu Pro Trp Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 118
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 118

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

Gly

<210> 119
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 119

Thr Ile Ser Asp Ala Gly Pro Tyr Ile Tyr Tyr Arg Asp Ser Val Lys
1 5 10 15

Gly

<210> 120
<211> 17
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 120

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

Gly

<210> 121

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 121

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

Gly

<210> 122

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 122

Thr	Ile	Ser	Asp	Ala	Gly	Gly	Trp	Ile	Tyr	Tyr	Arg	Asp	Ser	Val	Lys
1				5					10					15	

Gly

<210> 123

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 123

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

Gly

<210> 124

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 124

Thr	Ile	Ser	Asp	Ala	Gly	Gly	Tyr	Ile	Tyr	Tyr	Arg	Asp	Cys	Val	Lys
1				5					10					15	

Gly

<210> 125

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 125

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

Gly

<210> 126

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 126

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

Gly

<210> 127

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 127

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

Gly

<210> 128

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 128

Glu	Leu	Phe	Asn	Arg	Tyr	Ala	Leu	Asp	Tyr
1			5						10

<210> 129

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 129

Glu Leu His Phe Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 130
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 130

Glu Leu Tyr Phe Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 131
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 131

Glu Leu Leu His Arg Tyr Ala Leu Asp Tyr
1 5 10

<210> 132
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 132

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

<210> 133
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 133

Gln	Leu	Pro	Trp	Arg	Tyr	Ala	Leu	Asp	Tyr
1				5					10

<210> 134

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 134

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

<210> 135

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 135

Asn	Leu	Pro	Trp	Arg	Tyr	Ala	Leu	Asp	Tyr
1				5					10

<210> 136

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 136

Glu	Leu	Pro	Trp	Lys	Tyr	Ala	Leu	Asp	Tyr
1				5					10

<210> 137

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 137

Glu	Leu	Pro	Trp	Arg	Phe	Ala	Leu	Asp	Tyr
1				5					10

<210> 138

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 138

Glu	Leu	Pro	Trp	Arg	His	Ala	Leu	Asp	Tyr
1				5					10

<210> 139

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 139

Glu	Leu	Pro	Trp	Arg	Trp	Ala	Leu	Asp	Tyr
1				5					10

<210> 140

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 140

Gln	Gln	His	Ser	Asp	Ala	Pro	Leu	Thr
1				5				

<210> 141

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 141

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 142

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 142

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 Lys Ala Ser Gln Asp Val Thr Pro Ala

20

25

30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

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

<210> 143
 <211> 119
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 143

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

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

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

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

Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Ile Cys

85

90

95

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser
 115

<210> 144
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 144

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 Lys Ala Lys Gln Asp Val Thr Pro Ala
 20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

Glu Asp Ile Ala Thr Tyr Tyr Cys Met Gln His Tyr Thr Thr Pro Leu
 85 90 95

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

<210> 145
 <211> 119
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 145

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Ser Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 146

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 146

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 Lys Ala Ser Gln Asp Val Trp Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 147
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 147

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

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

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

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

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

Ala Arg Glu Ile Phe Asn Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 148
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 148

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 149
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 149

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

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

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

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

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

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

Thr Thr Val Thr Val Ser Ser
115

<210> 150

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 150

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

35

40

45

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

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

<210> 151

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 151

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

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

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

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

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

Ala Arg Glu Leu His Phe Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly

100

105

110

Thr Thr Val Thr Val Ser Ser
115

<210> 152
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 152

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 153
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 153

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

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

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

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

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

Ala Arg Glu Leu Tyr Phe Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 154
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 154

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 155
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 155

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

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

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

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

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

Ala Arg Glu Leu Leu His Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 156
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 156

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 157
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 157

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

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

50

55

60

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

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

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

<210> 159

<211> 119

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<223> Synthetic

<400> 159

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

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

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

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

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

Ala Arg Glu Phe Gly Lys Arg Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser

115

<210> 160
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<400> 160

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 Lys Ala Ser Gln Asp Val Thr Pro Ala
20 25 30

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

Tyr Ser Thr Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 161
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<212> PRT
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<220>
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<400> 161

Glu Gln His Ser Asp Ala Pro Leu Thr
1 5

<210> 162
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<400> 162

Asp Gln His Ser Asp Ala Pro Leu Thr
1 5

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Asn Gln His Ser Asp Ala Pro Leu Thr
1 5

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<400> 164

Gln Glu His Ser Asp Ala Pro Leu Thr
1 5

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Gln Asp His Ser Asp Ala Pro Leu Thr

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5

<210> 166

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

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<400> 166

Gln Asn His Ser Asp Ala Pro Leu Thr
1 5