

SEQUENCE LISTING

<110> NOVARTIS AG
THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA

<120> BCMA-TARGETING CHIMERIC ANTIGEN RECEPTOR, AND USES THEREOF

<130> N2067-7137W0

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<150> 62/752,010
<151> 2018-10-29

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<151> 2017-11-30

<160> 2036

<170> PatentIn version 3.5

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<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 39

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

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

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

Ser Gly Ile Ser Arg Ser Gly Glu Asn 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 Asp Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Pro Ala His Tyr Tyr Gly Gly Met Asp Val Trp Gly Gln
100 105 110

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser
130 135 140

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
145 150 155 160

Arg Ala Ser Gln Ser Ile Ser Ser Ser Phe Leu Ala Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Arg Arg
180 185 190

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
195 200 205

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Ser Ala Val Tyr
210 215 220

Tyr Cys Gln Gln Tyr His Ser Ser Pro Ser Trp Thr Phe Gly Gln Gly

225					230					235					240
Thr	Lys	Leu	Glu	Ile	Lys										
				245											
<210> 40															
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<212> PRT															
<213> Artificial Sequence															
<220>															
<221> source															
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"															
<400> 40															
Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
1				5					10					15	
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Asp	Tyr
			20					25					30		
Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ser	Gly	Ile	Ser	Trp	Asn	Ser	Gly	Ser	Ile	Gly	Tyr	Ala	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	Leu	Tyr	Tyr	Cys
			85						90					95	
Ser	Val	His	Ser	Phe	Leu	Ala	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr
			100					105					110		
Val	Ser	Ser	Ala	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Arg	Ala	Ser	Gly
		115					120					125			
Gly	Gly	Gly	Ser	Asp	Ile	Val	Met	Thr	Gln	Thr	Pro	Leu	Ser	Leu	Pro
	130					135					140				

Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
 145 150 155 160

Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys
 165 170 175

Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala
 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
 195 200 205

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
 210 215 220

Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys
 225 230 235 240

Val Glu Ile Lys

<210> 41

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 41

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 Val Ser Gly Phe Ala Leu Ser Asn His
 20 25 30

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

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser
130 135 140

Val Thr Pro Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser
145 150 155 160

Leu Leu Arg Asn Asp Gly Lys Thr Pro Leu Tyr Trp Tyr Leu Gln Lys
165 170 175

Ala Gly Gln Pro Pro Gln Leu Leu Ile Tyr Glu Val Ser Asn Arg Phe
180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
195 200 205

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Ala Tyr Tyr
210 215 220

Cys Met Gln Asn Ile Gln Phe Pro Ser Phe Gly Gly Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys

<210> 42

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 42

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Asp Asn Phe
20 25 30

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

Gly Trp Ile Asn Pro Lys Asn Asn Asn Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

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

Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
130 135 140

Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys
145 150 155 160

Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asn
165 170 175

Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu
180 185 190

Gly Ser Lys Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu His Ile Thr Arg Val Gly Ala Glu Asp
210 215 220

Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe
225 230 235 240

Gly Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 43

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 43

Gln Val Gln Leu Gln 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 Asp
20 25 30

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

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

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu
130 135 140

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Gly Ala Ser
180 185 190

Thr Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr His Phe Thr Leu Thr Ile Asn Ser Leu Gln Ser Glu Asp Ser Ala
210 215 220

Thr Tyr Tyr Cys Gln Gln Ser Tyr Lys Arg Ala Ser Phe Gly Gln Gly
225 230 235 240

Thr Lys Val Glu Ile Lys
245

<210> 44

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 44

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn Tyr
20 25 30

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

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

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Pro Tyr Tyr Tyr Tyr Met Asp Val Trp Gly Lys Gly Thr
100 105 110

Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg
115 120 125

Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Leu
130 135 140

Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser
145 150 155 160

Ser Gln Ser Leu Leu Tyr Ser Asn Gly Tyr Asn Tyr Val Asp Trp Tyr
165 170 175

Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser
180 185 190

Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

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

210

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Ile Tyr Tyr Cys Met Gln Gly Arg Gln Phe Pro Tyr Ser Phe Gly Gln
 225 230 235 240

Gly Thr Lys Val Glu Ile Lys
 245

<210> 45

<211> 238

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 45

Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
 20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
 115 120 125

Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Val Ser Pro Gly Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Ser Ser Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
165 170 175

Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala Ser Gly Ile Pro Asp
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Gly
210 215 220

Ser Ser Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 46

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 46

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Ser Ser Lys Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
165 170 175

Arg Leu Leu Met Tyr Gly Ala Ser Ile Arg Ala Thr Gly Ile Pro Asp
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly
210 215 220

Ser Ser Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 47

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 47

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
130 135 140

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Gly Ser Thr Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr
210 215 220

Gly Ser Ser Pro Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
225 230 235 240

Lys

<210> 48

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 48

Gln 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 Asp Tyr
20 25 30

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

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala 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 Ser Gly Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala
115 120 125

Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
130 135 140

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
145 150 155 160

Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys
165 170 175

Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val
180 185 190

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
195 200 205

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
210 215 220

Ser Tyr Thr Leu Ala Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
225 230 235

<210> 49

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 49

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 Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser
130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr
210 215 220

Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 50

<211> 246
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 50
Gln Val Gln Leu Val Gln 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 Asp Tyr
20 25 30

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

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

Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala
115 120 125

Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Leu Ser
130 135 140

Leu Pro Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser
145 150 155 160

Glu Ser Leu Val His Asn Ser Gly Lys Thr Tyr Leu Asn Trp Phe His
165 170 175

Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Tyr Glu Val Ser Asn
180 185 190

Arg Asp Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr
195 200 205

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val
210 215 220

Tyr Tyr Cys Met Gln Gly Thr His Trp Pro Gly Thr Phe Gly Gln Gly
225 230 235 240

Thr Lys Leu Glu Ile Lys
245

<210> 51
<211> 239
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 51
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

85

90

95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
 115 120 125

Gly Gly Gly Ser Asp Ile Arg Leu Thr Gln Ser Pro Ser Pro Leu Ser
 130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Glu Asp
 145 150 155 160

Ile Asn Lys Phe Leu Asn Trp Tyr His Gln Thr Pro Gly Lys Ala Pro
 165 170 175

Lys Leu Leu Ile Tyr Asp Ala Ser Thr Leu Gln Thr Gly Val Pro Ser
 180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn
 195 200 205

Ser Leu Gln Pro Glu Asp Ile Gly Thr Tyr Tyr Cys Gln Gln Tyr Glu
 210 215 220

Ser Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 225 230 235

<210> 52

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 52

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Gly Ser Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Gly Pro
165 170 175

Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn
210 215 220

Asp	Trp	Leu	Pro	Val	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys
225					230					235					240

<210> 53

<211> 241

<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 53

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	Gly	Phe	Ala	Leu	Ser	Asn	His
			20					25					30		

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

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

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

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

Ala	His	Gly	Gly	Glu	Ser	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr
			100					105					110		

Val	Ser	Ser	Ala	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Arg	Ala	Ser	Gly
		115					120					125			

Gly	Gly	Gly	Ser	Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Gly	Thr	Leu	Ser
		130				135					140				

Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser
145					150					155					160

Ile Gly Ser Ser Ser Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Met Tyr Gly Ala Ser Ser Arg Ala Ser Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr
210 215 220

Ala Gly Ser Pro Pro Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
225 230 235 240

Lys

<210> 54

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 54

caagtgaac tcgtggaatc tggaggagga ctcgtgaac ccggaagatc gcttagactg	60
tcgtgtgccg ccagcgggtt cactttctcg aactacgcga tgtcctgggt ccgccaggca	120
cccgaaagg gactcggttg ggtgtccggc atttcccgtt ccggcgaaaa tacctactac	180
gccgactccg tgaagggccg cttcaccatc tcaagggaca acagcaaaaa caccctgtac	240
ttgcaaatga actccctgcg ggatgaagat acagccgtgt actattgcgc ccggtcgcct	300
gcccattact acggcggaat ggacgtctgg ggacaggga cactgtgac tgtcagcagc	360
gcgtcgggtg gcggcggctc agggggtcgg gcctccgggg ggggagggtc cgacatcgtg	420
ctgaccagtc ccccggaac cctgagcctg agcccgggag agcgcgcgac cctgtcatgc	480

cgggcatccc agagcattag ctcctccttt ctcgcctggt atcagcagaa gcccgacag	540
gccccgaggc tgctgatcta cggcgctagc agaagggcta ccggaatccc agaccggttc	600
tccggctccg gttccgggac cgatttcacc cttactatct cgcgcctgga acctgaggac	660
tccgccgtct actactgcca gcagtaccac tcatccccgt cgtggacggt cggacagggc	720
accaagctgg agattaag	738

<210> 55
 <211> 732
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 55	
caagtgaac tcgtcgaatc cgggtggaggt ctggtccaac ctggtagaag cctgagactg	60
tcgtgtgcgg ccagcggatt cacctttgat gactatgcta tgcactgggt gcggcaggcc	120
ccaggaaagg gcctggaatg ggtgtcggga attagctgga actccgggtc cattggctac	180
gccgactccg tgaagggccg cttcaccatc tcccgcgaca acgcaaagaa ctccctgtac	240
ttgcaaata actcgctcag ggctgaggat accgcgctgt actactgctc cgtgcattcc	300
ttcctggcct actggggaca gggaactctg gtcaccgtgt cgagcgctc cggcggcggg	360
ggctcgggtg gacgggcctc gggcggaggg ggggtccgaca tcgtgatgac ccagaccccg	420
ctgagcttgc ccgtgactcc cggagagcct gcatccatct cctgccggtc atcccagtcc	480
cttctccact ccaacggata caactacctc gactggtacc tccagaagcc gggacagagc	540
cctcagcttc tgatctacct ggggtcaaata agagcctcag gagtgccgga tcggttcagc	600
ggatctgggt cgggaactga tttcactctg aagatttccc gcgtggaagc cgaggacgtg	660
ggcgtctact actgtatgca ggcgctgcag accccctata ctttcggcca agggacgaaa	720
gtggagatca ag	732

<210> 56
 <211> 729
 <212> DNA
 <213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 56

gaagtgcaat tgttggaatc tggaggagga cttgtgcagc ctggaggatc actgagactt	60
tcgtgtgcgg tgtcaggctt cgccctgagc aaccacggca tgagctgggt gcggagagcc	120
ccggggaagg gtctggaatg ggtgtccggg atcgtctact ccggttcaac ttactacgcc	180
gcaagcgtga agggctcgctt caccatttcc cgcgataact cccggaacac cctgtacctc	240
caaatgaact ccctgcggcc cgaggacacc gccatctact actgttccgc gcatggagga	300
gagtccgatg tctggggaca gggcactacc gtgaccgtgt cgagcgctc ggggggagga	360
ggctccggcg gtcgcgcctc cgggggggggt ggcagcgaca ttgtgatgac gcagactcca	420
ctctcgctgt ccgtgacccc gggacagccc gcgtccatct cgtgcaagag ctcccagagc	480
ctgctgagga acgacggaaa gactcctctg tatttgtacc tccagaaggc tggacagccc	540
ccgcaactgc tcatctacga agtgtcaaat cgcttctccg ggggtgccgga tcggttttcc	600
ggctcgggat cgggcaccga cttcacctg aaaatctcca gggtcgaggc cgaggacgtg	660
ggagcctact actgcatgca aaacatccag ttcccttcct tcggcggcgg cacaagctg	720
gagattaag	729

<210> 57

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 57

caagtccaac tcgtccagtc cggcgcagaa gtcagaaaaa ccggtgctag cgtgaaagtg	60
tcctgcaagg cctccggcta cattttcgat aacttcggaa tcaactgggt cagacaggcc	120
ccgggccagg ggctggaatg gatgggatgg atcaaccca agaacaaca caccaactac	180
gcacagaagt tccagggccg cgtgactatc accgccgatg aatcgaccaa taccgcctac	240

atggaggtgt cctccctgcg gtcggaggac actgccgtgt attactgcgc gaggggcccc	300
tactactacc aaagctacat ggacgtctgg ggacaggga ccatggtgac cgtgtcatcc	360
gcctccggtg gtggaggctc cggggggcgg gcttcaggag gcggaggaag cgatattgtg	420
atgaccaga ctccgcttag cctgcccgtg actcctggag aaccggcctc catttcctgc	480
cggtcctcgc aatcactcct gcattccaac ggttacaact acctgaattg gtacctccag	540
aagcctggcc agtcgcccc gttgctgac tatctgggct cgaagcgcg ctcgggggtg	600
cctgaccggt ttagcggatc tgggagcggc acggacttca ctctccacat caccgcgtg	660
ggagcggagg acgtgggagt gtactactgt atgcaggcg tgacagactcc gtacacattc	720
ggacagggca ccaagctgga gatcaag	747

<210> 58

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 58

caagtgaac ttcaagaatc aggcggagga ctcgtgcagc ccggaggatc attgcggctc	60
tcgtgcgccg cctcgggctt caccttctcg agcgacgcca tgacctgggt ccgccaggcc	120
ccggggaagg ggctggaatg ggtgtctgtg atttccggct ccgggggaac tacgtactac	180
gccgattccg tgaaaggctc cttcactatc tcccgggaca acagcaagaa caccctttat	240
ctgcaaatga attccctccg cgccgaggac accgccgtgt actactgcgc caagctggac	300
tcctcgggct actactatgc ccggggtccg agatactggg gacagggaac cctcgtgacc	360
gtgtcctccg cgtccggcgg aggagggtcg ggagggcggg cctccggcgg cggcggttcg	420
gacatccagc tgaccagtc cccatcctca ctgagcgcaa gcgtgggcga cagagtcacc	480
attacatgca gggcgtccca gagcatcagc tcctacctga actggtacca acagaagcct	540
ggaaaggctc ctaagctgtt gatctacggg gcttcgacct tggcatccgg ggtgcccgcg	600
aggttttagcg gaagcggtag cggcactcac ttactctga ccattaacag cctccagtcc	660
gaggattcag ccacttacta ctgtcagcag tcctacaagc gggccagctt cggacagggc	720

actaaggtcg agatcaag

738

<210> 59

<211> 741

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 59

caagtccaac tgggtccagag cgggtgcagaa gtgaagaagc ccggagcgag cgtgaaagtg 60

tcctgcaagg cttccgggta caccttctcc aactacggca tcacttgggt gcgccaggcc 120

ccgggacagg gcctggaatg gatgggggtgg atttccgcgt acaacggcaa tacgaactac 180

gctcagaagt tccagggtag agtgaccatg actaggaaca cctccatttc caccgcctac 240

atggaactgt cctccctgcg gagcgaggac accgccgtgt actattgcgc ccggggacca 300

tactactact acatggatgt ctgggggaag gggactatgg tcaccgtgtc atccgcctcg 360

ggaggcggcg gatcaggagg acgcgcctct ggtggtggag gatcggagat cgtgatgacc 420

cagagccctc tctccttgcc cgtgactcct ggggagcccg catccatttc atgccggagc 480

tcccagtcac ttctctactc caacggctat aactacgtgg attggtacct ccaaaagccg 540

ggccagagcc cgcagctgct gatctacctg ggctcgaaca gggccagcgg agtgcctgac 600

cggttctccg ggtcgggaag cgggaccgac ttcaagctgc aaatctcgag agtggaggcc 660

gaggacgtgg gaatctacta ctgtatgcag ggccgccagt ttccgtactc gttcggacag 720

ggcaccaaag tggaaatcaa g 741

<210> 60

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 60

gaagtgcaat tgctcgaaac tggaggaggt ctggtgcaac ctggaggatc acttcgcctg	60
tcctgcgccg tgtcgggctt tgccctgtcc aaccatggaa tgagctgggt ccgccgcgcg	120
ccggggaagg gcctcgaatg ggtgtccggc atcgtctact ccggctccac ctactacgcc	180
gcgtccgtga agggccggtt cacgatttca cgggacaact cgcggaacac cctgtacctc	240
caaatgaatt cccttcggcc ggaggatact gccatctact actgctccgc ccacggtggc	300
gaatccgacg tctggggcca gggaaccacc gtgaccgtgt ccagcgcgtc cgggggagga	360
ggaagcgggg gtagagcatc ggggtggaggc ggatcagaga tcgtgctgac ccagtcccc	420
gccaccttga gcgtgtcacc aggagagtcc gccaccctgt catgccgcgc cagccagtcc	480
gtgtcctcca acctggcttg gtaccagcag aagccggggc aggcccctag actcctgac	540
tatggggcgt cgaccgggc atctggaatt cccgataggt tcagcggatc gggctcgggc	600
actgacttca ctctgacat ctctcgctg caagccgagg acgtggctgt gtactactgt	660
cagcagtacg gaagctccct gactttcggg ggcgggacca aagtcgagat taag	714

<210> 61

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 61

gaagtgcaat tggtggaaac tggaggagga cttgtgcaac ctggaggatc attgagactg	60
agctgcgcag tgtcgggatt cgccctgagc aaccatggaa tgtcctgggt cagaagggcc	120
cctggaaaag gcctcgaatg ggtgtcaggg atcgtgtact ccggttccac ttactacgcc	180
gcctccgtga aggggcgctt cactatctca cgggataact cccgcaatac cctgtacctc	240
caaatgaaca gcctgcggcc ggaggatacc gccatctact actgttccgc ccacggtgga	300
gagtctgacg tctggggcca gggaactacc gtgaccgtgt cctccgcgtc cggcgggtgga	360
gggagcggcg gccgcgccag cggcggcgga ggctccgaga tcgtgatgac ccagagcccc	420
gctactctgt cggtgtcgcc cggagaaagg gcgaccctgt cctgccgggc gtcgcagtcc	480
gtgagcagca agctggcttg gtaccagcag aagccgggcc aggcaccacg cctgcttatg	540

tacggtgcct ccattcgggc caccggaatc ccggaccggt tctcggggtc ggggtccggt	600
accgagttca cactgacatc ttccctcgctc gagcccgagg actttgccgt ctattactgc	660
cagcagtacg gtcctcctc atggacgttc ggccagggga ccaaggtcga aatcaag	717

<210> 62
 <211> 723
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 62	
gaagtgcaat tggaggagac tggaggagga gtggtgcaac ctggagggaag cctgagactg	60
tcatgcgcgg tgtcgggctt cgccctctcc aaccacggaa tgtcctgggt ccgccgggcc	120
cctgggaaag gacttgaatg ggtgtccggc atcgtgtact cgggttccac ctactacgcg	180
gcctcagtga agggccggtt tactattagc cgcgacaact ccagaaacac actgtacctc	240
caaatgaact cgctgcggcc ggaagatacc gctatctact actgctccgc ccatggggga	300
gagtcggacg tctggggaca gggcaccact gtcactgtgt ccagcgcttc cggcgggtgt	360
ggaagcgggg gacgggcctc aggaggcggg ggcagcgaga ttgtgctgac ccagtcccc	420
gggaccctga gcctgtcccc gggagaaagg gccaccctct cctgtcgggc atcccagtcc	480
gtgggggtcta ctaaccttgc atggtaccag cagaagcccg gccaggcccc tcgcctgctg	540
atctacgacg cgtccaatag agccaccggc atcccggatc gcttcagcgg aggcggatcg	600
ggcaccgact tcaccctcac catttcaagg ctggaaccgg aggacttcgc cgtgtactac	660
tgccagcagt atggttcgtc cccaccctgg acgttcggcc aggggactaa ggtcgagatc	720
aag	723

<210> 63
 <211> 717
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 63

caagtgcaac tcgtggaatc tggaggagga ctcgtgaaac ctggaggatc attgagactg	60
tcatgcgcgg cctcgggatt cacgttctcc gattactaca tgagctggat tcgccaggct	120
ccggggaagg gactggaatg ggtgtcctac atttcctcat ccggctccac catctactac	180
gcggactccg tgaaggggag attcaccatt agccgcgata acgccaagaa cagcctgtac	240
cttcagatga actccctgcg ggctgaagat actgccgtct actactgcgc aaggagagagc	300
ggagatggga tggacgtctg gggacagggt accactgtga ccgtgtcgtc ggcctccggc	360
ggaggggggtt cgggtggaag ggccagcggc ggcggaggga gcgacatcca gatgaccag	420
tccccctcat cgctgtccgc ctccgtgggc gaccgcgtca ccatcacatg ccgggcctca	480
cagtcgatct cctcctacct caattggtat cagcagaagc ccggaaaggc ccctaagctt	540
ctgatctacg cagcgtcctc cctgcaatcc ggggtcccat ctcggttctc cggctcgggc	600
agcgggtaccg attcactct gaccatctcg agcctgcagc cggaggactt cgccacttac	660
tactgtcagc aaagctacac cctcgcgttt ggccagggca ccaaagtgga catcaag	717

<210> 64

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 64

gaagtgcaat tggagggaatc agggggagga cttgtgcagc ctggaggatc gctgagactg	60
tcatgtgccg tgtccggctt tgccctgtcc aaccacggga tgtcctgggt ccgccgcgcg	120
cctggaaagg gcctcgaatg ggtgtcgggt attgtgtaca gcggtagcac ctactatgcc	180
gcatccgtga aggggagatt caccatcagc cgggacaact ccaggaacac tctgtacctc	240
caaatgaatt cgctgaggcc agaggacact gccatctact actgctccgc gcatggcgga	300
gagtcgcagc tctggggaca ggggaccacc gtgaccgtgt ctagcgcgtc cggcggaggc	360
ggcagcgggg gtcgggcatc agggggcggc ggatcggaca tccagctcac ccagtccccg	420

agctcgctgt ccgcctccgt gggagatcgg gtcaccatca cgtgccgcgc cagccagtcg	480
atttcctcct acctgaactg gtaccaacag aagccccgaa aagccccgaa gcttctcatc	540
tacgccgcct cgagcctgca gtcaggagtg ccctcacggt tctccggctc cggttccggt	600
actgatttca ccctgacatc ttcctccctg caaccggagg acttcgctac ttactactgc	660
cagcagtcgt actccacccc ctacactttc ggacaaggca ccaaggtcga aatcaag	717

<210> 65
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 65	
caagtgcac tggtgcaaag cggaggagga ttggtcaaac ccggaggaag cctgagactg	60
tcatgcgcgg cctctggatt caccttctcc gattactaca tgtcatggat cagacaggcc	120
ccggggaagg gcctcgaatg ggtgtcctac atctcgtcct ccgggaacac catctactac	180
gccgacagcg tgaagggccg ctttaccatt tcccgcgaca acgcaaagaa ctcgctgtac	240
cttcagatga attccctgcg ggctgaagat accgcggtgt actattgcgc ccggtccact	300
atggtccggg aggactactg gggacagggc acactcgtga ccgtgtccag cgcgagcggg	360
ggtggaggca gcggtggacg cgcctccggc ggcggcgggt cagacatcgt gctgactcag	420
tcgcccctgt cgctgccggt caccctgggc caaccggcct caattagctg caagtcctcg	480
gagagcctgg tgcacaactc aggaaagact tacctgaact ggttccatca gcggcctgga	540
cagtccccac ggaggctcat ctatgaagtg tccaacaggg attcgggggt gcccgaccgc	600
ttcactggct ccgggtccgg caccgacttc accttgaaaa tctccagagt ggaagccgag	660
gacgtgggcg tgtactactg tatgcagggt acccactggc ctggaacctt tggacaagga	720
actaagctcg agattaag	738

<210> 66
 <211> 717
 <212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 66

caagtgcac tcgtggaatc tggaggagga ctcgtgcaac ccggtggaag ccttaggctg	60
tcgtgcgccg tcagcgggtt tgctctgagc aaccatggaa tgtcctgggt ccgccgggca	120
ccgggaaaag ggctggaatg ggtgtccggc atcgtgtaca gcgggtcaac ctattacgcc	180
gcgtccgtga agggcagatt cactatctca agagacaaca gccggaacac cctgtacttg	240
caaatgaatt ccctgcgccc cgaggacacc gccatctact actgctccgc ccacggagga	300
gagtcggacg tgtggggcca gggaacgact gtgactgtgt ccagcgcac aggggggggt	360
ggttcgggcg gccgggcctc ggggggagga ggttcgcaca ttcggctgac ccagtccccg	420
tccccactgt cggcctccgt cggcgaccgc gtgaccatca cttgtcaggc gtccgaggac	480
attaacaagt tcctgaactg gtaccaccag acccctggaa agggccccc aa gctgctgac	540
tacgatgcct cgacccttca aactggagt cctagccgggt tctccgggtc cggctccggc	600
actgatttca ctctgacat caactcattg cagccggaag atatcgggac ctactattgc	660
cagcagtacg aatccctccc gctcacattc ggcgggggaa ccaaggtcga gattaag	717

<210> 67

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 67

gaagtgcac tggaggagga cttgtgcaac ctgaggatc attgcggctc	60
tcatgcgctg tctccggctt cgccctgtca aatcacggga tgtcgtgggt cagacgggcc	120
ccgggaaagg gtctggaatg ggtgtcgggg attgtgtaca gcggctccac ctactacgcc	180
gcttcgggtc agggccgctt cactatttca cgggacaaca gccgcaacac cctctatctg	240
caaatgaact ctctccgcc ggaggatacc gccatctact actgctccgc acacggcggc	300

gaatccgacg tgtggggaca gggaaccact gtcaccgtgt cgtccgcata cgggtggcggg	360
ggatcgggtg gccgggcctc cggggggcggc ggcagcgaga ctaccctgac ccagtcccct	420
gccactctgt ccgtgagccc gggagagaga gccaccctta gctgccgggc cagccagagc	480
gtgggctcca acctggcctg gtaccagcag aagccaggac aggggtcccag gctgctgata	540
tacggagcct ccactcgcgc gaccggcata cccgcgaggt tctccgggtc gggttccggg	600
accgagttca ccctgacat ctctccctc caaccggagg acttcgcggt gtactactgt	660
cagcagtaca acgattggct gcccgtgaca tttggacagg ggacgaaggt ggaaatcaaa	720

<210> 68

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 68

gaagtgaat tgggtggaatc tgggtggagga cttgtgcaac ctggaggata actgagactg	60
tcatgcgcgg tgtccggttt tgccctgagc aatcatggga tgtcgtgggt ccggcgcgcc	120
cccggaaagg gtctggaatg ggtgtcgggt atcgtctact ccgggagcac ttactacgcc	180
gcgagcgtga agggccgctt caccatttcc cgcgataact cccgcaacac cctgtacttg	240
caaatgaact cgctccggcc tgaggacact gccatctact actgctccgc acacggagga	300
gaatccgacg tgtggggcca gggaactacc gtgaccgtca gcagcgcctc cggcggcggg	360
ggctcaggcg gacgggctag cggcggcggg ggctccgaga tcgtgctgac ccagtcgcct	420
ggcactctct cgctgagccc cggggaaagg gcaaccctgt cctgtcgggc cagccagtcc	480
attggatcat cctccctcgc ctggtatcag cagaaaccgg gacaggctcc gcggctgctt	540
atgtatgggg ccagctcaag agcctccggc attcccgaac ggttctccgg gtccggttcc	600
ggcaccgatt tcaccctgac tatctcgagg ctggagccag aggacttcgc cgtgtactac	660
tgccagcagt acgcgggggtc cccgccgttc acgttcggac agggaaccaa ggtcgagata	720
aag	723

<210> 69
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 69
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

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

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

Ser Gly Ile Ser Arg Ser Gly Glu Asn 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 Asp Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Pro Ala His Tyr Tyr Gly Gly Met Asp Val Trp Gly Gln
100 105 110

Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 70
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 70

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

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

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

Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala 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 Leu Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 71

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 71

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 Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 72
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 72
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Thr Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Asp Asn Phe
20 25 30

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

Gly Trp Ile Asn Pro Lys Asn Asn Asn Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

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

Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 73

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 73

Gln Val Gln Leu Gln 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 Asp
20 25 30

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

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

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

<210> 74
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 74
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn Tyr
20 25 30

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

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

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Pro Tyr Tyr Tyr Tyr Met Asp Val Trp Gly Lys Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 75
<211> 115
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 75

Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 76

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 76

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His

20

25

30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser
 115

<210> 77

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 77

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Val Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
 20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 78

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 78

Gln 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 Asp Tyr
20 25 30

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

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala 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 Ser Gly Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr

100

105

110

Val Thr Val Ser Ser
115

<210> 79

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 79

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 Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 80

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 80

Gln Val Gln Leu Val Gln 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 Asp Tyr
20 25 30

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

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

Val Thr Val Ser Ser
115

<210> 81

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 81

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

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 82
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 82
Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 83
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 83
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 Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 84
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 84
Asp Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Ser Ser
20 25 30

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

Ile Tyr Gly Ala Ser Arg Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro
85 90 95

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

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

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 85

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

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

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

<210> 86

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 86

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

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Arg Asn
20 25 30

Asp Gly Lys Thr Pro Leu Tyr Trp Tyr Leu Gln Lys Ala Gly Gln Pro
35 40 45

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

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

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

Ile Gln Phe Pro Ser Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 87

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 87

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

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

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

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Lys Arg Ala Ser Gly Val Pro
50 55 60

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

Thr Arg Val Gly Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala

85

90

95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105 110

<210> 88

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 88

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 Arg Ala Ser Gln Ser Ile Ser Ser Tyr
 20 25 30

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

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

Ser Gly Ser Gly Thr His Phe Thr Leu Thr Ile Asn Ser Leu Gln Ser
 65 70 75 80

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

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

<210> 89

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 89

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

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

Asn Gly Tyr Asn Tyr Val Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Ile Tyr Tyr Cys Met Gln Gly
85 90 95

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

<210> 90

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 90

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

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
20 25 30

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

Tyr Gly Ala Ser Thr Arg Ala Ser Gly Ile Pro Asp Arg Phe Ser Gly
50 55 60

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

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

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

<210> 91

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 91

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

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

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

Tyr Gly Ala Ser Ile Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly
50 55 60

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Ser Trp
85 90 95

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

<210> 92
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 92
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Gly Ser Thr
20 25 30

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

Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

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

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

<210> 93
<211> 105
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 93

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

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

Leu Asn 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 Ser Tyr Thr Leu Ala Phe
85 90 95

Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 94

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 94

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 Arg Ala Ser Gln Ser Ile Ser Ser Tyr
20 25 30

Leu Asn 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 Ser Tyr Ser Thr Pro Tyr
85 90 95

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

<210> 95

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 95

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

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Glu Ser Leu Val His Asn
20 25 30

Ser Gly Lys Thr Tyr Leu Asn Trp Phe His Gln Arg Pro Gly Gln Ser
35 40 45

Pro Arg Arg Leu Ile Tyr Glu Val Ser Asn Arg Asp Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly
85 90 95

Thr His Trp Pro Gly Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 96
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 96
Asp Ile Arg Leu Thr Gln Ser Pro Ser Pro Leu Ser Ala Ser Val Gly
1 5 10 15

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

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

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

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

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

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

<210> 97
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 97
Glu Thr Thr Leu Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Gly Ser Asn
20 25 30

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

Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asp Trp Leu Pro
85 90 95

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

<210> 98

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 98

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Gly Ser Ser
20 25 30

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

Met Tyr Gly Ala Ser Ser Arg Ala Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

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

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

<210> 99
<211> 490
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 99
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Asn Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Gly Trp Val Ser Gly Ile Ser Arg Ser Gly Glu Asn Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Pro Ala His Tyr Tyr Gly Gly Met
115 120 125

Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile
145 150 155 160

Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg
165 170 175

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Ser Ser Phe Leu
180 185 190

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
195 200 205

Gly Ala Ser Arg Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
225 230 235 240

Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro Ser Trp
245 250 255

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 100

<211> 488

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 100

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

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

Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
 225 230 235 240

Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe
 245 250 255

Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg
 260 265 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
 275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
 290 295 300

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
 305 310 315 320

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg
 325 330 335

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
 340 345 350

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
 355 360 365

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
 370 375 380

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
 385 390 395 400

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
 405 410 415

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
 420 425 430

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
435 440 445

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
450 455 460

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
465 470 475 480

His Met Gln Ala Leu Pro Pro Arg
485

<210> 101

<211> 487

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 101

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala

100

105

110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
 115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
 145 150 155 160

Pro Leu Ser Leu Ser Val Thr Pro Gly Gln Pro Ala Ser Ile Ser Cys
 165 170 175

Lys Ser Ser Gln Ser Leu Leu Arg Asn Asp Gly Lys Thr Pro Leu Tyr
 180 185 190

Trp Tyr Leu Gln Lys Ala Gly Gln Pro Pro Gln Leu Leu Ile Tyr Glu
 195 200 205

Val Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
 210 215 220

Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
 225 230 235 240

Val Gly Ala Tyr Tyr Cys Met Gln Asn Ile Gln Phe Pro Ser Phe Gly
 245 250 255

Gly Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro
 260 265 270

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
 275 280 285

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
 290 295 300

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
 305 310 315 320

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly
325 330 335

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
340 345 350

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu
355 360 365

Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp
370 375 380

Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
385 390 395 400

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
405 410 415

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
420 425 430

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

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
450 455 460

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
465 470 475 480

Met Gln Ala Leu Pro Pro Arg
485

<210> 102

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 102

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Arg Lys Thr Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Asp Asn Phe Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Lys Asn Asn Asn Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser
85 90 95

Thr Asn Thr Ala Tyr Met Glu Val Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Pro Tyr Tyr Tyr Gln Ser Tyr Met
115 120 125

Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile
145 150 155 160

Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro
165 170 175

Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly
180 185 190

Tyr Asn Tyr Leu Asn Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln

195

200

205

Leu Leu Ile Tyr Leu Gly Ser Lys Arg Ala Ser Gly Val Pro Asp Arg
 210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu His Ile Thr Arg
 225 230 235 240

Val Gly Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln
 245 250 255

Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr
 260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
 275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
 290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
 305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
 325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
 340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
 355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
 370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
 385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 103

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 103

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Asp Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Val Ile Ser Gly Ser Gly Gly Thr Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Leu Asp Ser Ser Gly Tyr Tyr Tyr Ala
115 120 125

Arg Gly Pro Arg Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135 140

Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly
145 150 155 160

Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
165 170 175

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
180 185 190

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
195 200 205

Ile Tyr Gly Ala Ser Thr Leu Ala Ser Gly Val Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr His Phe Thr Leu Thr Ile Asn Ser Leu Gln
225 230 235 240

Ser Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Lys Arg Ala
245 250 255

Ser Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr

290

295

300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
 305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
 325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
 340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
 355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
 370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
 385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
 405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 104

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 104

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Ser Asn Tyr Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

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

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser
85 90 95

Ile Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Pro Tyr Tyr Tyr Tyr Met Asp Val
115 120 125

Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser
165 170 175

Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Tyr Ser Asn Gly Tyr Asn
180 185 190

Tyr Val Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu
195 200 205

Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Lys Leu Gln Ile Ser Arg Val Glu
225 230 235 240

Ala Glu Asp Val Gly Ile Tyr Tyr Cys Met Gln Gly Arg Gln Phe Pro
245 250 255

Tyr Ser Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
145 150 155 160

Pro Ala Thr Leu Ser Val Ser Pro Gly Glu Ser Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Ser Ser Asn Leu Ala Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala
195 200 205

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr
225 230 235 240

Cys Gln Gln Tyr Gly Ser Ser Leu Thr Phe Gly Gly Gly Thr Lys Val
245 250 255

Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
260 265 270

Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
275 280 285

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
290 295 300

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
305 310 315 320

Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu
325 330 335

Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu
340 345 350

Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys
355 360 365

Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys
370 375 380

Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu
385 390 395 400

Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly
405 410 415

Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu
420 425 430

Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly
435 440 445

Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser
450 455 460

Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro
465 470 475 480

Pro Arg

<210> 106
<211> 483
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 106
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser
145 150 155 160

Pro Ala Thr Leu Ser Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Ser Ser Lys Leu Ala Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly Ala Ser Ile Arg Ala
195 200 205

Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr
225 230 235 240

Cys Gln Gln Tyr Gly Ser Ser Ser Trp Thr Phe Gly Gln Gly Thr Lys
245 250 255

Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
 370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
 385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
 405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
 420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
 435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
 450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
 465 470 475 480

Pro Pro Arg

<210> 107
 <211> 485
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 107
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Val
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
 35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
145 150 155 160

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Gly Ser Thr Asn Leu Ala Trp Tyr Gln Gln
180 185 190

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg
195 200 205

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Gly Gly Ser Gly Thr Asp
210 215 220

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
225 230 235 240

Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Pro Trp Thr Phe Gly Gln Gly
245 250 255

Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 465 470 475 480

Ala Leu Pro Pro Arg
 485

<210> 108
 <211> 483
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 108
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Asp Tyr Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Glu Ser Gly Asp Gly Met Asp Val Trp
 115 120 125

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly
 130 135 140

Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr
 145 150 155 160

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 165 170 175

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 180 185 190

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 195 200 205

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 210 215 220

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 225 230 235 240

Tyr Tyr Cys Gln Gln Ser Tyr Thr Leu Ala Phe Gly Gln Gly Thr Lys
 245 250 255

Val Asp Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
 260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
 275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
 290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
 305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
 325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
 340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 109

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 109

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu

20

25

30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
 35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
 65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
 85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
 100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
 115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser
 145 150 155 160

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
 165 170 175

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys
 180 185 190

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln
 195 200 205

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
 210 215 220

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
 225 230 235 240

Cys Gln Gln Ser Tyr Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys
245 250 255

Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 110
<211> 490
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 110
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu
20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Asp Tyr Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Asn Thr Ile Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Thr Met Val Arg Glu Asp Tyr Trp

115	120	125													
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Gly	Gly	Gly	Gly
130						135					140				
Ser	Gly	Gly	Arg	Ala	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile	Val	Leu	Thr
145					150					155					160
Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val	Thr	Leu	Gly	Gln	Pro	Ala	Ser	Ile
				165					170					175	
Ser	Cys	Lys	Ser	Ser	Glu	Ser	Leu	Val	His	Asn	Ser	Gly	Lys	Thr	Tyr
			180					185					190		
Leu	Asn	Trp	Phe	His	Gln	Arg	Pro	Gly	Gln	Ser	Pro	Arg	Arg	Leu	Ile
		195					200					205			
Tyr	Glu	Val	Ser	Asn	Arg	Asp	Ser	Gly	Val	Pro	Asp	Arg	Phe	Thr	Gly
	210					215					220				
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Lys	Ile	Ser	Arg	Val	Glu	Ala
225					230					235					240
Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys	Met	Gln	Gly	Thr	His	Trp	Pro	Gly
				245					250					255	
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala
			260					265						270	
Pro	Arg	Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser
		275					280					285			
Leu	Arg	Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr
	290					295					300				
Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala
305					310					315					320
Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys
				325					330					335	

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 111

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 111

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Arg Leu Thr Gln Ser
145 150 155 160

Pro Ser Pro Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
165 170 175

Gln Ala Ser Glu Asp Ile Asn Lys Phe Leu Asn Trp Tyr His Gln Thr
180 185 190

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Asp Ala Ser Thr Leu Gln
195 200 205

Thr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe

210

215

220

Thr Leu Thr Ile Asn Ser Leu Gln Pro Glu Asp Ile Gly Thr Tyr Tyr
 225 230 235 240

Cys Gln Gln Tyr Glu Ser Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys
 245 250 255

Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
 260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
 275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
 290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
 305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
 325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
 340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Gly Gly
 355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
 370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
 385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
 405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
 420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 112

<211> 484

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 112

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser
145 150 155 160

Pro Ala Thr Leu Ser Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Gly Ser Asn Leu Ala Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Gln Gly Pro Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala
195 200 205

Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr
225 230 235 240

Cys Gln Gln Tyr Asn Asp Trp Leu Pro Val Thr Phe Gly Gln Gly Thr
245 250 255

Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
260 265 270

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
275 280 285

Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
290 295 300

Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu

305		310		315		320									
Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg	Lys	Lys
			325						330					335	
Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln	Thr	Thr
			340					345					350		
Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu	Glu	Gly
		355					360					365			
Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala	Pro	Ala
	370					375					380				
Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu	Gly	Arg
385					390					395					400
Arg	Glu	Glu	Tyr	Asp	Val	Leu	Asp	Lys	Arg	Arg	Gly	Arg	Asp	Pro	Glu
				405					410					415	
Met	Gly	Gly	Lys	Pro	Arg	Arg	Lys	Asn	Pro	Gln	Glu	Gly	Leu	Tyr	Asn
			420					425					430		
Glu	Leu	Gln	Lys	Asp	Lys	Met	Ala	Glu	Ala	Tyr	Ser	Glu	Ile	Gly	Met
		435					440					445			
Lys	Gly	Glu	Arg	Arg	Arg	Gly	Lys	Gly	His	Asp	Gly	Leu	Tyr	Gln	Gly
	450					455					460				
Leu	Ser	Thr	Ala	Thr	Lys	Asp	Thr	Tyr	Asp	Ala	Leu	His	Met	Gln	Ala
465					470					475					480
Leu	Pro	Pro	Arg												

<210> 113
 <211> 485
 <212> PRT
 <213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 113

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
145 150 155 160

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Ile Gly Ser Ser Ser Leu Ala Trp Tyr Gln Gln
180 185 190

Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly Ala Ser Ser Arg
195 200 205

Ala Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
210 215 220

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
225 230 235 240

Tyr Cys Gln Gln Tyr Ala Gly Ser Pro Pro Phe Thr Phe Gly Gln Gly
245 250 255

Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro

405

410

415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
 420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
 435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
 450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 465 470 475 480

Ala Leu Pro Pro Arg
 485

<210> 114

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 114

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtgc aactcgtgga atctggtgga ggactcgtgc aacccggaag atcgcttaga	120
ctgtcgtgtg ccgccagcgg gttcactttc tcgaactacg cgatgtcctg ggtccgccag	180
gcacccggaa agggactcgg ttgggtgtcc ggcatttccc ggtccggcga aaatacctac	240
tacgccgact ccgtgaaggg ccgcttcacc atctcaaggg acaacagcaa aaacaccctg	300
tacttgcaaa tgaactccct gcgggatgaa gatacagccg tgtactattg cgcccgtcgg	360
cctgcccatt actacggcgg aatggacgtc tggggacagg gaaccactgt gactgtcagc	420
agcgcgtcgg gtggcggcgg ctcaggggggt cgggcctccg gggggggagg gtccgacatc	480
gtgctgaccc agtccccggg aaccctgagc ctgagcccgg gagagcgcgc gaccctgtca	540
tgccgggcat cccagagcat tagctcctcc tttctcgcct ggtatcagca gaagcccgga	600

caggccccga ggctgctgat ctacggcgct agcagaaggg ctaccggaat cccagaccgg	660
ttctccggct ccggttccgg gaccgatttc acccttacta tctcgcgcct ggaacctgag	720
gactccgccg tctactactg ccagcagtac cactcatccc cgtcgtggac gttcggacag	780
ggcaccaagc tggagattaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc ttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcaaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccagga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 115

<211> 1464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 115

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtgc aactcgtcga atccggtgga ggtctggtcc aacctggtag aagcctgaga	120
ctgtcgtgtg cggccagcgg attcaccttt gatgactatg ctatgcactg ggtgcggcag	180
gccccaggaa agggcctgga atgggtgtcg ggaattagct ggaactccgg gtccattggc	240
tacgccgact ccgtgaaggg ccgcttcacc atctcccgcg acaacgcaaa gaactccctg	300

tacttgcaaa tgaactcgct cagggctgag gataccgcgc tgtactactg ctccgtgcat	360
tccttcctgg cctactgggg acaggggaact ctggtcaccg tgtcgagcgc ctccggcggc	420
gggggctcgg gtggacgggc ctcgggcgga ggggggtccg acatcgtgat gaccagacc	480
ccgctgagct tgcccgtgac tcccggagag cctgcatcca tctcctgccg gtcatcccag	540
tcccttctcc actccaacgg atacaactac ctcgactggg acctccagaa gccgggacag	600
agccctcagc ttctgatcta cctgggggtca aatagagcct caggagtgcc ggatcggttc	660
agcggatctg gttcgggaac tgatttcact ctgaagattt cccgcgtgga agccgaggac	720
gtgggcgtct actactgtat gcaggcgctg cagacccctt ataccttcgg ccaagggacg	780
aaagtggaga tcaagaccac taccccagca ccgaggccac ccacccggc tcctaccatc	840
gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgcagctgg tggggccgtg	900
catacccggtg gtcttgactt cgcctgcgat atctacattt gggcccctct ggctgggtact	960
tgccgggtcc tgctgctttc actcgtgatc actctttact gtaagcgcgg tcggaagaag	1020
ctgctgtaca tctttaagca acccttcatg aggctgtgc agactactca agaggaggac	1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc	1140
agccgcagcg cagatgctcc agcctacaag caggggcaga accagctcta caacgaactc	1200
aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggaccagaa	1260
atgggcggga agccgcgcag aaagaatccc caagagggcc tgtacaacga gtcctaaaag	1320
gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aagaggcaaa	1380
ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgtcttt	1440
cacatgcagg ccctgccgcc tcgg	1464

<210> 116

<211> 1461

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 116

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
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cccgaagtgc aattgttgga atctggagga ggacttgtgc agcctggagg atcactgaga	120
ctttcgtgtg cggtgtcagg cttcgccctg agcaaccacg gcatgagctg ggtgcggaga	180
gccccgggga agggctctgga atgggtgtcc gggatcgtct actccggttc aacttactac	240
gccgcaagcg tgaagggtcg cttcaccatt tcccgcgata actcccggaa caccctgtac	300
ctccaaatga actccctgcg gcccaggagc accgccatct actactgttc cgcgcatgga	360
ggagagtccg atgtctgggg acagggcact accgtgaccg tgtcgagcgc ctcgggggga	420
ggaggctccg gcggtcgcgc ctccgggggg ggtggcagcg acatttgtat gacgcagact	480
ccactctcgc tgtccgtgac cccgggacag cccgcgtcca tctcgtgcaa gagctcccag	540
agcctgctga ggaacgacgg aaagactcct ctgtattggt acctccagaa ggctggacag	600
cccccgcaac tgctcatcta cgaagtgtca aatcgcttct ccgggggtgcc ggatcggttt	660
tccggctcgg gatcgggcac cgacttcacc ctgaaaatct ccagggtcga ggccgaggac	720
gtgggagcct actactgcat gcaaaacatc cagttccctt ctttcggcgg cggcacaaag	780
ctggagatta agaccactac cccagcaccg aggccacca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctggtgg ggccgtgcat	900
acccggggtc ttgacttcgc ctgcgatatc tacatttggt cccctctggc tggctacttc	960
ggggctcctgc tgctttcact cgtgatcact ctttactgta agcgcggctc gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tgttcatgcc ggttcccaga ggaggaggaa ggcggctgcg aactgcgcgt gaaattcagc	1140
cgcagcgag atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat	1200
cttggtcgga gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg	1260
ggcgggaagc cgcgcagaaa gaatcccaa gagggcctgt acaacgagct ccaaaaggat	1320
aagatggcag aagcctatag cgagattggt atgaaagggg aacgcagaag aggcaaaggc	1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac	1440
atgcaggccc tgccgcctcg g	1461

<210> 117

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 117

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca gtccggcgca gaagtcagaa aaaccggtgc tagcgtgaaa	120
gtgtcctgca aggccctcgg ctacattttc gataacttcg gaatcaactg ggtcagacag	180
gccccggggc aggggctgga atggatggga tggatcaacc ccaagaacaa caacaccaac	240
tacgcacaga agttccaggg ccgctgact atcaccgccg atgaatcgac caataccgcc	300
tacatggagg tgtcctccct gcggctcggag gacactgccg tgtattactg cgcgaggggc	360
ccatactact accaaagcta catggacgtc tggggacagg gaaccatggt gaccgtgtca	420
tccgcctccg gtgggtggagg ctccgggggg cgggcttcag gaggcggagg aagcgatatt	480
gtgatgacc agactccgct tagcctgccc gtgactcctg gagaaccggc ctccattttc	540
tgccggtcct cgcaatcact cctgcattcc aacgggttaca actacctgaa ttggtacctc	600
cagaagcctg gccagtcgcc ccagttgctg atctatctgg gctcgaagcg cgcctccggg	660
gtgcctgacc ggtttagcgg atctgggagc ggcacggact tcactctcca catcaccgc	720
gtgggagcgg aggacgtggg agtgtactac tgtatgcagg cgctgcagac tccgtacaca	780
ttcggacagg gcaccaagct ggagatcaag accactacc cagcaccgag gccaccacc	840
ccggctccta ccatcgcctc ccagcctctg tccctgcgtc cggaggcatg tagaccgcga	900
gctgggtggg ccgtgcatac ccggggtctt gacttcgcct gcgatatacta catttggggc	960
cctctggctg gtacttgagg ggtcctgctg ctttactcgt tgatcactct ttactgtaag	1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcattgccg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380

cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg cgcctcgg	1479

<210> 118
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 118	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aacttcaaga atcaggcgga ggactcgtgc agcccggagg atcattgcgg	120
ctctcgtgcg cgcctcggg cttcaccttc tcgagcgacg ccatgacctg ggtccgccag	180
gccccgggga aggggctgga atgggtgtct gtgatttccg gctccggggg aactacgtac	240
tacgccgatt ccgtgaaagg tcgcttcact atctcccggg acaacagcaa gaacaccctt	300
tatctgcaaa tgaattccct ccgcgccgag gacaccgccg tgtactactg cgccaagctg	360
gactcctcgg gctactacta tgcccggggg ccgagatact ggggacaggg aaccctcgtg	420
accgtgtcct ccgcgtccgg cggaggaggg tcgggagggc gggcctccgg cggcggcggt	480
tcggacatcc agctgacca gtcccatcc tctactgagcg caagcgtggg cgacagagtc	540
accattacat gcagggcgtc ccagagcatc agctcctacc tgaactggta ccaacagaag	600
cctggaaagg ctctaagct gttgatctac ggggcttcga ccctggcatc cggggtgccc	660
gcgaggttta gcggaagcgg tagcggcact cacttcactc tgaccattaa cagcctccag	720
tccgaggatt cagccactta ctactgtcag cagtcctaca agcgggccag cttcggacag	780
ggcactaagg tcgagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc ttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080

gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggacagaacca gctctacaac	1200
gaactcaatc ttggctcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 119

<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 119

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactggtcca gagcgggtgca gaagtgaaga agcccggagc gagcgtgaaa	120
gtgtcctgca aggcttccgg gtacaccttc tccaactacg gcatcacttg ggtgcgccag	180
gccccgggac agggcctgga atggatgggg tggatttccg cgtacaacgg caatacgaac	240
tacgctcaga agttccaggg tagagtgacc atgactagga acacctccat ttccaccgcc	300
tacatggaac tgtcctccct gcggagcagag gacaccgccg tgtactattg cgcccgggga	360
ccatactact actacatgga tgtctggggg aaggggacta tggtcaccgt gtcatccgcc	420
tcgggaggcg gcggatcagg aggacgcgcc tctggtggtg gaggatcgga gatcgtgatg	480
accagagcc ctctctcctt gcccgtgact cctggggagc ccgcatccat ttcatgccgg	540
agctcccagt cacttctcta ctccaacggc tataactacg tggattggta cctccaaaag	600
ccggggccaga gcccgcagct gctgatctac ctgggctcga acagggccag cggagtgcct	660
gaccggttct ccgggtcggg aagcgggacc gacttcaagc tgcaaattct gagagtggag	720
gccgaggacg tgggaatcta ctactgtatg cagggccgcc agtttccgta ctcgttcgga	780
cagggcacca aagtggaaat caagaccact accccagcac cgaggccacc cccccggct	840

cctaccatcg cctcccagcc tctgtccctg cgtccggagg catgtagacc cgcagctggt	900
ggggccgtgc atacccgggg tcttgacttc gcctgcgata tctacatttg ggcccctctg	960
gctggtactt gcggggtcct gctgctttca ctctgtatca ctctttactg taagcgcggt	1020
cggaagaagc tgctgtacat ctttaagcaa cccttcatga ggctgtgca gactactcaa	1080
gaggaggacg gctgttcatg ccggttccca gaggaggagg aaggcggctg cgaactgcgc	1140
gtgaaattca gccgcagcgc agatgctcca gcctacaagc aggggcagaa ccagctctac	1200
aacgaactca atcttggtcg gagagaggag tacgacgtgc tggacaagcg gagaggacgg	1260
gaccagaaa tgggcgggaa gccgcgcaga aagaatcccc aagagggcct gtacaacgag	1320
ctccaaaagg ataagatggc agaagcctat agcgagattg gtatgaaagg ggaacgcaga	1380
agaggcaaag gccacgacgg actgtaccag ggactcagca ccgccaccaa ggacacctat	1440
gacgctcttc acatgcaggc cctgccgcct cgg	1473

<210> 120

<211> 1446

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 120

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattgctcga aactggagga ggtctggtgc aacctggagg atcacttcgc	120
ctgtcctgcg ccgtgtcggg ctttgccctg tccaaccatg gaatgagctg ggtccgccgc	180
gcgccgggga agggcctcga atgggtgtcc ggcatcgtct actccggctc cacctactac	240
gccgcgtccg tgaagggccg gttcacgatt tcacgggaca actcgcgga caccctgtac	300
ctccaaatga attcccttcg gccggaggat actgccatct actactgctc cgcccacggt	360
ggcgaatccg acgtctgggg ccagggaacc accgtgaccg tgtccagcgc gtccggggga	420
ggaggaagcg ggggtagagc atcgggtgga ggcggatcag agatcgtgct gaccagttcc	480
cccgccacct tgagcgtgtc accaggagag tccgccaccc tgtcatgccg cgccagccag	540

tccgtgtcct ccaacctggc ttggtaccag cagaagccgg ggcaggcccc tagactcctg	600
atctatgggg cgtcgacccg ggcattctgga attcccgata ggttcagcgg atcgggctcg	660
ggcactgact tcactctgac catctcctcg ctgcaagccg aggacgtggc tgtgtactac	720
tgtcagcagt acggaagctc cctgactttc ggtggcggga ccaaagtcga gattaagacc	780
actaccccag caccgaggcc acccaccctg gctcctacca tcgcctcca gcctctgtcc	840
ctgcgtccgg aggcatgtag acccgagct ggtggggccg tgcatacccg gggctttgac	900
ttgcctgagc atatctacat ttgggcccct ctggctggta cttgcggggt cctgctgctt	960
tcactctgta tcactcttta ctgtaagcgc ggtcggaaga agctgctgta catctttaag	1020
caacccttca tgaggcctgt gcagactact caagaggagg acggctgttc atgccggttc	1080
ccagaggagg aggaaggcgg ctgcgaactg cgcgtgaaat tcagccgcag cgcagatgct	1140
ccagcctaca agcaggggca gaaccagctc tacaacgaac tcaatcttgg tcggagagag	1200
gagtacgacg tgctggacaa gcggagagga cgggaccag aaatgggcgg gaagccgcgc	1260
agaaagaatc cccaagaggg cctgtacaac gagctccaaa aggataagat ggcagaagcc	1320
tatagcgaga ttggtatgaa aggggaacgc agaagaggca aaggccacga cggactgtac	1380
cagggactca gcaccgccac caaggacacc tatgacgctc ttcacatgca ggccctgccg	1440
cctcgg	1446

<210> 121

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 121

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgga aactggagga ggacttgtgc aacctggagg atcattgaga	120
ctgagctgag cagtgtcggg attcgccctg agcaaccatg gaatgtcctg ggtcagaagg	180
gcccttgga aaggcctcga atgggtgtca gggatcgtgt actccggttc cacttactac	240
gccgcctccg tgaaggggag cttcactatc tcacgggata actcccga taccctgtac	300

ctccaaatga acagcctgcg gccggaggat accgccatct actactgttc cgcccacggt	360
ggagagtctg acgtctgggg ccagggaact accgtgaccg tgtcctccgc gtccggcggt	420
ggagggagcg gcggccgcgc cagcggcggc ggaggctccg agatcgtgat gaccagagc	480
cccgctactc tgtcgggtgc gcccgagaa agggcgaccc tgtcctgccg ggcgtcgag	540
tccgtgagca gcaagctggc ttggtaccag cagaagccgg gccaggcacc acgcctgctt	600
atgtacggtg cctccattcg ggccaccgga atcccggacc ggttctcggg gtcggggtcc	660
ggtaccgagt tcacactgac catttcctcg ctcgagcccg aggactttgc cgtctattac	720
tgccagcagt acggctcctc ctcatggacg ttcggccagg ggaccaaggt cgaaatcaag	780
accactacc cagcaccgag gccaccacc ccggctccta ccatcgctc ccagcctctg	840
tccctgcgtc cggaggcatg tagaccgcga gctggtgggg ccgtgcatac ccggggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgagg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcattgccg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 122

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 122

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgga gactggagga ggagtgggtgc aacctggagg aagcctgaga	120
ctgtcatgcg cgggtgtcggg cttcgccctc tccaaccacg gaatgtcctg ggtccgccgg	180
gcccctggga aaggacttga atgggtgtcc ggcacgtgtg actcgggttc cacctactac	240
gcggcctcag tgaagggccg gtttactatt agccgcgaca actccagaaa cacactgtac	300
ctccaaatga actcgctgcg gccggaagat accgctatct actactgctc cgcccatggg	360
ggagagtgcg acgtctgggg acagggcacc actgtcactg tgtccagcgc ttccggcggg	420
ggtggaagcg ggggacgggc ctgaggaggc ggtggcagcg agattgtgct gacccagtcc	480
cccgaggacc tgagcctgtc ccggggagaa agggccaccc tctcctgtcg ggcacccag	540
tccgtggggg ctactaacct tgcattggtag cagcagaagc ccggccaggc ccctcgcctg	600
ctgatctacg acgcgtccaa tagagccacc ggcacccgg atcgcttcag cggaggcgga	660
tcgggcaccg acttcaccct caccatttca aggctggaac cggaggactt cgccgtgtac	720
tactgccagc agtatggttc gtccccaccc tggacgttcg gccaggggac taaggctcag	780
atcaagacca ctacccagc accgaggcca cccacccgg ctctaccat cgcctccag	840
cctctgtccc tgcgtccgga ggcattgtag cccgcagctg gtggggccgt gcatacccg	900
ggtcttgact tcgcctgcga tatctacatt tgggcccctc tggctggtag ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcaggggcag aaccagctct acaacgaact caatcttggg	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggtatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgtctt tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 123

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 123

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtgga atctggtgga ggactcgtga aacctggagg atcattgaga	120
ctgtcatgcg cggcctcggg attcacgttc tccgattact acatgagctg gattcgccag	180
gctccgggga agggactgga atgggtgtcc tacatttcct catccggctc caccatctac	240
tacgcggact ccgtgaaggg gagattcacc attagccgcg ataacgcaa gaacagcctg	300
taccttcaga tgaactccct gcgggctgaa gatactgccg tctactactg cgcaaggag	360
agcggagatg ggatggacgt ctggggacag ggtaccactg tgaccgtgtc gtcggcctcc	420
ggcggagggg gttcgggtgg aagggccagc ggcggcggag gcagcgacat ccagatgacc	480
cagtccccct catcgctgtc cgctccgtg ggcgaccgcg tcaccatcac atgccgggcc	540
tcacagtcga tctctccta cctcaattgg tatcagcaga agcccggaaa ggcccctaag	600
cttctgatct acgcagcgtc ctccctgcaa tccggggtcc catctcggtt ctccggctcg	660
ggcagcggta ccgacttcac tctgaccatc tcgagcctgc agccggagga cttcgccact	720
tactactgtc agcaaagcta caccctcgcg tttggccagg gcaccaaagt ggacatcaag	780
accactaccc cagcaccgag gccaccacc ccggctccta ccatgcctc ccagcctctg	840
tccctgcgtc cggaggcatg tagaccgca gctggtgggg ccgtgcatac ccggggtctt	900
gacttcgcct gcgatatcta ctttgggcc cctctggctg gtacttgagg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcggg agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320

gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 124
 <211> 1449
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 124	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgga atcaggggga ggacttgtgc agcctggagg atcgtgaga	120
ctgtcatgtg ccgtgtccgg ctttgccctg tccaaccacg ggatgtcctg ggtccgccgc	180
gcgctggaa agggcctcga atgggtgtcg ggtatttgtt acagcggtag cacctactat	240
gccgcatccg tgaaggggag attcaccatc agccgggaca actccaggaa cactctgtac	300
ctccaaatga attcgctgag gccagaggac actgccatct actactgctc cgcgcatggc	360
ggagagtccg acgtctgggg acaggggacc accgtgaccg tgtctagcgc gtccggcgga	420
ggcggcagcg ggggtcgggc atcagggggc ggcggtcgg acatccagct caccagttcc	480
ccgagctcgc tgtccgcctc cgtgggagat cgggtcacca tcacgtgccg cgccagccag	540
tcgatttcct cctacctgaa ctggtaccaa cagaagcccg gaaaagcccc gaagcttctc	600
atctacgccg cctcgagcct gcagtcagga gtgccctcac ggttctccgg ctccggttcc	660
ggtactgatt tcacctgac catttcctcc ctgcaaccgg aggacttcgc tacttactac	720
tgccagcagt cgtactccac cccctacact ttcggacaag gcaccaaggt cgaaatcaag	780
accactaccc cagcaccgag gccacccacc ccggctccta ccatcgctc ccagcctctg	840
tccctgcgtc cggaggcatg tagaccgcga gctggtgggg ccgtgcatac ccgggggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgctg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcggga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080

ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 125

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 125

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtgc aactggtgca aagcggagga ggattggtca aaccggagg aagcctgaga	120
ctgtcatgcg cggcctctgg attcaccttc tccgattact acatgtcatg gatcagacag	180
gccccgggga agggcctcga atgggtgtcc tacatctcgt cctccgggaa caccatctac	240
tacgccgaca gcgtgaaggg ccgctttacc atttcccgcg acaacgcaaa gaactcgctg	300
taccttcaga tgaattccct gcgggctgaa gataccgcgg tgtactattg cgcccgtcc	360
actatggtcc gggaggacta ctggggacag ggcacactcg tgaccgtgtc cagcgcgagc	420
gggggtggag gcagcgggtg acgcgcctcc ggcggcggcg gttcagacat cgtgctgact	480
cagtcgcccc tgtcgctgcc ggtcaccttg ggccaaccgg cctcaattag ctgcaagtcc	540
tcggagagcc tgggtgcacaa ctcaggaaag acttacctga actggttcca tcagcggcct	600
ggacagtccc cacggaggct catctatgaa gtgtccaaca gggattcggg ggtgcccgcac	660
cgcttcactg gctccgggtc cggcaccgac ttcaccttga aaatctccag agtggaagcc	720
gaggacgtgg gcgtgtacta ctgtatgcag ggtaccact ggcctggaac ctttggacaa	780

ggaactaagc tcgagattaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggctcg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 126

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 126

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtgc aactcgtgga atctggtgga ggactcgtgc aaccgggtgg aagccttagg	120
ctgtcgtgcg ccgtcagcgg gtttgctctg agcaaccatg gaatgtcctg ggtccgccgg	180
gcaccgggaa aagggctgga atgggtgtcc ggcacgtgt acagcgggtc aacctattac	240
gccgcgtccg tgaagggcag attcactatc tcaagagaca acagccggaa caccctgtac	300
ttgcaaataa attccctgcg ccccgaggac accgccatct actactgctc cgcccacgga	360
ggagagtcgg acgtgtgggg ccagggaacg actgtgactg tgtccagcgc atcaggaggg	420
ggtgggttcgg gcggccgggc ctcgggggga ggaggttccg acattcggct gaccagttcc	480
ccgtccccac tgtcggcctc cgtcggcgac cgcgtgacca tcacttgtca ggcgtccgag	540

gacattaaca agttcctgaa ctggtaccac cagaccctg gaaaggcccc caagctgctg	600
atctacgatg cctcgaccct tcaaactgga gtgcctagcc ggttctccgg gtccggctcc	660
ggcactgatt tcactctgac catcaactca ttgcagccgg aagatatcgg gacctactat	720
tgccagcagt acgaatccct cccgctcaca ttcggcgggg gaaccaaggt cgagattaag	780
accactaccc cagcaccgag gccaccacc ccggctccta ccatcgctc ccagcctctg	840
tccctgcgtc cggaggcatg tagaccgca gctggtgggg ccgtgcatac ccggggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgctg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccaggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 127

<211> 1452

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 127

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgga aactggagga ggacttgtgc aacctggagg atcattgcgg	120
cttcatgctg ctgtctccgg cttcgccctg tcaaatacac ggatgtcgtg ggtcagacgg	180
gccccgggaa agggctgga atgggtgtcg gggatttgtt acagcggctc cacctactac	240

gccgcttcgg tcaagggccg cttcactatt tcacgggaca acagccgcaa caccctctat	300
ctgcaaatga actctctccg cccggaggat accgccatct actactgctc cgcacacggc	360
ggcgaatccg acgtgtgggg acaggggaacc actgtcaccg tgtcgtccgc atccggtggc	420
ggaggatcgg gtggccgggc ctccgggggc ggcggcagcg agactaccct gacccagtcc	480
cctgccactc tgtccgtgag cccgggagag agagccaccc ttagctgccg ggccagccag	540
agcgtgggct ccaacctggc ctggtaccag cagaagccag gacagggtcc caggctgctg	600
atctacggag cctccactcg cgcgaccggc atccccgcga ggttctccgg gtcgggttcc	660
gggaccgagt tcaccctgac catctcctcc ctccaaccgg aggacttcgc ggtgtactac	720
tgtcagcagt acaacgattg gctgcccgtg acatttggac aggggacgaa ggtggaaatc	780
aaaaccacta cccagcacc gaggccaccc accccggctc ctaccatcgc ctcccagcct	840
ctgtccctgc gtccggaggc atgtagaccg gcagctggtg gggccgtgca taccgggggt	900
cttgacttcg cctgcgatat ctacatttgg gccctcttg ctggtacttg cggggtcctg	960
ctgctttcac tcgtgatcac tctttactgt aagcgcggtc ggaagaagct gctgtacatc	1020
tttaagcaac cttcatgag gcctgtgcag actactcaag aggaggacgg ctgttcatgc	1080
cggttcccag aggaggagga aggcggctgc gaactgcgcg tgaaattcag ccgcagcgca	1140
gatgctccag cctacaagca ggggcagaac cagctctaca acgaactcaa tcttggtcgg	1200
agagaggagt acgacgtgct ggacaagcgg agaggacggg acccagaaat gggcgggaag	1260
ccgcgcagaa agaatcccca agagggcctg tacaacgagc tccaaaagga taagatggca	1320
gaagcctata gcgagattgg tatgaaagg gaacgcagaa gaggcaaagg ccacgacgga	1380
ctgtaccagg gactcagcac cgccaccaag gacacctatg acgctcttca catgcaggcc	1440
ctgccgcctc gg	1452

<210> 128

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 128
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaagtgc aattggtgga atctggtgga ggacttgtgc aacctggagg atcactgaga 120
ctgtcatgcg cgggtgtccg ttttgccctg agcaatcatg ggatgtcgtg ggtccggcgc 180
gccccggaa agggctctgga atgggtgtcg ggtatcgtct actccgggag cacttactac 240
gccgcgagcg tgaagggccg cttcaccatt tcccgcgata actcccga caccctgtac 300
ttgcaaata actcgctccg gcctgaggac actgccatct actactgctc cgcacacgga 360
ggagaatccg acgtgtgggg ccagggaact accgtgaccg tcagcagcgc ctccggcggc 420
gggggctcag gcggacgggc tagcggcggc ggtggctccg agatcgtgct gacccagtcg 480
cctggcactc tctcgctgag ccccggggaa agggcaacc tgtcctgtcg ggccagccag 540
tccattggat catcctccct cgcctggtat cagcagaaac cgggacaggc tccgcggctg 600
cttatgtatg gggccagctc aagagcctcc ggcattcccg accggttctc cgggtccggt 660
tccggcaccg atttcaccct gactatctcg aggctggagc cagaggactt cgccgtgtac 720
tactgccagc agtacgcggg gtccccgccg ttcacgttcg gacagggaac caaggtcgag 780
atcaagacca ctaccccagc accgaggcca cccaccccg ctcctaccat cgcctcccag 840
cctctgtccc tgcgtccgga ggcattgtaga cccgcagctg gtggggccgt gcatacccg 900
ggctcttgact tcgcctgcga tatctacatt tgggcccctc tggctggtac ttgcggggctc 960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac 1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca 1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc 1140
gcagatgctc cagcctacaa gcaggggcag aaccagctct acaacgaact caatcttgg 1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg 1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg 1320
gcagaagcct atagcgagat tggtatgaaa ggggaacgca gaagaggcaa aggccacgac 1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag 1440
gccctgccgc ctcgg 1455

<210> 129

<211> 243
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 129
Gln Val Gln Leu Gln 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 Ser
20 25 30

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

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Ala 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 Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Arg His Trp Gln Glu Trp Pro Asp Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser Pro
130 135 140

Ala Phe Met Ser Ala Thr Pro Gly Asp Lys Val Ile Ile Ser Cys Lys
145 150 155 160

Ala Ser Gln Asp Ile Asp Asp Ala Met Asn Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Glu Ala Pro Leu Phe Ile Ile Gln Ser Ala Thr Ser Pro Val Pro
180 185 190

Gly Ile Pro Pro Arg Phe Ser Gly Ser Gly Phe Gly Thr Asp Phe Ser
195 200 205

Leu Thr Ile Asn Asn Ile Glu Ser Glu Asp Ala Ala Tyr Tyr Phe Cys
210 215 220

Leu Gln His Asp Asn Phe Pro Leu Thr Phe Gly Gln Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys

<210> 130
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 130
Val Asn Leu Arg Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln Thr
1 5 10 15

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

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

Leu Ala Arg Ile Asp Trp Asp Glu Asp Lys Phe Tyr Ser Thr Ser Leu
50 55 60

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

Leu Arg Met Thr Asn Met Asp Pro Ala Asp Thr Ala Thr Tyr Tyr Cys

85

90

95

Ala Arg Ser Gly Ala Gly Gly Thr Ser Ala Thr Ala Phe Asp Ile Trp
 100 105 110

Gly Pro Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser
 130 135 140

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
 145 150 155 160

Arg Ala Ser Gln Asp Ile Tyr Asn Asn Leu Ala Trp Phe Gln Leu Lys
 165 170 175

Pro Gly Ser Ala Pro Arg Ser Leu Met Tyr Ala Ala Asn Lys Ser Gln
 180 185 190

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Ala Ser Gly Thr Asp Phe
 195 200 205

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
 210 215 220

Cys Gln His Tyr Tyr Arg Phe Pro Tyr Ser Phe Gly Gln Gly Thr Lys
 225 230 235 240

Leu Glu Ile Lys

<210> 131

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 131

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

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

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala 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 Lys Thr Ile Ala Ala Val Tyr Ala Phe Asp Ile Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Leu Ser
130 135 140

Leu Pro Val Thr Pro Glu Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser
145 150 155 160

Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu
165 170 175

Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn
180 185 190

Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
195 200 205

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val
210 215 220

Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly
225 230 235 240

Thr Lys Leu Glu Ile Lys
245

<210> 132
<211> 240
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 132
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 Asp Tyr
20 25 30

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

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

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Ser Pro Ser Val Ser Ala
 130 135 140

Ala Pro Gly Tyr Thr Ala Thr Ile Ser Cys Gly Gly Asn Asn Ile Gly
 145 150 155 160

Thr Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Leu
 165 170 175

Leu Val Ile Arg Asp Asp Ser Val Arg Pro Ser Lys Ile Pro Gly Arg
 180 185 190

Phe Ser Gly Ser Asn Ser Gly Asn Met Ala Thr Leu Thr Ile Ser Gly
 195 200 205

Val Gln Ala Gly Asp Glu Ala Asp Phe Tyr Cys Gln Val Trp Asp Ser
 210 215 220

Asp Ser Glu His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 225 230 235 240

<210> 133
 <211> 241
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 133
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Pro Ser Gly Tyr Thr Val Thr Ser His
 20 25 30

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

Gly Met Ile Asn Pro Ser Gly Gly Val Thr Ala Tyr Ser Gln Thr Leu
50 55 60

Gln Gly Arg Val Thr Met Thr Ser Asp Thr Ser Ser Ser Thr Val Tyr
65 70 75 80

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

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

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Pro Pro Ser
130 135 140

Val Ser Val Ser Pro Gly Gln Thr Ala Ser Ile Thr Cys Ser Gly Asp
145 150 155 160

Gly Leu Ser Lys Lys Tyr Val Ser Trp Tyr Gln Gln Lys Ala Gly Gln
165 170 175

Ser Pro Val Val Leu Ile Ser Arg Asp Lys Glu Arg Pro Ser Gly Ile
180 185 190

Pro Asp Arg Phe Ser Gly Ser Asn Ser Ala Asp Thr Ala Thr Leu Thr
195 200 205

Ile Ser Gly Thr Gln Ala Met Asp Glu Ala Asp Tyr Tyr Cys Gln Ala
210 215 220

Trp Asp Asp Thr Thr Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val
225 230 235 240

Leu

<210> 134

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 134
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly
20 25 30

Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His 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 Ala Gly Ile Ala Ala Arg Leu Arg Gly Ala Phe Asp Ile
100 105 110

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln
130 135 140

Ser Pro Ser Ser Val Ser Ala Ser Val Gly Asp Arg Val Ile Ile Thr
145 150 155 160

Cys Arg Ala Ser Gln Gly Ile Arg Asn Trp Leu Ala Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr Ala Ala Ser Asn Leu
180 185 190

Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Ala Asp
195 200 205

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr
210 215 220

Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe Thr Phe Gly Pro Gly Thr
225 230 235 240

Lys Val Asp Ile Lys
245

<210> 135

<211> 253

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 135

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

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

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

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

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

Arg Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 130 135 140

Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
 145 150 155 160

Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile Gly Ser Lys Ser Val
 165 170 175

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Leu Tyr
 180 185 190

Gly Lys Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Arg Ser Gly Thr Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Arg Asp Ser Ser Gly Asp His
 225 230 235 240

Leu Arg Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
 245 250

<210> 136

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 136

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

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
20 25 30

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

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Phe Tyr Ala
50 55 60

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

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

Tyr Tyr Cys Ala Arg Ser Ser Pro Glu Gly Leu Phe Leu Tyr Trp Phe
100 105 110

Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Asp
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Ser Glu Leu
130 135 140

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Ile Arg Ile
145 150 155 160

Thr Cys Gln Gly Asp Ser Leu Gly Asn Tyr Tyr Ala Thr Trp Tyr Gln
165 170 175

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Thr Asn Asn
180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Ala Ser Ser Ser Gly Asn
195 200 205

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp
 210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly His His Leu Leu Phe Gly
 225 230 235 240

Thr Gly Thr Lys Val Thr Val Leu
 245

<210> 137
 <211> 246
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 137
 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

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

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

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125

Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Gly Thr Leu
130 135 140

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
145 150 155 160

Ser Val Ser Ser Ala Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
165 170 175

Pro Pro Arg Leu Leu Ile Ser Gly Ala Ser Thr Arg Ala Thr Gly Ile
180 185 190

Pro Asp Arg Phe Gly Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
195 200 205

Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His
210 215 220

Tyr Gly Ser Ser Phe Asn Gly Ser Ser Leu Phe Thr Phe Gly Gln Gly
225 230 235 240

Thr Arg Leu Glu Ile Lys
245

<210> 138

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 138

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

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

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

Val Thr Arg Ala Gly Ser Glu Ala Ser Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu
130 135 140

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
145 150 155 160

Ser Val Ser Asn Ser Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Ile Tyr Asp Ala Ser Ser Arg Ala Thr Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Arg Leu Glu Pro Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Phe
210 215 220

Gly Thr Ser Ser Gly Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
225 230 235 240

Lys

<210> 139
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 139
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

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

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

Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr
130 135 140

Gln Ser Pro Gly Thr Val Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu
145 150 155 160

Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Phe Leu Ala Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser
180 185 190

Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Ser Ala
210 215 220

Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro Ser Trp Thr Phe Gly
225 230 235 240

Gln Gly Thr Arg Leu Glu Ile Lys
245

<210> 140

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 140

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

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

<210> 141
 <211> 239
 <212> PRT
 <213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 141

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

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

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

Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala 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 Val Gly Lys Ala Val Pro Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Ser Ser Leu Ser
130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr
210 215 220

Ser Thr Pro Tyr Ser Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
225 230 235

<210> 142

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 142

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

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

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

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

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

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

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

Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
130 135 140

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
145 150 155 160

Arg Ala Thr Gln Ser Ile Gly Ser Ser Phe Leu Ala Trp Tyr Gln Gln
165 170 175

Arg Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Gln Arg
180 185 190

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Arg Gly Ser Gly Thr Asp
195 200 205

Phe Thr Leu Thr Ile Ser Arg Val Glu Pro Glu Asp Ser Ala Val Tyr
210 215 220

Tyr Cys Gln His Tyr Glu Ser Ser Pro Ser Trp Thr Phe Gly Gln Gly
225 230 235 240

Thr Lys Val Glu Ile Lys
245

<210> 143

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Val Val Arg Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Asn Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr
210 215 220

Gly Ser Pro Pro Arg Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile
225 230 235 240

Lys

<210> 144
<211> 242
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 144
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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Ile Pro Gln Thr Gly Thr Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu
130 135 140

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
145 150 155 160

Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Arg Pro Gly Gln
165 170 175

Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile
180 185 190

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
195 200 205

Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His
210 215 220

Tyr Gly Ser Ser Pro Ser Trp Thr Phe Gly Gln Gly Thr Arg Leu Glu
225 230 235 240

Ile Lys

<210> 145

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 145

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Met Ser Arg Glu Asn Asp Lys Asn Ser Val Phe

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

<210> 146
 <211> 244
 <212> PRT
 <213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 146

Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
20 25 30

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

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

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

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Ser Leu Ser Ser Asn Phe Leu Ala Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Gln Ala Pro Gly Leu Leu Ile Tyr Gly Ala Ser Asn Trp Ala Thr
180 185 190

Gly Thr Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
195 200 205

Leu Thr Ile Thr Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
210 215 220

Gln Tyr Tyr Gly Thr Ser Pro Met Tyr Thr Phe Gly Gln Gly Thr Lys
225 230 235 240

Val Glu Ile Lys

<210> 147

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 147

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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

Val Leu Trp Phe Gly Glu Gly Phe Asp Pro Trp Gly Gln Gly Thr Leu
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro
130 135 140

Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
145 150 155 160

Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys
165 170 175

Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala
180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
195 200 205

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
210 215 220

Cys Met Gln Ala Leu Gln Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys
225 230 235 240

Val Asp Ile Lys

<210> 148

<211> 251

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 148

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

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Val Gly Tyr Asp Ser Ser Gly Tyr Tyr Arg Asp Tyr Tyr Gly
100 105 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val
130 135 140

Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly
180 185 190

Thr Ser Ser Arg Ala Thr Gly Ile Ser Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
210 215 220

Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Asn Ser Pro Pro Lys Phe

225 230 235 240

Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys
245 250

```
<210> 149
<211> 246
<212> PRT
<213> Artificial Sequence
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"
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<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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Met Gly Trp Ser Ser Gly Tyr Leu Gly Ala Phe Asp Ile Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
130 135 140

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
145 150 155 160

Arg Ala Ser Gln Ser Val Ala Ser Ser Phe Leu Ala Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Gly Arg
180 185 190

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
195 200 205

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
210 215 220

Tyr Cys Gln His Tyr Gly Gly Ser Pro Arg Leu Thr Phe Gly Gly Gly
225 230 235 240

Thr Lys Val Asp Ile Lys
245

<210> 150
<211> 729
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 150
caagtgcagc ttcaggaaag cggaccgggc ctggtcaagc catccgaaac tctctccctg 60
acttgcactg tgtctggcgg ttccatctca tcgtcgtact actactgggg ctggattagg 120
cagccgcccg gaaagggact ggagtggatc ggaagcatct actattccgg ctcggcgtac 180
tacaacccta gcctcaagtc gagagtgacc atctccgtgg atacctcaa gaaccagttt 240
tccctgcgcc tgagctccgt gaccgccgct gacaccgccg tgtactactg tgctcggcat 300
tggcaggaat ggcccgatgc cttcgacatt tggggccagg gcactatggt cactgtgtca 360
tccgggggtg gaggcagcgg gggaggaggg tccggggggg gaggttcaga gacaaccttg 420

accagtcac ccgcattcat gtccgccact ccgggagaca aggtcatcat ctcgtgcaaa	480
gcgtcccagg atatcgacga tgccatgaat tggtaccagc agaagcctgg cgaagcgccg	540
ctgttcatta tccaatccgc aacctcgccc gtgcctggaa tcccaccgcg gttcagcggc	600
agcggtttcg gaaccgactt ttccctgacc attaacaaca ttgagtccga ggacgccgcc	660
tactacttct gcctgcaaca cgacaacttc cctctcacgt tcggccaggg aaccaagctg	720
gaaatcaag	729

<210> 151

<211> 735

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 151

caagtcaatc tgcgcgaatc cggccccgcc ttggtcaagc ctaccagac ctcactctg	60
acctgtactt tctccggctt ctccctgcgg acttccggga tgtgcgtgtc ctggatcaga	120
cagcctccgg gaaaggccct ggagtggctc gctcgcattg actgggatga ggacaagttc	180
tactccacct cactcaagac caggctgacc atcagcaaag atacctctga caaccaagtg	240
gtgctccgca tgaccaacat ggaccagcc gacactgcca cttactactg cgcgaggagc	300
ggagcgggcg gaacctccgc caccgccttc gatatttggg gcccggttac catggtcacc	360
gtgtcaagcg gaggaggggg gtccgggggc ggcggttccg ggggaggcgg atcggacatt	420
cagatgactc agtcaccatc gtccctgagc gctagcgtgg gcgacagagt gacaatcact	480
tgccgggcat cccaggacat ctataacaac cttgcgtggg tccagctgaa gcctggttcc	540
gcaccgcggt cacttatgta cgccgccaac aagagccagt cgggagtgcc gtcccggttt	600
tccggttcgg cctcgggaac tgacttcacc ctgacgatct ccagcctgca acccgaggat	660
ttcgccacct actactgcca gcactactac cgctttccct actcgttcgg acagggaacc	720
aagctggaaa tcaag	735

<210> 152

<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 152
gaagtgcagc ttgtcgaatc cggggggggga ctgggtcaagc cgggcggatc actgagactg 60
tcctgcgccg cgagcggcctt cacgttctcc tcctactcca tgaactgggt ccgccaagcc 120
cccgggaagg gactggaatg ggtgtcctct atctcctcgt cgtcgtccta catctactac 180
gccgactccg tgaagggaag attcaccatt tcccgcgaca acgcaaagaa ctactgtac 240
ttgcaaatga actcactccg ggccgaagat actgctgtgt actattgcgc caagactatt 300
gccgccgtct acgctttcga catctggggc cagggaacca ccgtgactgt gtcgtccggt 360
ggtggtggct cgggcggagg aggaagcggc ggcgggggggt ccgagattgt gctgaccag 420
tcgccactga gcctccctgt gacccccgag gaacccgcca gcatcagctg ccggtccagc 480
cagtcccctgc tccactccaa cggatacaat tacctcgatt ggtaccttca gaagcctgga 540
caaagcccgc agctgctcat ctacttgga tcaaaccgcg cgtcaggagt gcctgaccgg 600
ttctccggct cgggcagcgg taccgatttc accctgaaaa tctccagggt ggaggcagag 660
gacgtgggag tgtattactg tatgcaggcg ctgcagactc cgtacacatt tgggcagggc 720
accaagctgg agatcaag 738

<210> 153
<211> 720
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 153
gaagtccagc tcgtggagtc cggcggaggc cttgtgaagc ctggaggttc gctgagactg 60
tcctgcgccg cctccggcctt caccttctcc gactactaca tgtcctggat cagacaggcc 120
ccgggaaagg gcctggaatg ggtgtcctac atctcgtcat cgggcagcac tatctactac 180

gcggactcag tgaaggggcg gttcaccatt tcccgggata acgcgaagaa ctcgctgtat	240
ctgcaaata ga actcactgag ggccgaggac accgccgtgt actactgcgc ccgcgatctc	300
cgcggggcat ttgacatctg gggacaggga accatggtca cagtgtccag cggaggggga	360
ggatcgggtg gcggagggtc cgggggtgga ggctcctcct acgtgctgac tcagagccca	420
agcgtcagcg ctgcgcccgg ttacacggca accatctcct gtggcggaaa caacattggg	480
accaagtctg tgcactggta tcagcagaag ccgggccaaag ctcccctggt ggtgatccgc	540
gatgactccg tgcggcctag caaaattccg ggacggttct ccggctcaa cagcggcaat	600
atggccactc tcaccatctc gggagtgcag gccggagatg aagccgactt ctactgcaa	660
gtctgggact cagactccga gcatgtggtg ttcgggggcg gaaccaagct gactgtgctc	720

<210> 154

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 154

caagtgcagc tggtgcagag cggggccgaa gtcaagaagc cgggagcctc cgtgaaagtg	60
tcctgcaagc cttcgggata caccgtgacc tcccactaca ttcatagggt ccgccgcgcc	120
cccggccaag gactcgagt gatgggcatg atcaacccta gcggcggagt gaccgcgtac	180
agccagacgc tgcagggacg cgtgactatg acctcggata cctcctcctc caccgtctat	240
atggaactgt ccagcctgcg gtccgaggat accgccatgt actactgcgc ccgggaagga	300
tcaggctccg ggtgggtattt cgacttctgg ggaagaggca ccctcgtgac tgtgtcatct	360
gggggagggg gttccggtgg tggcggatcg ggaggaggcg gttcatccta cgtgctgacc	420
cagccaccct ccgtgtccgt gagccccggc cagactgcat cgattacatg tagcggcgac	480
ggcctctcca agaaatacgt gtcgtggtac cagcagaagg ccggacagag cccggtggtg	540
ctgatctcaa gagataagga gcggcctagc ggaatcccgg acaggttctc gggttccaac	600
tccgcggaca ctgctactct gaccatctcg gggaccagg ctatggacga agccgattac	660

tactgccaag cctgggacga cactactgtc gtgtttggag ggggcaccaa gttgaccgtc	720
ctt	723

<210> 155
 <211> 735
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 155	
caagtgcagc ttcaggagag cggcccggga ctcgtgaagc cgtcccagac cctgtccctg	60
acttgcaccg tgtcgggagg aagcatctcg agcggaggct actattggtc gtggattcgg	120
cagcaccctg gaaagggcct ggaatggatc ggctacatct actactccgg ctcgacctac	180
tacaacccat cgctgaagtc cagagtgaca atctcagtgg acacgtccaa gaatcagttc	240
agcctgaagc tctcttccgt gactgcggcc gacaccgccg tgtactactg cgcacgcgt	300
ggaattgccg cccggctgag ggggtgccttc gacatttggg gacagggcac catggtcacc	360
gtgtcctccg gcggcggagg ttccgggggt ggaggctcag gaggaggggg gtccgacatc	420
gtcatgactc agtcgccctc aagcgtcagc gcgtccgtcg gggacagagt gatcatcacc	480
tgtcgggcgt cccagggaat tcgcaactgg ctggcctggt atcagcagaa gcccggaaag	540
gcccccaacc tgttgatcta cgccgcctca aacctccaat ccgggggtgcc gagccgcttc	600
agcggctccg gttcgggtgc cgatttcact ctgaccatct cctccctgca acctgaagat	660
gtggctacct actactgcca aaagtacaac tccgcacctt ttactttcgg accggggacc	720
aaagtggaca ttaag	735

<210> 156
 <211> 759
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 156
caagtgcagc tgggtccagtc gggcgccgag gtcaagaagc ccgggagctc tgtgaaagtg 60
tcctgcaagg cctccggggg cacctttagc tcctacgcca tctcctgggt ccgccaagca 120
ccgggtcaag gcctggagtg gatgggggga attatcccta tcttcggcac tgccaactac 180
gcccagaagt tccagggacg cgtgaccatt accgcggacg aatccacctc caccgcttat 240
atggagctgt ccagcttgcg ctcggaagat accgccgtgt actactgcgc ccggaggggt 300
ggataccagc tgctgagatg ggacgtgggc ctcctgcggt cggcgttcga catctggggc 360
cagggcacta tggtcactgt gtccagcggg ggaggcggat cgggaggcgg cggatcaggg 420
ggaggcgggt ccagctacgt gcttactcaa ccccttcgg tgtccgtggc cccgggacag 480
accgccagaa tcacttgagg aggaacaac attgggtcca agagcgtgca ttggtaccag 540
cagaagccag gacaggcccc tgtgctggtg ctctacggga agaacaatcg gcccagcggg 600
gtgccggaca ggttctcggg ttcacgctcc ggtacaaccg cttactgac tatcaccggg 660
gcccaggcag aggatgaagc ggactactac tgttcctccc gggattcatc cggcgaccac 720
ctccgggtgt tcggaaccgg aacgaaggtc accgtgctg 759

<210> 157

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 157
gaagtgcagc tccaacagtc aggaccgggg ctcgtgaagc catcccagac cctgtccctg 60
acttgtgcca tctcgggaga tagcgtgtca tcgaactccg ccgcctggaa ctggattcgg 120
cagagcccgt cccgcggact ggagtggctt ggaaggacct actaccggtc caagtgttac 180
tctttctacg cgatctcgct gaagtccgc attatcatta accctgatac ctccaagaat 240
cagtttctcc tccaactgaa atccgtcacc cccgaggaca cagcagtgtg ttactgcgca 300
cggagcagcc ccgaaggact gttcctgtat tggtttgacc cctggggcca ggggactctt 360
gtgaccgtgt cgagcggcgg agatgggtcc ggtggcgggt gttcgggggg cggcggatca 420

tcatccgaac tgaccagga cccggctgtg tccgtggcgc tgggacaaac catccgcatt	480
acgtgccagg gagactccct gggcaactac tacgccactt ggtaccagca gaagccgggc	540
caagcccctg tgttgggtcat ctacgggacc aacaacagac cttccggcat ccccgaccgg	600
ttcagcgctt cgtcctccgg caacactgcc agcctgacca tcactggagc gcaggccgaa	660
gatgaggccg actactactg caacagcaga gactcctcgg gtcatcacct cttgttcgga	720
actggaacca aggtcacctg gctg	744

<210> 158
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 158	
gaagtgcagc tcgtggagtc aggaggcggc ctggtccagc cgggagggtc ccttagactg	60
tcatgcgccg caagcggatt cactttctcc tcctatgcca tgagctgggt ccgccaagcc	120
cccggaaagg gactggaatg ggtgtccgcc atctcggggt ctggaggctc aacttactac	180
gctgactccg tgaaggagc gttcaccatt agccgcgaca actccaagaa caccctctac	240
ctccaaatga actccctgcg ggccgaggat accgccgtct actactgcgc caaagtggaa	300
ggttcaggat cgctggacta ctggggacag ggtactctcg tgaccgtgtc atcgggcgga	360
ggagggttccg gcggtggcgg ctccggcggc ggagggtcgg agatcgtgat gaccagagc	420
cctggtactc tgagcctttc gccgggagaa agggccaccc tgtcctgccg cgcttcccaa	480
tccgtgtcct ccgcgtactt ggcgtggtac cagcagaagc cgggacagcc ccctcggctg	540
ctgatcagcg gggccagcac ccgggcaacc ggaatcccag acagattcgg gggttccggc	600
agcggcacag atttcaccct gactatttcg aggttgagc ccgaggactt tgcggtgtat	660
tactgtcagc actacgggtc gtcctttaat ggctccagcc tgttcacgtt cggacagggg	720
acccgcctgg aaatcaag	738

<210> 159
 <211> 723

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 159
gaagtgcaac tggatggaac cggatggcggc ctggtgcagc ctggaggatc attgaggctg 60
tcatgcgcgg ccagcgggat taccttctcc cggatcccca tgtcctgggt cagacaggcc 120
ccggggaaag ggcttgaatg ggtgtccggg atctcggact ccggtgtcag cacttactac 180
gccgactccg ccaagggacg cttcaccatt tcccgggaca actcgaagaa caccctgttc 240
ctccaaatga gtcctctcg ggacaggat actgcagtgt actactgcgt gacccgcgcc 300
gggtccgagg cgtctgacat ttggggacag ggcactatgg tcaccgtgtc gtccggcgga 360
gggggctcgg gaggcggtgg cagcggagga ggagggtccg agatcgtgct gacccaatcc 420
ccggccaccc tctcgtgag ccctggagaa agggcaacct tgtcctgtcg cgcgagccag 480
tccgtgagca actccctggc ctggtaccag cagaagcccg gacaggctcc gagacttctg 540
atctacgacg cttcagccg ggccactgga atccccgacc gcttttcggg gtccggctca 600
ggaaccgatt tcaccctgac aatctcacgg ctggagccag aggatttcgc catctattac 660
tgccagcagt tcggtacttc ctccggcctg actttcggag gcggcacgaa gctcgaaatc 720
aag 723

<210> 160
<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 160
caagtgcagc tcgtggaatc gggatggcggc ctggtgcagc cggggggctc acttagactg 60
tcctgcgcgg ccagcggatt cactttctcc tcctacgcca tgtcctgggt cagacaggcc 120
cctggaaagg gcctggaatg ggtgtccgca atcagcggca gcggcggctc gacctattac 180

gcggattcag tgaagggcag attcaccatt tcccgggaca acgccaagaa ctccttgtac	240
cttcaaata ga actccctccg cgcggaagat accgcaatct actactgcgc tcgggccact	300
tacaagaggg aactgcgcta ctactacggg atggacgtct ggggccaggg aaccatggtc	360
accgtgtcca gcggaggagg aggatcggga ggaggcggta gcgggggtgg agggtcggag	420
atcgtgatga cccagtcccc cggcactgtg tcgctgtccc ccggcgaacg ggccaccctg	480
tcatgtcggg ccagccagtc agtgtcgtca agcttcctcg cctggtacca gcagaaaccg	540
ggacaagctc cccgcctgct gatctacgga gccagcagcc gggccaccgg tttcctgac	600
cggttctccg gttcggggtc cgggaccgac tttactctga ctatctctcg cctcgagcca	660
gaggactccg ccgtgtatta ctgccagcag taccactcct ccccgctctg gacgttcgga	720
cagggcacaa ggctggagat taag	744

<210> 161

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 161

gaggtgcagc ttgtggaaac cgggtggcggga ctggtgcagc ccggaggaag cctcaggctg	60
tcctgcgccg cgtccggctt caccttctcc tcgtacgcca tgtcctgggt ccgccaggcc	120
cccggaaagg gcctggaatg ggtgtccgcc atctctggaa gcggaggttc cacgtactac	180
gcggacagcg tcaaggaag gttcacaatc tccgcgata attcgaagaa cactctgtac	240
cttcaaata ga acaccctgaa ggccgaggac actgctgtgt actactgcgc acgggccacc	300
tacaagagag agctccggta ctactacgga atggacgtct ggggccaggg aactactgtg	360
accgtgtcct cgggaggggg tggctccggg gggggcggct ccggcggagg cggttccgag	420
attgtgctga cccagtcacc ttcaactctg tcgctgtccc cgggagagag cgctactctg	480
agctgccggg ccagccagtc cgtgtccacc accttcctcg cctggtatca gcagaagccg	540
gggcaggcac cacggctctt gatctacggg tcaagcaaca gagcgaccgg aattcctgac	600
cgcttctcgg ggagcggttc aggcaccgac ttcaccctga ctatccggcg cctggaaccc	660

gaagatttcg ccgtgtatta ctgtcaacag taccactcct cgccgtcctg gacctttggc	720
caaggaacca aagtggaaat caag	744

<210> 162
 <211> 717
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 162	
gaagtgcagc tcgtggaaac tggaggtgga ctcgtgcagc ctggacggtc gctgcggctg	60
agctgcgctg catccggctt caccttcgac gattatgcca tgactgggt cagacaggcg	120
ccagggaagg gacttgagt ggtgtccggt atcagctgga atagcggctc aatcggatac	180
gcggaactccg tgaagggaag gttcaccatt tccgcgaca acgccaagaa ctccctgtac	240
ttgcaaatga acagcctccg ggatgaggac actgccgtgt actactgcgc ccgcgtcgga	300
aaagctgtgc ccgacgtctg gggccaggga accactgtga ccgtgtccag cggcgggggt	360
ggatcgggcg gtggagggtc cgggtggagg ggctcagata ttgtgatgac ccagaccccc	420
tcgtccctgt ccgcctcgggt cggcgaccgc gtgactatca catgtagagc ctcgcagagc	480
atctccagct acctgaactg gtatcagcag aagccgggga aggccccgaa gtcctgatc	540
tacgcggcat catcactgca atcgggagt ccgagccggt tttccgggtc cggctccggc	600
accgacttca cgctgacat ttcttcctg caaccgagg acttcgccac ttactactgc	660
cagcagtcct actccacccc ttactcctt ggccaaggaa ccaggctgga aatcaag	717

<210> 163
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 163

gaagtgcagc tcgtggagag cgggggagga ttggtgcagc ccggaaggtc cctgcggctc	60
tcctgcactg cgtctggctt caccttcgac gactacgca tgcactgggt cagacagcgc	120
ccgggaaagg gcctggaatg ggtcgcctca atcaactgga agggaaactc cctggcctat	180
ggcgacagcg tgaagggccg cttcgccatt tcgcgcgaca acgccaagaa caccgtgttt	240
ctgcaaatga attccctgcg gaccgaggat accgctgtgt actactgcgc cagccaccag	300
ggcgtggcat actataacta cgccatggac gtgtggggaa gagggacgct cgtcacctgt	360
tcctccgggg gcggtggatc ggggtggagga ggaagcgggt gcgggggcag cgaaatcgtg	420
ctgactcaga gcccgggaac tctttcactg tccccgggag aacgggccac tctctcgtgc	480
cggggccacc agtccatcgg ctcttccttc cttgcctggt accagcagag gccaggacag	540
gcgccccgcc tgctgatcta cggtgcttcc caacgcgcca ctggcattcc tgaccggttc	600
agcggcagag ggtcgggaac cgatttcaca ctgaccattt cccgggtgga gccgaagat	660
tcggcagtct actactgtca gcattacgag tcctcccctt catggacctt cgggtcaaggg	720
accaaagtgg agatcaag	738

<210> 164

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 164

gaggtgcagt tggtcgaaag cgggggcggg cttgtgcagc ctggcggatc actgcggctg	60
tcctgcgcgg catcaggctt cacgttttct tcctacgcca tgtcctgggt gcgccaggcc	120
cctggaaagg gactggaatg ggtgtccgcg atttcggggt ccggcgggag cacctactac	180
gccgattccg tgaagggccg cttcactatc tcgcgggaca actccaagaa caccctctac	240
ctccaaatga atagcctgcg ggccgaggat accgccgtct actattgcgc taaggctcgtg	300
cgcgacggaa tggacgtgtg gggacagggt accaccgtga cagtgtcctc ggggggaggc	360
ggtagcggcg gaggaggaag cggtggtgga ggttccgaga ttgtgctgac tcaatcacc	420
gcgaccctga gcctgtcccc cggcgaaagg gccactctgt cctgtcgggc cagccaatca	480

gtctcctcct cgtacctggc ctggtaccag cagaagccag gacaggctcc gagactcctt	540
atctatggcg catcctcccc cgccaccgga atcccggata ggttctcggg aaacggatcg	600
gggaccgact tcactctcac catctcccgg ctggaaccgg aggacttcgc cgtgtactac	660
tgccagcagt acggcagccc gcctagattc actttcggcc ccggcaccaa agtggacatc	720
aag	723

<210> 165
 <211> 726
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 165	
gaagtgcagc tgctggagtc cggcgggtgga ttggtgcaac cgggggggatc gctcagactg	60
tcctgtgcgg cgtcaggctt caccttctcg agctacgcca tgtcatgggt cagacaggcc	120
cctggaaagg gtctggaatg ggtgtccgcc atttcggga gcgggggatc tacatactac	180
gccgatagcg tgaagggccg cttcaccatt tcccgggaca actccaagaa cactctctat	240
ctgcaaata actccctccg cgctgaggac actgccgtgt actactgcgc caaaatccct	300
cagaccggca ccttcgacta ctggggacag gggactctgg tcaccgtcag cagcgggtggc	360
ggagggttcgg ggggaggagg aagcggcggc ggagggtccg agattgtgct gaccagtc	420
cccggcactt tgtccctgtc gcctggagaa agggccaccc tttcctgccg ggcattccaa	480
tccgtgtcct cctcgtacct ggcttggtac cagcagaggc ccggacaggc cccacggctt	540
ctgatctacg gagcaagcag ccgcgcgacc ggtatcccgg accggttttc gggctcgggc	600
tcaggaaactg acttcaccct caccatctcc cgcctggaac ccgaagattt cgctgtgtat	660
tactgccagc actacggcag ctccccgtcc tggacgttcg gccagggaac tcggctggag	720
atcaag	726

<210> 166
 <211> 744
 <212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 166

gaagtgcac	tggtggaaac	cggtggagga	ctcgtgcagc	ctggcggcag	cctccggctg	60
agctgcgccg	cttcgggatt	caccttttcc	tcctacgcga	tgtcttgggt	cagacaggcc	120
cccggaaagg	ggctggaatg	ggtgtcagcc	atctccggct	ccggcggatc	aacgtactac	180
gccgactccg	tgaaggccg	gttcaccatg	tcgcgcgaga	atgacaagaa	ctccgtgttc	240
ctgcaaatga	actccctgag	ggtggaggac	accggagtgt	actattgtgc	gcgcgccaac	300
tacaagagag	agctgcggta	ctactacgga	atggacgtct	ggggacaggg	aactatggtg	360
accgtgtcat	ccggtggagg	gggaagcggc	ggtggaggca	gcgggggcgg	gggttcagaa	420
attgtcatga	cccagtcccc	gggaactctt	tccctctccc	ccggggaatc	cgcgactttg	480
tcctgccggg	ccagccagcg	cgtggcctcg	aactacctcg	catggtacca	gcataagcca	540
ggccaagccc	cttccctgct	gatttccggg	gctagcagcc	gcgccactgg	cgtgccggat	600
aggttctcgg	gaagcggctc	gggtaccgat	ttcaccttgg	caatctcgcg	gctggaaccg	660
gaggattcgg	ccgtgtacta	ctgccagcac	tatgactcat	ccccctcctg	gacattcggg	720
cagggcacca	aggtcgagat	caag				744

<210> 167

<211> 732

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 167

gaagtgcagc	tgctcgaaac	cggtggaggg	ctggtgcagc	cagggggctc	cctgaggctt	60
tcatgcgccg	ctagcggatt	ctccttctcc	tcttacgccg	tgtcgtgggt	ccgccaagcc	120
cctggaaaag	gcctggaatg	ggtgtccgcg	atttccggga	gcggagggtc	gacctattac	180
gccgactccg	tgaaggccg	ctttaccatc	tcccgggata	actccaagaa	cactctgtac	240

ctccaaatga actcgctgag agccgaggac accgccgtgt attactgcgc gaaggcgctg	300
gtcggcgcga ctggggcatt cgacatctgg ggacagggaa ctcttgtgac cgtgtcgagc	360
ggaggcggcg gctccggcgg aggagggagc gggggcggtg gttccgaaat cgtgttgact	420
cagtccccgg gaaccctgag cttgtcaccc ggggagcggg ccactctctc ctgtcgcgcc	480
tcccaatcgc tctcatcaa tttcctggcc tggtagcagc agaagcccgg acaggccccg	540
ggcctgctca tctacggcgc ttcaaactgg gcaacgggaa cccctgatcg gttcagcgga	600
agcggatcgg gtactgactt taccctgacc atcaccagac tggaaccgga ggacttcgcc	660
gtgtactact gccagtacta cggcacctcc cccatgtaca cattcggaca gggtagcaag	720
gtcgagatta ag	732

<210> 168

<211> 733

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 168

gaagtgcagc tgcttgagag cggtaggaggt ctggtgcagc ccgggggatc actgcgcctg	60
tcctgtgccg cgtccggttt cactttctcc tcgtacgcca tgtcgtgggt cagacaggca	120
ccgggaaagg gactggaatg ggtgtcagcc atttcgggtt cggggggcag cacctactac	180
gctgactccg tgaagggccg gttcaccatt tcccgcgaca actccaagaa caccttgtag	240
ctccaaatga actccctgcg ggccgaagat accgccgtgt attactgcgt gctgtggttc	300
ggagagggat tcgaccctg gggacaagga acactcgtga ctgtgtcatc cggcggaggc	360
ggcagcgggtg gcggcggttc cggcggcggc ggatctgaca tcgtgttgac ccagtcccct	420
ctgagcctgc cggtcactcc tggcgaacca gccagcatct cctgccggtc gagccagtcc	480
ctcctgcact ccaatgggta caactacctc gattgggtatc tgcaaaagcc gggccagagc	540
ccccagctgc tgatctacct tgggtcaaac cgcgcttccg gggtgcctga tagattctcc	600
gggtccggga gcggaaccga ctttaccctg aaaatctcga gggtggaggc cgaggacgtc	660

ggagtgtact actgcatgca ggcgctccag actcccctga ccttcggagg aggaacgaag 720
gtcgacatca aga 733

<210> 169
<211> 753
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 169
caagtgcagc tcgtggagtc aggcggagga ctggtgcagc ccgggggctc cctgagactt 60
tcctgcgcgg catcgggttt taccttctcc tcctatgcta tgtcctgggt gcgccaggcc 120
ccgggaaagg gactggaatg ggtgtccgca atcagcggta gcgggggctc aacatactac 180
gccgactccg tcaagggtcg cttcactatt tcccgggaca actccaagaa taccctgtac 240
ctccaaatga acagcctcag ggccgaggat actgccgtgt actactgcgc caaagtcgga 300
tacgatagct ccggttacta ccgggactac tacggaatgg acgtgtgggg acagggcacc 360
accgtgaccg tgtcaagcgg cggaggcggg tcaggagggg gaggctccgg cgggtggaggg 420
tccgaaatcg tcctgactca gtcgcctggc actctgtcgt tgtccccggg ggagcgcgct 480
accctgtcgt gtcggggctc gcagtccgtg tcgagctcct acctcgcgtg gtaccagcag 540
aagcccggac aggcccctag acttctgatc tacggcactt cttcacgcgc caccgggatc 600
agcgacaggt tcagcggctc cggctccggg accgacttca ccctgaccat tagccggctg 660
gagcctgaag atttcgccgt gtattactgc caacactacg gaaactcgcc gccaaagttc 720
acgttcggac ccggaaccaa gctggaaatc aag 753

<210> 170
<211> 739
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 170
gaagtccaac tgggtggagtc cgggggaggg ctctgtgcagc ccggaggcag ccttcggctg 60
tcgtgcgccg cctccggggtt cacgtttctca tcctacgcga tgtcgtgggt cagacaggca 120
ccaggaaagg gactggaatg ggtgtccgcc attagcggct ccggcggtag cacctactat 180
gccgactcag tgaagggaag gttcactatc tcccgcgaca acagcaagaa caccctgtac 240
ctccaaatga actctctgcg ggccgaggat accgcggtgt actattgcgc caagatgggt 300
tgggtccagcg gataacttggg agccttcgac atttggggac agggcactac tgtgaccgtg 360
tcctccgggg gtggcggatc gggaggcggc ggctcgggtg gaggggggtt cgaaatcgtg 420
ttgaccagcag caccgggaac cctctcgctg tccccgggag aacgggctac actgtcatgt 480
agagcgtccc agtccgtggc ttctctgctt ctggcctggt accagcagaa gccgggacag 540
gcaccccgcc tgctcatcta cggagccagc ggccgggcga ccggcatccc tgaccgcttc 600
tccggttccg gctcgggcac cgactttact ctgaccatta gcaggcttga gcccgaggat 660
tttgccgtgt actactgcca aactacggg gggagccctc gcctgacctt cggaggcggg 720
actaaggtcg atatcaaaa 739

<210> 171
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 171
Gln Val Gln Leu Gln 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 Ser
20 25 30

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

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Ala 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 Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Arg His Trp Gln Glu Trp Pro Asp Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 172

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 172

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

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

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

Trp Leu Ala Arg Ile Asp Trp Asp Glu Asp Lys Phe Tyr Ser Thr Ser
50 55 60

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

Val Leu Arg Met Thr Asn Met Asp Pro Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Ser Gly Ala Gly Gly Thr Ser Ala Thr Ala Phe Asp Ile
100 105 110

Trp Gly Pro Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 173

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 173

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

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

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala 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 Lys Thr Ile Ala Ala Val Tyr Ala Phe Asp Ile Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 174

<211> 117

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 174
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 Asp Tyr
20 25 30

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

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

Val Thr Val Ser Ser
115

<210> 175
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 175
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

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

<210> 176
 <211> 123
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 176
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly	20	25	30
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Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu	35	40	45
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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 Ala Gly Ile Ala Ala Arg Leu Arg Gly Ala Phe Asp Ile
100 105 110

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 177

<211> 129

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 177

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

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

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

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

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

Arg Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser
 115 120 125

Ser

<210> 178

<211> 125

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 178

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

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
 20 25 30

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

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Phe Tyr Ala
 50 55 60

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

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

Tyr Tyr Cys Ala Arg Ser Ser Pro Glu Gly Leu Phe Leu Tyr Trp Phe
 100 105 110

Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 179

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 179

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

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

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

Leu Val Thr Val Ser Ser
115

<210> 180

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 180

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

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

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

Val Thr Arg Ala Gly Ser Glu Ala Ser Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 181

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 181

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

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

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

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

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

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

Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 182

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 182

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

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

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

Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 183

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 183

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

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

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

Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala 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 Val Gly Lys Ala Val Pro Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 184

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 184

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

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

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

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

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

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

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

Gly Arg Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 185

<211> 117

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 185
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Val Val Arg Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 186
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 186
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
 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Ile Pro Gln Thr Gly Thr Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Thr Val Ser Ser
 115

<210> 187
 <211> 124
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 187
 Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Met Ser Arg Glu Asn Asp Lys Asn Ser Val Phe
65 70 75 80

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

Ala Arg Ala Asn Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 188

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 188

Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
20 25 30

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

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

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

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 189

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 189

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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

Val Leu Trp Phe Gly Glu Gly Phe Asp Pro Trp Gly Gln Gly Thr Leu
 100 105 110

Val Thr Val Ser Ser
 115

<210> 190
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 190
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Val Gly Tyr Asp Ser Ser Gly Tyr Tyr Arg Asp Tyr Tyr Gly
100 105 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 191
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 191

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp 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 Lys Met Gly Trp Ser Ser Gly Tyr Leu Gly Ala Phe Asp Ile Trp
100 105 110

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

<210> 192

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 192

Glu Thr Thr Leu Thr Gln Ser Pro Ala Phe Met Ser Ala Thr Pro Gly
1 5 10 15

Asp Lys Val Ile Ile Ser Cys Lys Ala Ser Gln Asp Ile Asp Asp Ala
20 25 30

Met Asn Trp Tyr Gln Gln Lys Pro Gly Glu Ala Pro Leu Phe Ile Ile
35 40 45

Gln Ser Ala Thr Ser Pro Val Pro Gly Ile Pro Pro Arg Phe Ser Gly
50 55 60

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

Glu Asp Ala Ala Tyr Tyr Phe Cys Leu Gln His Asp Asn Phe Pro Leu
85 90 95

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

<210> 193

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 193

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

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

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

Tyr Ala Ala Asn Lys Ser Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Ala 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 His Tyr Tyr Arg Phe Pro Tyr
85 90 95

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

<210> 194
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 194
Glu Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Glu
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 195
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 195

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

Thr Ala Thr Ile Ser Cys Gly Gly Asn Asn Ile Gly Thr Lys Ser Val
20 25 30

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

Asp Asp Ser Val Arg Pro Ser Lys Ile Pro Gly Arg Phe Ser Gly Ser
50 55 60

Asn Ser Gly Asn Met Ala Thr Leu Thr Ile Ser Gly Val Gln Ala Gly
65 70 75 80

Asp Glu Ala Asp Phe Tyr Cys Gln Val Trp Asp Ser Asp Ser Glu His
85 90 95

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 196

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 196

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

Thr Ala Ser Ile Thr Cys Ser Gly Asp Gly Leu Ser Lys Lys Tyr Val
20 25 30

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

Arg Asp Lys Glu Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
50 55 60

Asn Ser Ala Asp Thr Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Trp Asp Asp Thr Thr Val Val
85 90 95

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 197

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 197

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

Asp Arg Val Ile Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Trp
20 25 30

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

Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys

100

105

<210> 198

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 198

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

Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile Gly Ser Lys Ser Val
 20 25 30

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

Gly Lys Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser
 50 55 60

Arg Ser Gly Thr Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Arg Asp Ser Ser Gly Asp His
 85 90 95

Leu Arg Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
 100 105

<210> 199

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 199

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

Thr Ile Arg Ile Thr Cys Gln Gly Asp Ser Leu Gly Asn Tyr Tyr Ala
20 25 30

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

Gly Thr Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Ala Ser
50 55 60

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly His His
85 90 95

Leu Leu Phe Gly Thr Gly Thr Lys Val Thr Val Leu
100 105

<210> 200

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 200

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ala
20 25 30

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

Ile Ser Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Gly
50 55 60

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

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Ser Ser Phe
85 90 95

Asn Gly Ser Ser Leu Phe Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
100 105 110

Lys

<210> 201

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 201

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 Gln Ser Val Ser Asn Ser
20 25 30

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

Tyr Asp Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly
50 55 60

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

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

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

<210> 202
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 202
Glu Ile Val Met Thr Gln Ser Pro Gly Thr Val Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
20 25 30

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

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro
85 90 95

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

<210> 203
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 203

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

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Thr
20 25 30

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

Ile Tyr Gly Ser Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

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

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

<210> 204

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 204

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

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

Leu Asn 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 Ser Tyr Ser Thr Pro Tyr
85 90 95

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

<210> 205

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 205

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Thr Gln Ser Ile Gly Ser Ser
20 25 30

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

Ile Tyr Gly Ala Ser Gln Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln His Tyr Glu Ser Ser Pro
85 90 95

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

<210> 206
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 206
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 Gln Ser Val Ser Ser Ser
20 25 30

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

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

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

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

<210> 207
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 207
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
20 25 30

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

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Ser Ser Pro
85 90 95

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

<210> 208

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 208

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

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Val Ala Ser Asn
20 25 30

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

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

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

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln His Tyr Asp Ser Ser Pro
85 90 95

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

<210> 209

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 209

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Leu Ser Ser Asn
20 25 30

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

Ile Tyr Gly Ala Ser Asn Trp Ala Thr Gly Thr Pro Asp Arg Phe Ser
50 55 60

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

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

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

<210> 210

<211> 112

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 210
Asp Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
100 105 110

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 211
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser

20

25

30

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

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

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

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Asn Ser Pro
 85 90 95

Pro Lys Phe Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys
 100 105 110

<210> 212

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 212

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ala Ser Ser
 20 25 30

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

Ile Tyr Gly Ala Ser Gly Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
 50 55 60

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

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Gly Ser Pro
85 90 95

Arg Leu Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
100 105

<210> 213

<211> 487

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 213

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly
35 40 45

Ser Ile Ser Ser Ser Tyr Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro
50 55 60

Gly Lys Gly Leu Glu Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Ala
65 70 75 80

Tyr Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr
85 90 95

Ser Lys Asn Gln Phe Ser Leu Arg Leu Ser Ser Val Thr Ala Ala Asp
100 105 110

Thr Ala Val Tyr Tyr Cys Ala Arg His Trp Gln Glu Trp Pro Asp Ala
115 120 125

Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly

130

135

140

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Thr Thr
 145 150 155 160

Leu Thr Gln Ser Pro Ala Phe Met Ser Ala Thr Pro Gly Asp Lys Val
 165 170 175

Ile Ile Ser Cys Lys Ala Ser Gln Asp Ile Asp Asp Ala Met Asn Trp
 180 185 190

Tyr Gln Gln Lys Pro Gly Glu Ala Pro Leu Phe Ile Ile Gln Ser Ala
 195 200 205

Thr Ser Pro Val Pro Gly Ile Pro Pro Arg Phe Ser Gly Ser Gly Phe
 210 215 220

Gly Thr Asp Phe Ser Leu Thr Ile Asn Asn Ile Glu Ser Glu Asp Ala
 225 230 235 240

Ala Tyr Tyr Phe Cys Leu Gln His Asp Asn Phe Pro Leu Thr Phe Gly
 245 250 255

Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro
 260 265 270

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
 275 280 285

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
 290 295 300

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
 305 310 315 320

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly
 325 330 335

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
 340 345 350

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu
355 360 365

Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp
370 375 380

Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
385 390 395 400

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
405 410 415

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
420 425 430

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

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
450 455 460

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
465 470 475 480

Met Gln Ala Leu Pro Pro Arg
485

<210> 214

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 214

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Asn Leu Arg Glu Ser Gly Pro Ala Leu
20 25 30

Val Lys Pro Thr Gln Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe
35 40 45

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

Gly Lys Ala Leu Glu Trp Leu Ala Arg Ile Asp Trp Asp Glu Asp Lys
65 70 75 80

Phe Tyr Ser Thr Ser Leu Lys Thr Arg Leu Thr Ile Ser Lys Asp Thr
85 90 95

Ser Asp Asn Gln Val Val Leu Arg Met Thr Asn Met Asp Pro Ala Asp
100 105 110

Thr Ala Thr Tyr Tyr Cys Ala Arg Ser Gly Ala Gly Gly Thr Ser Ala
115 120 125

Thr Ala Phe Asp Ile Trp Gly Pro Gly Thr Met Val Thr Val Ser Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
165 170 175

Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Tyr Asn Asn Leu
180 185 190

Ala Trp Phe Gln Leu Lys Pro Gly Ser Ala Pro Arg Ser Leu Met Tyr
195 200 205

Ala Ala Asn Lys Ser Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Ala Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu

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

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
 450 455 460

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
 465 470 475 480

Leu His Met Gln Ala Leu Pro Pro Arg
 485

<210> 215
 <211> 490
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 215
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Ser Ile Ser Ser Ser Ser Tyr Ile Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Thr Ile Ala Ala Val Tyr Ala Phe Asp
115 120 125

Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr
145 150 155 160

Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Glu Glu Pro Ala Ser Ile
165 170 175

Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr
180 185 190

Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile
195 200 205

Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly
210 215 220

Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala
225 230 235 240

Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Tyr
245 250 255

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys

325

330

335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
 340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
 355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
 370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
 385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
 405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 216

<211> 484

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 216

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Asp Tyr Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Leu Arg Gly Ala Phe Asp Ile Trp
115 120 125

Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Ser
145 150 155 160

Pro Ser Val Ser Ala Ala Pro Gly Tyr Thr Ala Thr Ile Ser Cys Gly
165 170 175

Gly Asn Asn Ile Gly Thr Lys Ser Val His Trp Tyr Gln Gln Lys Pro
180 185 190

Gly Gln Ala Pro Leu Leu Val Ile Arg Asp Asp Ser Val Arg Pro Ser
195 200 205

Lys Ile Pro Gly Arg Phe Ser Gly Ser Asn Ser Gly Asn Met Ala Thr
210 215 220

Leu Thr Ile Ser Gly Val Gln Ala Gly Asp Glu Ala Asp Phe Tyr Cys
225 230 235 240

Gln Val Trp Asp Ser Asp Ser Glu His Val Val Phe Gly Gly Gly Thr
245 250 255

Lys Leu Thr Val Leu Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
260 265 270

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
275 280 285

Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
290 295 300

Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
305 310 315 320

Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys
325 330 335

Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr
340 345 350

Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Gly
355 360 365

Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala
370 375 380

Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg
385 390 395 400

Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu
405 410 415

Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn

420

425

430

Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met
 435 440 445

Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly
 450 455 460

Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala
 465 470 475 480

Leu Pro Pro Arg

<210> 217

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 217

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Pro Ser Gly Tyr
 35 40 45

Thr Val Thr Ser His Tyr Ile His Trp Val Arg Arg Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Met Ile Asn Pro Ser Gly Gly Val Thr Ala
 65 70 75 80

Tyr Ser Gln Thr Leu Gln Gly Arg Val Thr Met Thr Ser Asp Thr Ser
 85 90 95

Ser Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Glu Gly Ser Gly Ser Gly Trp Tyr Phe
115 120 125

Asp Phe Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Tyr Val Leu
145 150 155 160

Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala Ser Ile
165 170 175

Thr Cys Ser Gly Asp Gly Leu Ser Lys Lys Tyr Val Ser Trp Tyr Gln
180 185 190

Gln Lys Ala Gly Gln Ser Pro Val Val Leu Ile Ser Arg Asp Lys Glu
195 200 205

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Asn Ser Ala Asp
210 215 220

Thr Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met Asp Glu Ala Asp
225 230 235 240

Tyr Tyr Cys Gln Ala Trp Asp Asp Thr Thr Val Val Phe Gly Gly Gly
245 250 255

Thr Lys Leu Thr Val Leu Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
465 470 475 480

Ala Leu Pro Pro Arg
485

<210> 218

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 218

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly
35 40 45

Ser Ile Ser Ser Gly Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro
50 55 60

Gly Lys Gly Leu Glu Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr
65 70 75 80

Tyr Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr
85 90 95

Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp
100 105 110

Thr Ala Val Tyr Tyr Cys Ala Arg Ala Gly Ile Ala Ala Arg Leu Arg
115 120 125

Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Val Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly Asp
165 170 175

Arg Val Ile Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Trp Leu
180 185 190

Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr
195 200 205

Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Ala Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
225 230 235 240

Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe Thr
245 250 255

Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala Pro
260 265 270

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
275 280 285

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
290 295 300

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
305 310 315 320

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys
325 330 335

Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg
340 345 350

Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro
355 360 365

Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser
370 375 380

Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu
385 390 395 400

Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg
405 410 415

Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln
420 425 430

Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr
435 440 445

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
450 455 460

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
465 470 475 480

Leu His Met Gln Ala Leu Pro Pro Arg
485

<210> 219

<211> 497

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 219

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly
35 40 45

Thr Phe Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Arg Gly Gly Tyr Gln Leu Leu Arg Trp
115 120 125

Asp Val Gly Leu Leu Arg Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr
130 135 140

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser
165 170 175

Val Ala Pro Gly Gln Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile
180 185 190

Gly Ser Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
195 200 205

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

Arg Phe Ser Gly Ser Arg Ser Gly Thr Thr Ala Ser Leu Thr Ile Thr
225 230 235 240

Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Arg Asp
245 250 255

Ser Ser Gly Asp His Leu Arg Val Phe Gly Thr Gly Thr Lys Val Thr
260 265 270

Val Leu Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
275 280 285

Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala
290 295 300

Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile
305 310 315 320

Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
325 330 335

Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr
340 345 350

Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu
355 360 365

Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu
370 375 380

Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln
385 390 395 400

Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu
405 410 415

Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly
420 425 430

Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln
435 440 445

Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu
450 455 460

Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr
465 470 475 480

Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
485 490 495

Arg

<210> 220

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 220

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Gln Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp
35 40 45

Ser Val Ser Ser Asn Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro
50 55 60

Ser Arg Gly Leu Glu Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp
65 70 75 80

Tyr Ser Phe Tyr Ala Ile Ser Leu Lys Ser Arg Ile Ile Ile Asn Pro
85 90 95

Asp Thr Ser Lys Asn Gln Phe Ser Leu Gln Leu Lys Ser Val Thr Pro
100 105 110

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Ser Pro Glu Gly Leu
115 120 125

Phe Leu Tyr Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val
130 135 140

Ser Ser Gly Gly Asp Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly
165 170 175

Gln Thr Ile Arg Ile Thr Cys Gln Gly Asp Ser Leu Gly Asn Tyr Tyr
180 185 190

Ala Thr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile
195 200 205

Tyr Gly Thr Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Ala
210 215 220

Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala
225 230 235 240

Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly His
245 250 255

His Leu Leu Phe Gly Thr Gly Thr Lys Val Thr Val Leu Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 221
<211> 490
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 221
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe

35

40

45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Val Glu Gly Ser Gly Ser Leu Asp Tyr
 115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser
 130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln
 145 150 155 160

Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
 165 170 175

Cys Arg Ala Ser Gln Ser Val Ser Ser Ala Tyr Leu Ala Trp Tyr Gln
 180 185 190

Gln Lys Pro Gly Gln Pro Pro Arg Leu Leu Ile Ser Gly Ala Ser Thr
 195 200 205

Arg Ala Thr Gly Ile Pro Asp Arg Phe Gly Gly Ser Gly Ser Gly Thr
 210 215 220

Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val
 225 230 235 240

Tyr Tyr Cys Gln His Tyr Gly Ser Ser Phe Asn Gly Ser Ser Leu Phe
 245 250 255

Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 222
<211> 485
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 222
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile
35 40 45

Thr Phe Ser Arg Tyr Pro Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Ser Asp Ser Gly Val Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Ala Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Phe Leu Gln Met Ser Ser Leu Arg Asp Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Thr Arg Ala Gly Ser Glu Ala Ser Asp Ile
115 120 125

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser

130

135

140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln
 145 150 155 160

Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
 165 170 175

Cys Arg Ala Ser Gln Ser Val Ser Asn Ser Leu Ala Trp Tyr Gln Gln
 180 185 190

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp Ala Ser Ser Arg
 195 200 205

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 210 215 220

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Ile Tyr
 225 230 235 240

Tyr Cys Gln Gln Phe Gly Thr Ser Ser Gly Leu Thr Phe Gly Gly Gly
 245 250 255

Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
 275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
 305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
 325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
 340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
465 470 475 480

Ala Leu Pro Pro Arg
485

<210> 223
<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 223
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Ile Tyr Tyr Cys Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr
115 120 125

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Ile Val Met Thr Gln Ser Pro Gly Thr Val Ser Leu Ser Pro Gly
165 170 175

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
180 185 190

Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu

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

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 224
 <211> 492
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 224
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Thr Leu Lys Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr
115 120 125

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Ile Val Leu Thr Gln Ser Pro Ser Thr Leu Ser Leu Ser Pro Gly
165 170 175

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Thr
180 185 190

Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr Gly Ser Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Arg Leu Glu
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro
245 250 255

Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu

325

330

335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
 340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
 355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 225

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 225

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Val Gly Lys Ala Val Pro Asp Val Trp
115 120 125

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
145 150 155 160

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
165 170 175

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln
195 200 205

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
225 230 235 240

Cys Gln Gln Ser Tyr Ser Thr Pro Tyr Ser Phe Gly Gln Gly Thr Arg
245 250 255

Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu

420

425

430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
 435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
 450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
 465 470 475 480

Pro Pro Arg

<210> 226

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 226

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe
 35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Arg Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ala Ser Ile Asn Trp Lys Gly Asn Ser Leu Ala
 65 70 75 80

Tyr Gly Asp Ser Val Lys Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala
 85 90 95

Lys Asn Thr Val Phe Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Ser His Gln Gly Val Ala Tyr Tyr Asn Tyr
115 120 125

Ala Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
145 150 155 160

Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg
165 170 175

Ala Thr Leu Ser Cys Arg Ala Thr Gln Ser Ile Gly Ser Ser Phe Leu
180 185 190

Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
195 200 205

Gly Ala Ser Gln Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Arg
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Val Glu Pro Glu
225 230 235 240

Asp Ser Ala Val Tyr Tyr Cys Gln His Tyr Glu Ser Ser Pro Ser Trp
245 250 255

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 227

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 227

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Val Val Arg Asp Gly Met Asp Val Trp
115 120 125

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
145 150 155 160

Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln
180 185 190

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg
195 200 205

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Asn Gly Ser Gly Thr Asp
210 215 220

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
225 230 235 240

Tyr Cys Gln Gln Tyr Gly Ser Pro Pro Arg Phe Thr Phe Gly Pro Gly
245 250 255

Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
465 470 475 480

Ala Leu Pro Pro Arg
485

<210> 228

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 228

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Ile Pro Gln Thr Gly Thr Phe Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln
145 150 155 160

Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
165 170 175

Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln
180 185 190

Gln Arg Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser
195 200 205

Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
210 215 220

Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val
225 230 235 240

Tyr Tyr Cys Gln His Tyr Gly Ser Ser Pro Ser Trp Thr Phe Gly Gln
245 250 255

Gly Thr Arg Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 229
<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 229
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Met Ser Arg Glu Asn Asp
85 90 95

Lys Asn Ser Val Phe Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr
100 105 110

Gly Val Tyr Tyr Cys Ala Arg Ala Asn Tyr Lys Arg Glu Leu Arg Tyr
115 120 125

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Ile Val Met Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
165 170 175

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Val Ala Ser Asn
180 185 190

Tyr Leu Ala Trp Tyr Gln His Lys Pro Gly Gln Ala Pro Ser Leu Leu
195 200 205

Ile Ser Gly Ala Ser Ser Arg Ala Thr Gly Val Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Ala Ile Ser Arg Leu Glu
225 230 235 240

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln His Tyr Asp Ser Ser Pro
245 250 255

Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 230

<211> 488

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 230

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Ser Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys

50

55

60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Ala Leu Val Gly Ala Thr Gly Ala Phe
 115 120 125

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
 130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu
 145 150 155 160

Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
 165 170 175

Leu Ser Cys Arg Ala Ser Gln Ser Leu Ser Ser Asn Phe Leu Ala Trp
 180 185 190

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gly Leu Leu Ile Tyr Gly Ala
 195 200 205

Ser Asn Trp Ala Thr Gly Thr Pro Asp Arg Phe Ser Gly Ser Gly Ser
 210 215 220

Gly Thr Asp Phe Thr Leu Thr Ile Thr Arg Leu Glu Pro Glu Asp Phe
 225 230 235 240

Ala Val Tyr Tyr Cys Gln Tyr Tyr Gly Thr Ser Pro Met Tyr Thr Phe
 245 250 255

Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg
 260 265 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
290 295 300

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
305 310 315 320

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg
325 330 335

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
340 345 350

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
355 360 365

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
370 375 380

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
385 390 395 400

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
405 410 415

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
420 425 430

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
435 440 445

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
450 455 460

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
465 470 475 480

His Met Gln Ala Leu Pro Pro Arg
485

<210> 231
<211> 488
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 231
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Leu Trp Phe Gly Glu Gly Phe Asp Pro Trp
115 120 125

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

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

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
370 375 380

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
385 390 395 400

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
405 410 415

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
420 425 430

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
435 440 445

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
450 455 460

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
465 470 475 480

His Met Gln Ala Leu Pro Pro Arg
485

<210> 232

<211> 495

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 232

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Val Gly Tyr Asp Ser Ser Gly Tyr Tyr
115 120 125

Arg Asp Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
130 135 140

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
145 150 155 160

Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser
165 170 175

Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser
180 185 190

Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg
195 200 205

Leu Leu Ile Tyr Gly Thr Ser Ser Arg Ala Thr Gly Ile Ser Asp Arg
210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg
225 230 235 240

Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Asn

245

250

255

Ser Pro Pro Lys Phe Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys
 260 265 270

Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
 275 280 285

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
 290 295 300

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile
 305 310 315 320

Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val
 325 330 335

Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe
 340 345 350

Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly
 355 360 365

Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg
 370 375 380

Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln
 385 390 395 400

Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp
 405 410 415

Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro
 420 425 430

Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp
 435 440 445

Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg
 450 455 460

Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr
 465 470 475 480

Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490 495

<210> 233
 <211> 490
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 233
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

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

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Met Gly Trp Ser Ser Gly Tyr Leu Gly
 115 120 125

Ala Phe Asp Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
145 150 155 160

Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg
165 170 175

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ala Ser Ser Phe Leu
180 185 190

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
195 200 205

Gly Ala Ser Gly Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
225 230 235 240

Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Gly Ser Pro Arg Leu
245 250 255

Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met

340

345

350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
 355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
 370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
 385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
 405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 234

<211> 1461

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 234

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccaagtgc agcttcagga aagcggaccg ggcctggtca agccatccga aactctctcc 120

ctgacttgca ctgtgtctgg cggttccatc tcatcgtcgt actactactg gggctggatt	180
aggcagccgc ccggaaaggg actggagtg atcggaagca tctactattc cggctcggcg	240
tactacaacc ctagcctcaa gtcgagagt accatctccg tggatacctc caagaaccag	300
ttttccctgc gcctgagctc cgtgaccgcc gctgacaccg ccgtgtacta ctgtgctcgg	360
cattggcagg aatggcccg tgccttcgac atttggggcc agggcactat ggtcactgtg	420
tcatccgggg gtggaggcag cgggggagga gggccgggg ggggagggtt agagacaacc	480
ttgaccaggt caccgcatt catgtccgcc actccgggag acaaggatcat catctcgtgc	540
aaagcgtccc aggatatcga cgatgccatg aattgggtacc agcagaagcc tggcgaagcg	600
ccgctgttca ttatccaatc cgcaacctcg cccgtgcctg gaatcccacc gcggttcagc	660
ggcagcgggt tcggaaccga cttttccctg accattaaca acattgagtc cgaggacgcc	720
gcctactact tctgcctgca acacgacaac ttccctctca cgttcggcca gggaaccaag	780
ctggaaatca agaccactac cccagcaccg aggccaccca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctgggtg ggccgtgcat	900
acccggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tgggtacttgc	960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tgttcatgcc ggttcccaga ggaggaggaa ggcggtcgcg aactgcgcgt gaaattcagc	1140
cgcagcgag atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat	1200
cttggtcgga gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg	1260
ggcgggaagc cgcgcagaaa gaatcccaa gagggcctgt acaacgagct ccaaaaggat	1320
aagatggcag aagcctatag cgagattggg atgaaagggg aacgcagaag aggcaaaggc	1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac	1440
atgcaggccc tgccgcctcg g	1461

<210> 235

<211> 1467

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 235

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtca atctgcgcga atccggcccc gccttggtca agcctacca gaccctcact	120
ctgacctgta ctttctccgg cttctccctg cggacttccg ggatgtgcgt gtcctggatc	180
agacagcctc cgggaaaggc cctggagtgg ctgcctcgca ttgactggga tgaggacaag	240
ttctactcca cctcactcaa gaccaggctg accatcagca aagatacctc tgacaaccaa	300
gtggtgctcc gcatgaccaa catggacca gccgacactg ccacttacta ctgcgcgagg	360
agcggagcgg gcggaacctc cgccaccgcc ttgatatttt ggggcccggg taccatggtc	420
accgtgtcaa gcggaggagg ggggtccggg ggcggcggtt ccgggggagg cggatcggac	480
attcagatga ctcagtcacc atcgtccctg agcgttagcg tgggcgacag agtgacaatc	540
acttgccggg catcccagga catctataac aaccttgctg ggttccagct gaagcctggt	600
tccgcaccgc ggtcacttat gtacgccgcc aacaagagcc agtcgggagt gccgtcccgg	660
ttttccgggt cggcctcggg aactgacttc accctgacga tctccagcct gcaacccgag	720
gatttcgcca cctactactg ccagcactac taccgctttc cctactcgtt cggacaggga	780
accaagctgg aaatcaagac cactaccca gcaccgaggc caccacccc ggctcctacc	840
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gtgcataccc ggggtcttga cttgcctgc gatatttaca tttgggcccc tctggctggt	960
acttgccggg tcctgctgct ttactcgtg atcactcttt actgtaagcg cggtcggaag	1020
aagctgctgt acatcttta gcaaccctt atgaggcctg tgcagactac tcaagaggag	1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa	1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa	1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca	1260
gaaatgggcg ggaagccgcg cagaaagaat cccaagagg gcctgtacaa cgagctccaa	1320
aaggataaga tggcagaagc ctatagcgag attggtatga aagggaacg cagaagaggc	1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct	1440

cttcacatgc aggccctgcc gcctcgg

1467

<210> 236

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 236

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agcttgtcga atccgggggg ggactgggtca agccggggcgg atcactgaga	120
ctgtcctgcg ccgcgagcgg cttcacgttc tcctcctact ccatgaactg ggtccgccaa	180
gccccgggga agggactgga atgggtgtcc tctatctcct cgtcgtcgtc ctacatctac	240
tacgccgact ccgtgaaggg aagattcacc atttcccgcg acaacgcaaa gaactcactg	300
tacttgcaaa tgaactcact ccgggccgaa gatactgctg tgtactattg cgccaagact	360
attgccgccg tctacgcttt cgacatctgg ggccaggga ccaccgtgac tgtgtcgtcc	420
ggtggtggtg gctcgggcgg aggaggaagc ggcggcgggg ggtccgagat tgtgtgacc	480
cagtcgccac tgagcctccc tgtgaccccc gaggaacccg ccagcatcag ctgccggtcc	540
agccagtccc tgctccactc caacggatac aattacctcg attggtacct tcagaagcct	600
ggacaaagcc cgagctgct catctacttg ggatcaaacc gcgcgtcagg agtgcctgac	660
cggttctccg gctcgggcag cggtaccgat ttcaccctga aaatctccag ggtggaggca	720
gaggacgtgg gagtgtatta ctgtatgcag gcgctgcaga ctccgtacac atttgggcag	780
ggcaccaagc tggagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc ttactgtaa gcgcggtcgg	1020
aagaagtgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140

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gaactcaatc ttggtcggag agaggagtag gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 237

<211> 1452

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 237

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtcc agctcgtgga gtccggcgga ggccttgtag agcctggagg ttcgctgaga	120
ctgtcctgcg ccgcctccgg cttcaccttc tccgactact acatgtcctg gatcagacag	180
gccccgggaa agggcctgga atgggtgtcc tacatctcgt catcgggcag cactatctac	240
tacgcggact cagtgaaggg gcggttcacc atttcccggg ataacgcgaa gaactcgctg	300
tatctgcaaa tgaactcact gagggccgag gacaccgccg tgtactactg cgcccgcgat	360
ctccgcgggg catttgacat ctggggacag ggaaccatgg tcacagtgtc cagcggaggg	420
ggaggatcgg gtggcggagg ttccgggggt ggaggctcct cctacgtgct gactcagagc	480
ccaagcgtca gcgctgcgcc cggttacacg gcaaccatct cctgtggcgg aaacaacatt	540
gggaccaagt ctgtgcactg gtatcagcag aagccgggcc aagctcccct gttggtgata	600
cgcgatgact ccgtgcggcc tagcaaaatt ccgggacggt tctccggctc caacagcggc	660
aatatggcca ctctcaccat ctcgggagtg caggccggag atgaagccga cttctactgc	720
caagtctggg actcagactc cgagcatgtg gtgttcgggg gcggaaccaa gctgactgtg	780
ctcaccacta cccagcacc gagggcacc accccggctc ctaccatcgc ctcccagcct	840
ctgtccctgc gtccggaggc atgtagacc gcagctggtg gggccgtgca taccgggggt	900

cttgacttcg cctgcgatat ctacatttgg gcccctctgg ctggtacttg cggggtcctg	960
ctgctttcac tcgtgatcac tctttactgt aagcgcggtc ggaagaagct gctgtacatc	1020
tttaagcaac cttcatgag gcctgtgcag actactcaag aggaggacgg ctgttcatgc	1080
cggttcccag aggaggagga aggcggctgc gaactgcgcg tgaaattcag ccgcagcgca	1140
gatgctccag cctacaagca ggggcagaac cagctctaca acgaactcaa tcttggtcgg	1200
agagaggagt acgacgtgct ggacaagcgg agaggacggg acccagaaat gggcgggaag	1260
ccgcgcagaa agaatcccca agagggcctg tacaacgagc tccaaaagga taagatggca	1320
gaagcctata gcgagattgg tatgaaaggg gaacgcagaa gaggcaaagg ccacgacgga	1380
ctgtaccagg gactcagcac cgccaccaag gacacctatg acgtcttca catgcaggcc	1440
ctgccgcctc gg	1452

<210> 238

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 238

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctggtgca gagcggggcc gaagtcaaga agccgggagc ctccgtgaaa	120
gtgtcctgca agccttcggg atacaccgtg acctcccact acattcattg ggtccgccgc	180
gccccgggcc aaggactcga gtggatgggc atgatcaacc ctagcggcgg agtgaccgcg	240
tacagccaga cgctgcaggg acgcgtgact atgacctcgg atacctcctc ctccaccgtc	300
tatatggaac tgtccagcct gcggtccgag gataccgcca tgtactactg cgcccgggaa	360
ggatcaggct ccgggtggta tttcgacttc tggggaagag gcaccctcgt gactgtgtca	420
tctgggggag ggggttcgg tgggtggcga tcgggaggag gcggttcac ctagctgctg	480
accagccac cctccgtgtc cgtgagcccc ggccagactg catcgattac atgtagcggc	540
gacggcctct ccaagaaata cgtgtcgtgg taccagcaga aggccggaca gagcccgggtg	600

gtgctgatct caagagataa ggagcggcct agcgggaatcc cggacaggtt ctcgggttcc	660
aactccgcgg acactgctac tctgaccatc tcgggggaccc aggctatgga cgaagccgat	720
tactactgcc aagcctggga cgacactact gtcgtgtttg gagggggcac caagttgacc	780
gtccttacca ctaccccagc accgaggcca cccaccccgg ctcttaccat cgcctcccag	840
cctctgtccc tgcgtccgga ggcatgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggtcttgact tcgcctgcga tatctacatt tgggccctc tggttggtac ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcagggggcag aaccagctct acaacgaact caatcttggt	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggtatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 239

<211> 1467

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 239

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtgc agcttcagga gagcggcccg ggactcgtga agccgtcca gaccctgtcc	120
ctgacttgca ccgtgtcggg aggaagcatc tcgagcggag gctactattg gtcgtggatt	180
cggcagcacc ctggaaaggg cctggaatgg atcggctaca tctactactc cggctcgacc	240
tactacaacc catcgctgaa gtccagagtg acaatctcag tggacacgtc caagaatcag	300
ttcagcctga agctctcttc cgtgactgcg gccgacaccg ccgtgtacta ctgcgcacgc	360

gctggaattg ccgcccggct gaggggtgcc ttcgacattt ggggacaggg caccatggtc	420
accgtgtcct ccggcggcgg aggttccggg ggtggaggct caggaggagg ggggtccgac	480
atcgtcatga ctcagtcgcc ctcaagcgtc agcgcgtccg tcggggacag agtgatcatc	540
acctgtcggg cgtcccaggg aattcgcaac tggctggcct ggtatcagca gaagcccgga	600
aaggcccca acctgttgat ctacgccgcc tcaaacctcc aatccggggg gccgagccgc	660
ttcagcggct ccggttcggg tgccgatttc actctgacca tctcctccct gcaacctgaa	720
gatgtggcta cctactactg ccaaaagtac aactccgcac cttttacttt cggaccgggg	780
accaaagtgg acattaagac cactaccca gcaccgaggc caccacccc ggctcctacc	840
atgcctccc agcctctgtc cctgcgtccg gaggcattga gaccgcagc tgggtggggcc	900
gtgcataccc ggggtcttga cttgcctgc gatatttaca tttgggcccc tctggctggt	960
acttgccggg tcctgctgct ttactcgtg atcactcttt actgtaagcg cggtcggag	1020
aagctgctgt acatcttta gcaaccctt atgaggcctg tgcagactac tcaagaggag	1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa	1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa	1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca	1260
gaaatgggcg ggaagccgc cagaaagaat cccaagagg gcctgtacaa cgagctccaa	1320
aaggataaga tggcagaagc ctatagcgag attggtatga aagggaacg cagaagaggc	1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct	1440
cttcacatgc aggcctgcc gcctcgg	1467

<210> 240

<211> 1491

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 240

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
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ccccaagtgc agctggtcca gtcgggcgcc gaggtcaaga agcccgggag ctctgtgaaa	120
gtgtcctgca aggcctccgg gggcaccttt agctcctacg ccatctcctg ggtccgccaa	180
gcaccgggtc aaggcctgga gtggatgggg ggaattatcc ctatcttcgg cactgccaac	240
tacgcccaga agttccaggg acgcgtgacc attaccgcgg acgaatccac ctccaccgt	300
tatatggagc tgtccagctt gcgctcggaa gataccgccg tgtactactg cgcccggagg	360
ggtggatacc agctgctgag atgggacgtg ggcctcctgc ggtcggcggt cgacatctgg	420
ggccagggca ctatggtcac tgtgtccagc ggaggaggcg gatcgggagg cggcggatca	480
gggggaggcg gttccagcta cgtgcttact caacccccctt cgggtgtccgt ggccccggga	540
cagaccgcca gaatcacttg cggaggaaac aacattgggt ccaagagcgt gcattggtac	600
cagcagaagc caggacaggc ccctgtgctg gtgctctacg ggaagaacaa tcggcccagc	660
ggagtgccgg acaggttctc gggttcacgc tccggtacaa ccgcttcact gactatcacc	720
ggggcccagg cagaggatga agcggactac tactgttcct cccgggattc atccggcgac	780
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tgtagacccg cagctggtgg ggccgtgcat acccggggtc ttgacttcgc ctgcgatatc	960
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cctgtgcaga ctactcaaga ggaggacggc tgttcatgcc ggttcccaga ggaggaggaa	1140
ggcggctgcg aactgcgcgt gaaattcagc cgcagcgcag atgctccagc ctacaagcag	1200
gggcagaacc agctctacaa cgaactcaat cttggtcggg gagaggagta cgacgtgctg	1260
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gagggcctgt acaacgagct ccaaaaggat aagatggcag aagcctatag cgagattggt	1380
atgaaagggg aacgcagaag aggcaaaggc cacgacggac tgtaccaggg actcagcacc	1440
gccaccaagg acacctatga cgctcttcac atgcaggccc tgccgcctcg g	1491

<210> 241

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 241

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctccaaca gtcaggaccg gggctcgtga agccatccca gaccctgtcc	120
ctgacttgtg ccatctcggg agatagcgtg tcatcgaact ccgccgcctg gaactggatt	180
cggcagagcc cgtcccgcgg actggagtgg cttggaagga cctactaccg gtccaagtgg	240
tactctttct acgcgatctc gctgaagtcc cgcattatca ttaaccctga tacctccaag	300
aatcagttct ccctccaact gaaatccgtc acccccgagg acacagcagt gtattactgc	360
gcacggagca gccccgaagg actgttcctg tatttggttg acccctgggg ccaggggact	420
cttgtgaccg tgtcgagcgg cggagatggg tccggtggcg gtggttcggg gggcggcgga	480
tcatcatccg aactgaccca ggacccggct gtgtccgtgg cgctgggaca aaccatccgc	540
attacgtgcc agggagactc cctgggcaac tactacgcca cttggtacca gcagaagccg	600
ggccaagccc ctgtgttggg catctacggg accaacaaca gaccttccgg catccccgac	660
cggttcagcg cttcgtcctc cggcaacact gccagcctga ccatcactgg agcgcaggcc	720
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ggaactggaa ccaaggtcac cgtgctgacc actaccccag caccgaggcc acccaccgcc	840
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ggtggggccg tgcatacccg gggctttgac ttgcctgcg atatctacat ttggggccct	960
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caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380

agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 242
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 242	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctcgtgga gtcaggaggc ggcctgggtcc agccgggagg gtcccttaga	120
ctgtcatgcg ccgcaagcgg attcactttc tcctcctatg ccatgagctg ggtccgccaa	180
gccccggaa agggactgga atgggtgtcc gccatctcgg ggtctggagg ctcaacttac	240
tacgctgact ccgtgaaggg acggttcacc attagccgcg acaactccaa gaacaccctc	300
tacctcaaaa tgaactccct gcgggccgag gataccgccg tctactactg cgccaaagtg	360
gaaggttcag gatcgtgga ctactgggga cagggtactc tcgtgaccgt gtcacgggc	420
ggaggagggt ccggcggtgg cggctccggc ggcggagggt cggagatcgt gatgaccag	480
agccctggta ctctgagcct ttcgccggga gaaagggccca ccctgtcctg ccgcgcttcc	540
caatccgtgt cctccgcgta cttggcgtgg taccagcaga agccgggaca gcccctcgg	600
ctgctgatca gcggggccag caccgggca accggaatcc cagacagatt cgggggttcc	660
ggcagcggca cagatttcac cctgactatt tcgaggttgg agcccgagga ctttgcggtg	720
tattactgtc agcactacgg gtcgtccttt aatggctcca gcctgttcac gttcggacag	780
gggacccgcc tggaaatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
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ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
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gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140

aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 243

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 243

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aactggtgga aaccggtggc ggcctggtgc agcctggagg atcattgagg	120
ctgtcatgcg cggccagcgg tattaccttc tcccgggtacc ccatgtcctg ggtcagacag	180
gccccgggga aagggttga atgggtgtcc gggatctcgg actccggtgt cagcacttac	240
tacgccgact ccgccaaggg acgcttcacc atttcccggg acaactcgaa gaacaccctg	300
ttcctccaaa tgagctccct ccgggacgag gatactgcag tgtactactg cgtgacctgc	360
gccgggtccg aggcgtctga catttgggga cagggcacta tggtcaccgt gtcgtccggc	420
ggagggggct cgggaggcgg tggcagcggg ggaggagggt ccgagatcgt gctgacccaa	480
tccccggcca ccctctcgct gagccctgga gaaagggcaa cttgtcctg tcgcgcgagc	540
cagtccgtga gcaactccct ggcctggtac cagcagaagc ccggacaggc tccgagactt	600
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tactgccagc agttcggtac ttcctccggc ctgactttcg gaggcggcac gaagctcgaa	780
atcaagacca ctaccccagc accgaggcca cccaccccg ctcctaccat cgcctcccag	840

cctctgtccc tgcgtccgga ggcatgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggctttgact tcgcctgcga tatctacatt tgggcccctc tggctggtac ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcaggggcag aaccagctct acaacgaact caatcttgg	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggatatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 244

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 244

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ctgtcctgcg cggccagcgg attcactttc tcctcctacg ccatgtcctg ggtcagacag	180
gcccctggaa agggcctgga atgggtgtcc gcaatcagcg gcagcggcgg ctcgacctat	240
tacgcggatt cagtgaaggg cagattcacc atttcccggg acaacgcaa gaactccttg	300
taccttcaaa tgaactccct ccgcgcggaa gataccgcaa tctactactg cgctcgggcc	360
acttacaaga gggaactgcg ctactactac gggatggacg tctggggcca gggaaccatg	420
gtcaccgtgt ccagcggagg aggaggatcg ggaggaggcg gtagcggggg tggagggtcg	480
gagatcgtga tgaccagtc ccccggcact gtgtcgtgtg ccccggcga acgggccacc	540
ctgtcatgtc gggccagcca gtcagtgtcg tcaagcttcc tcgcctggta ccagcagaaa	600

ccgggacaag ctccccgcct gctgatctac ggagccagca gccggggccac cggtattcct	660
gaccggtttct ccggttcggg gtccggggacc gactttactc tgactatctc tcgcctcgag	720
ccagaggact ccgccgtgta ttactgccag cagtaccact cctccccgtc ctggacgttc	780
ggacagggca caaggctgga gattaagacc actaccccag caccgaggcc acccaccctc	840
gctcctacca tcgcctccca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcgggggt cctgctgctt tcactcgtga tcactcttta ctgtaagcgc	1020
ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 245

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 245

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccagagtgc agcttgtgga aaccggtggc ggactggtgc agcccggagg aagcctcagg	120
ctgtcctgcg ccgcgtccgg cttcaccttc tcctcgtacg ccatgtcctg ggtccgccag	180
gccccggaa agggcctgga atgggtgtcc gccatctctg gaagcggagg ttccacgtac	240
tacgcgga ca gctcaagg aaggttcaca atctccgcg ataattcgaa gaacactctg	300

taccttcaaa tgaacaccct gaaggccgag gacactgctg tgtactactg cgcacgggcc	360
acctacaaga gagagctccg gtactactac ggaatggacg tctggggcca gggaactact	420
gtgaccgtgt cctcgggagg ggggtggctcc ggggggggcg gctccggcgg aggcggttcc	480
gagattgtgc tgaccagtc accttcaact ctgtcgtgt ccccgggaga gagcgctact	540
ctgagctgcc gggccagcca gtccgtgtcc accaccttcc tcgcctggta tcagcagaag	600
ccggggcagg caccacggct cttgatctac ggggtcaagca acagagcgac cggaattcct	660
gaccgcttct cggggagcgg ttcaggcacc gacttcaccc tgactatccg gcgcctggaa	720
cccgaagatt tcgccgtgta ttactgtcaa cagtaccact cctcgccgtc ctggaccttt	780
ggccaaggaa ccaaagtgga aatcaagacc actacccag caccgaggcc acccaccccg	840
gctcctacca tcgcctccca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
gggtggggccg tgcatacccg gggctctgac ttcgcctgcg atatctacat ttggggcccct	960
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caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgctgaaat tcagccgcag cgcatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggacccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctcaaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 246

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 246

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cccgaagtgc agctcgtgga aactggaggt ggactcgtgc agcctggacg gtcgctgcgg	120
ctgagctgcg ctgcatccgg cttcaccttc gacgattatg ccatgcactg ggtcagacag	180
gcgccaggga agggacttga gtgggtgtcc ggtatcagct ggaatagcgg ctcaatcgga	240
tacgcggact ccgtgaaggg aaggttcacc atttcccgcg acaacgcaa gaactccctg	300
tacttgcaaa tgaacagcct ccgggatgag gacactgccg tgtactactg cgcccgcgtc	360
ggaaaagctg tgcccgcgt ctggggccag ggaaccactg tgaccgtgtc cagcggcggg	420
ggtggatcgg gcggtggagg gtccggtgga gggggctcag atattgtgat gaccagacc	480
ccctcgtccc tgtccgcctc ggtcggcgac cgcgtgacta tcacatgtag agcctcgcag	540
agcatctcca gctacctgaa ctggtatcag cagaagccgg ggaaggcccc gaagctcctg	600
atctacgcgg catcatcact gcaatcggga gtgccgagcc ggttttccgg gtccggctcc	660
ggcaccgact tcacgctgac catttcttcc ctgcaaccg aggacttcgc cacttactac	720
tgccagcagt cctactccac cccttactcc ttcgccaag gaaccaggct ggaaatcaag	780
accactacc cagcaccgag gccaccacc ccggctccta ccatcgctc ccagcctctg	840
tccctgcgtc cggaggcatg tagaccgcga gctggtgggg ccgtgcatac ccggggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgcgg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 247

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 247

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
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ctctcctgca ctgcgtctgg cttcaccttc gacgactacg cgatgcactg ggtcagacag	180
cgcccgggaa agggcctgga atgggtcgcc tcaatcaact ggaaggga aa ctccctggcc	240
tatggcgaca gcgtgaaggg ccgcttcgcc atttcgcgcg acaacgcaa gaacaccgtg	300
tttctgcaaa tgaattccct gcggaccgag gataccgctg tgtactactg cgccagccac	360
cagggcgtgg catactataa ctacgccatg gacgtgtggg gaagagggac gctcgtcacc	420
gtgtcctccg ggggcggtgg atcgggtgga ggaggaagcg gtggcggggg cagcgaatc	480
gtgctgactc agagcccggg aactctttca ctgtccccgg gagaacgggc cactctctcg	540
tgccgggcca ccaggtccat cggctcctcc ttccttgctt ggtaccagca gaggccagga	600
caggcgcccc gcctgctgat ctacggtgct tccaacgcg ccactggcat tcctgaccgg	660
ttcagcggca gaggtcggg aaccgatttc aactgacca tttcccgggt ggagcccga	720
gattcggcag tctactactg tcagcattac gagtctctcc cttcatggac cttcgggtcaa	780
gggaccaaag tggagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct ccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg	900
gccgtgcata cccgggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggctctgct gctttcactc gtgatcactc tttactgtaa gcgcggctcg	1020
aagaagctgc tgtacatctt taagcaacct ttcagaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380

ggcaaaggcc acgacggact gtaccagga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 248
 <211> 1455
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 248	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaggtgc agttggtcga aagcgggggc gggcttgtgc agcctggcgg atcactgcgg	120
ctgtcctgcg cggcatcagg cttcacgttt tcttcctacg ccatgtcctg ggtgcgccag	180
gccccctggaa agggactgga atgggtgtcc gcgatttcgg ggtccggcgg gagcacctac	240
tacgccgatt ccgtgaaggg ccgcttcact atctcgcggg acaactccaa gaacaccctc	300
tacctcaaaa tgaatagcct gcggggccgag gataccgccg tctactattg cgctaaggtc	360
gtgcgcgacg gaatggacgt gtggggacag ggtaccaccg tgacagtgtc ctcgggggga	420
ggcggtagcg gcggaggagg aagcgggtggg ggaggttccg agatttgtgt gactcaatca	480
cccgcgaccc tgagcctgtc ccccgccgaa agggccactc tgtcctgtcg ggccagccaa	540
tcagtctcct cctcgtacct ggcctgggtac cagcagaagc caggacaggc tccgagactc	600
cttatctatg gcgcctcctc ccgcgccacc ggaatcccgg ataggttctc gggaaacgga	660
tcggggaccg acttcactct caccatctcc cggctggaac cggaggactt cgccgtgtac	720
tactgccagc agtacggcag cccgcctaga ttacttttcg gccccggcac caaagtggac	780
atcaagacca ctaccccagc accgaggcca cccaccccgg ctctaccat cgcctcccag	840
cctctgtccc tgcgtccgga ggcatgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggtcttgact tcgcctgcga tatctacatt tgggcccctc tggctgggtac ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080

tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcaggggcag aaccagctct acaacgaact caatcttggc	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggtatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 249

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 249

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctgctgga gtccggcggt ggattggtgc aaccgggggg atcgtcaga	120
ctgtcctgtg cggcgtcagg cttcaccttc tcgagctacg ccatgtcatg ggtcagacag	180
gcccctggaa agggctctgga atgggtgtcc gccatttccg ggagcggggg atctacatac	240
tacgccgata gcgtgaaggg ccgcttcacc atttcccggg acaactcaa gaacactctc	300
tatctgcaaa tgaactccct ccgcgtgag gacactgccg tgtactactg cgccaaaatc	360
cctcagaccg gcaccttcga ctactgggga caggggactc tggtcaccgt cagcagcggc	420
ggcggagggt cggggggagg aggaagcggc ggcggagggt ccgagattgt gctgaccag	480
tcaccggca ctttgtccct gtcgcctgga gaaaggcca ccctttcctg ccgggcatcc	540
caatccgtgt cctcctcgta cctggcctgg taccagcaga ggcccggaca ggccccacgg	600
cttctgatct acggagcaag cagccgcgcg accggtatcc cggaccgggt ttctgggctcg	660
ggctcaggaa ctgacttcac cctcaccatc tccgcctgg aaccgaaga tttcgctgtg	720
tattactgcc agcactacgg cagctccccg tcctggacgt tcggccaggg aactcggctg	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840

cagcctctgt ccctgcgtcc ggaggcatgt agacccgcag ctggtggggc cgtgcataacc	900
cgggggtcttg acttcgcctg cgatatctac atttgggccc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
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ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 250

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 250

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aactggtgga aaccggtgga ggactcgtgc agcctggcgg cagcctccgg	120
ctgagctgcg ccgcttcggg attcaccttt tcctcctacg cgatgtcttg ggtcagacag	180
gccccggaa aggggctgga atgggtgtca gccatctccg gctccggcgg atcaacgtac	240
tacgccgact ccgtgaaagg ccggttcacc atgtcgcgcg agaatgacaa gaactccgtg	300
ttcctgcaaa tgaactccct gaggggtggag gacaccggag tgtactattg tgcgcgcgcc	360
aactacaaga gagagctgcg gtactactac ggaatggacg tctggggaca gggaactatg	420
gtgaccgtgt catccggtgg agggggaagc ggcggtggag gcagcggggg cgggggttca	480
gaaattgtca tgaccagtc cccgggaact ctttcctct ccccgggga atccgcgact	540

ttgtcctgcc gggccagcca gcgcgtggcc tcgaactacc tcgcatggta ccagcataag	600
ccaggccaag ccccttcctt gctgatttcc ggggctagca gccgcgccac tggcgtgccg	660
gataggttct cgggaagcgg ctcggtgacc gatttcaccc tggcaatctc gcggctggaa	720
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ggacagggca ccaaggtcga gatcaagacc actaccccag caccgaggcc acccaccctc	840
gctcctacca tcgcctccca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttgggccctt	960
ctggctggta cttgcggggt cctgctgctt tcactcgtga tcactcttta ctgtaagcgc	1020
ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gagtacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 251

<211> 1464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 251

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctgctcga aaccggtgga gggctggtgc agccaggggg ctccctgagg	120
ctttcatgcg ccgctagcgg attctccttc tcctcttacg ccatgtcgtg ggtccgcaa	180
gcccctggaa aaggcctgga atgggtgtcc gcgatttccg ggagcggagg ttcgacctat	240
tacgccgact ccgtgaaggg ccgctttacc atctcccggg ataactcaa gaacactctg	300

tacctccaaa tgaactcgct gagagccgag gacaccgccg tgtattactg cgcgaaggcg	360
ctggtcggcg cgactggggc attcgacatc tggggacagg gaactcttgt gaccgtgtcg	420
agcggaggcg gcggctccgg cggaggaggg agcgggggcg gtggttccga aatcgtgttg	480
actcagtccc cgggaaccct gagcttgtca cccggggagc gggccactct ctctgtcgc	540
gcctcccaat cgctctcatc caatttcctg gcctggtacc agcagaagcc cggacaggcc	600
ccgggcctgc tcatctacgg cgcttcaaac tgggcaacgg gaaccctga tcggttcagc	660
ggaagcggat cgggtactga ctttacctg accatcacca gactggaacc ggaggacttc	720
gccgtgtact actgccagta ctacggcacc tccccatgt acacattcgg acagggtacc	780
aaggtcgaga ttaagaccac taccccagca ccgaggccac ccacccggc tcctaccatc	840
gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgcagctgg tggggccgtg	900
catacccggg gtcttgactt cgcctgcgat atctacattt gggcccctct ggctggtact	960
tgcggggtcc tgctgctttc actcgtgatc actctttact gtaagcgcgg tcggaagaag	1020
ctgctgtaca tctttaagca acccttcatt aggctgtgc agactactca agaggaggac	1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc	1140
agccgcagcg cagatgctcc agcctacaag caggggcaga accagctcta caacgaactc	1200
aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggaccagaa	1260
atgggcggga agccgcgcag aaagaatccc caagagggcc tgtacaacga gtcctaaaag	1320
gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aagaggcaaa	1380
ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgtcttt	1440
cacatgcagg ccctgccgcc tcgg	1464

<210> 252

<211> 1464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 252

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctgcttga gagcgggtgga ggtctgggtgc agcccggggg atcactgcgc	120
ctgtcctgtg ccgctgccgg ttctactttc tcctcgtacg ccatgtcgtg ggtcagacag	180
gcaccgggaa agggactgga atgggtgtca gccatttcgg gttcgggggg cagcacctac	240
tacgtgact ccgtgaaggg ccggttcacc atttcccgcg acaactccaa gaacaccttg	300
tacctcaaaa tgaactccct gcgggcccga gataccgccg tgtattactg cgtgctgtgg	360
ttcggagagg gattcgacct gtggggacaa ggaacactcg tgactgtgtc atccggcgga	420
ggcggcagcg gtggcggcgg ttccggcggc ggcggatctg acatcgtgtt gacccagtcc	480
cctctgagcc tgccgggtcac tcctggcgaa ccagccagca tctcctgccg gtcgagccag	540
tccctcctgc actccaatgg gtacaactac ctcgattggg atctgcaaaa gccgggccag	600
agccccagc tgctgatcta ccttgggtca aaccgcgctt ccgggggtgcc tgatagattc	660
tccgggtccg ggagcggaac cgactttacc ctgaaaatct cgagggtgga ggccgaggac	720
gtcggagtgt actactgcat gcaggcgctc cagactcccc tgaccttcgg aggaggaacg	780
aaggtcgaca tcaagaccac taccccagca ccgaggccac ccaccccggc tcctaccatc	840
gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgcagctgg tggggccgtg	900
catacccggg gtcttgactt cgcttgcgat atctacattt gggcccctct ggctgggtact	960
tgcgggggtcc tgctgctttc actcgtgatc actctttact gtaagcgcgg tcggaagaag	1020
ctgctgtaca tctttaagca acccttcacg aggcctgtgc agactactca agaggaggac	1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc	1140
agccgcagcg cagatgctcc agcctacaag caggggcaga accagctcta caacgaactc	1200
aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggaccagaa	1260
atgggcggga agccgcgcag aaagaatccc caagagggcc tgtacaacga gctccaaaag	1320
gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aagaggcaaa	1380
ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgtcttt	1440
cacatgcagg ccctgccgcc tcgg	1464

<210> 253

<211> 1485

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 253

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctcgtgga gtcaggcgga ggactgggtgc agcccggggg ctccctgaga	120
ctttcctgcg cggcatcggg ttttaccttc tcctcctatg ctatgtcctg ggtgcgccag	180
gccccgggaa agggactgga atgggtgtcc gcaatcagcg gtagcggggg ctcaacatac	240
tacgccgact ccgtcaaggg tcgcttcact atttcccggg acaactcaa gaataccctg	300
tacctcaaaa tgaacagcct cagggccgag gatactgccg tgtactactg cgccaaagtc	360
ggatacgata gtcccggtta ctaccgggac tactacggaa tggacgtgtg gggacagggc	420
accaccgtga ccgtgtcaag cggcggaggc ggttcaggag ggggaggctc cggcgggtgga	480
gggtccgaaa tcgtcctgac tcagtcgcct ggcaactctgt cgttgtcccc gggggagcgc	540
gctaccctgt cgtgtcgggc gtcgcagtcc gtgtcgagct cctacctcgc gtggtaccag	600
cagaagcccc gacaggcccc tagacttctg atctacggca cttcttcacg cgccaccggg	660
atcagcgaca ggttcagcgg ctccggctcc gggaccgact tcaccctgac cattagccgg	720
ctggagcctg aagatttcgc cgtgtattac tgccaacact acggaaactc gccgcaaag	780
ttcacgttcg gaccggaac caagctggaa atcaagacca ctacccagc accgaggcca	840
cccaccccgg ctctaccat cgcctcccag cctctgtccc tgcgtccgga ggcatgtaga	900
cccgcagctg gtggggccgt gcatacccgg ggtcttgact tcgcctgcga tatctacatt	960
tgggcccctc tggctggtac ttgcggggtc ctgctgcttt cactcgtgat cactctttac	1020
tgtaagcgcg gtcggaagaa gctgctgtac atctttaagc aacccttcac gaggcctgtg	1080
cagactactc aagaggagga cggctgttca tgccggttcc cagaggagga ggaaggcggc	1140
tgcgaactgc gcgtgaaatt cagccgcagc gcagatgctc cagcctacaa gcaggggcag	1200
aaccagctct acaacgaact caatcttggt cggagagagg agtacgacgt gctggacaag	1260
cggagaggac gggaccaga aatgggcggg aagccgcgca gaaagaatcc ccaagagggc	1320

ctgtacaacg agctccaaaa ggataagatg gcagaagcct atagcgagat tggtatgaaa	1380
ggggaacgca gaagaggcaa aggccacgac ggactgtacc agggactcag caccgccacc	1440
aaggacacct atgacgctct tcacatgcag gccctgccgc ctcgg	1485

<210> 254
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 254	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtcc aactggtgga gtccggggga gggctcgtgc agcccggagg cagccttcgg	120
ctgtcgtgcg ccgcctccgg gttcacgttc tcacacctac cgatgtcgtg ggtcagacag	180
gcaccaggaa agggactgga atgggtgtcc gccattagcg gctccggcgg tagcacctac	240
tatgccgact cagtgaaggg aaggttcact atctcccgcg acaacagcaa gaacaccctg	300
tacctcaaaa tgaactctct gcgggccgag gataccgcgg tgtactattg cgccaagatg	360
ggttggtcca gcggatactt gggagccttc gacatttggg gacagggcac tactgtgacc	420
gtgtcctccg ggggtggcgg atcgggaggc ggcggtcgg gtggaggggg ttccgaaatc	480
gtgttgaccc agtcaccggg aaccctctcg ctgtccccgg gagaacgggc tacactgtca	540
tgtagagcgt ccaggtccgt ggcttcctcg ttcctggcct ggtaccagca gaagccggga	600
caggcacccc gcctgctcat ctacggagcc agcggccggg cgaccggcat ccctgaccgc	660
ttctccggtt ccggctcggg caccgacttt actctgacca ttagcaggct tgagcccagag	720
gattttgccg tgtactactg ccaacactac ggggggagcc ctgcctgac cttcgagggc	780
ggaactaagg tcgatatcaa aaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct ccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc ttactgtaa gcgcggctcg	1020
aagaagctgc tgtacatctt taagcaacct ttcattgaggc ctgtgcagac tactcaagag	1080

gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg 1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac 1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac 1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc 1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga 1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac 1440
gctcttcaca tgcaggccct gccgcctcgg 1470

<210> 255

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 255

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

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

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met
35 40 45

Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

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

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

<210> 256
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 256
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

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

Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
50 55 60

Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
100 105 110

Val Thr Val Ser Ser
115

<210> 257
<211> 117
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 257

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

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

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

Gly Arg Ile Asn Thr Glu Ser Gly Val Pro Ile Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asp Glu Asp Thr Ala Ser Tyr Phe Cys
85 90 95

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

Leu Thr Val Ser Ser
115

<210> 258

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 258

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

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr His Tyr
20 25 30

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

Gly Arg Ile Asn Thr Glu Thr Gly Glu Pro Leu Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Cys Asp Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Leu Thr Val Ser Ser
115

<210> 259

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 259

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

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

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

Phe Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly

50

55

60

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

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

Thr Phe Gly Gly Gly Thr Lys Leu Asp Ile Lys
100 105

<210> 260

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 260

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

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

Gly Ala His Leu Ile 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 Thr Gly Val Pro Ala
50 55 60

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

Pro Val Glu Glu Asp Asp Val Ala Ile Tyr Ser Cys Leu Gln Ser Arg
85 90 95

Ile Phe Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 261
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 261
Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala Met Ser Leu Gly
1 5 10 15

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

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

Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr Gly Val Pro Ala
50 55 60

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

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

Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 262
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 262
Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala Met Ser Leu Gly
1 5 10 15

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

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

Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr Gly Val Pro Ala
50 55 60

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

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

Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 263

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 263

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

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

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met
35 40 45

Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser
130 135 140

His Arg Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser Ile Thr Cys
145 150 155 160

Arg Ala Ser Gln Asp Val Asn Thr Ala Val Ser Trp Tyr Gln Gln Lys
165 170 175

Pro Gly Gln Ser Pro Lys Leu Leu Ile Phe Ser Ala Ser Tyr Arg Tyr
180 185 190

Thr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Ala Asp Phe
195 200 205

Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr
210 215 220

Cys Gln Gln His Tyr Ser Thr Pro Trp Thr Phe Gly Gly Gly Thr Lys
225 230 235 240

Leu Asp Ile Lys

<210> 264

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 264

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

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

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

Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
50 55 60

Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys
130 135 140

Lys Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr
145 150 155 160

Phe Thr Asp Tyr Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly
165 170 175

Leu Lys Trp Met Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr
180 185 190

Ala Tyr Asp Phe Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala
195 200 205

Ser Thr Ala Tyr Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala
210 215 220

Thr Tyr Phe Cys Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly
225 230 235 240

Gln Gly Thr Ser Val Thr Val Ser Ser
245

<210> 265

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 265

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

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

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

Gly Arg Ile Asn Thr Glu Ser Gly Val Pro Ile Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asp Glu Asp Thr Ala Ser Tyr Phe Cys
85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Leu Asp Phe Trp Gly Gln Gly Thr Ala

100

105

110

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
 130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
 145 150 155 160

Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro
 165 170 175

Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
 180 185 190

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
 195 200 205

Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
 210 215 220

Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
 225 230 235 240

Glu Ile Lys

<210> 266

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 266

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

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr His Tyr
20 25 30

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

Gly Arg Ile Asn Thr Glu Thr Gly Glu Pro Leu Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Cys Asp Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
145 150 155 160

Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
180 185 190

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
195 200 205

Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
210 215 220

Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
 225 230 235 240

Glu Ile Lys

<210> 267

<211> 467

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 267

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

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

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met
 35 40 45

Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
 50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
 65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
 85 90 95

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser
 130 135 140

His Arg Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser Ile Thr Cys
 145 150 155 160

Arg Ala Ser Gln Asp Val Asn Thr Ala Val Ser Trp Tyr Gln Gln Lys
 165 170 175

Pro Gly Gln Ser Pro Lys Leu Leu Ile Phe Ser Ala Ser Tyr Arg Tyr
 180 185 190

Thr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Ala Asp Phe
 195 200 205

Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr
 210 215 220

Cys Gln Gln His Tyr Ser Thr Pro Trp Thr Phe Gly Gly Gly Thr Lys
 225 230 235 240

Leu Asp Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
 245 250 255

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
 260 265 270

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
 275 280 285

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
 290 295 300

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
 305 310 315 320

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
 325 330 335

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
 340 345 350

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
355 360 365

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
370 375 380

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
385 390 395 400

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
405 410 415

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
420 425 430

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
435 440 445

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
450 455 460

Pro Pro Arg
465

<210> 268
<211> 472
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 268
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly Leu Lys Trp Met

35

40

45

Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
50 55 60

Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys
130 135 140

Lys Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr
145 150 155 160

Phe Thr Asp Tyr Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly
165 170 175

Leu Lys Trp Met Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr
180 185 190

Ala Tyr Asp Phe Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala
195 200 205

Ser Thr Ala Tyr Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala
210 215 220

Thr Tyr Phe Cys Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly
225 230 235 240

Gln Gly Thr Ser Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg
245 250 255

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
260 265 270

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
275 280 285

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
290 295 300

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg
305 310 315 320

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
325 330 335

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
340 345 350

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
355 360 365

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
370 375 380

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
385 390 395 400

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
405 410 415

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
420 425 430

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
435 440 445

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
450 455 460

His Met Gln Ala Leu Pro Pro Arg
465 470

<210> 269
<211> 466
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 269
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

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

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

Gly Arg Ile Asn Thr Glu Ser Gly Val Pro Ile Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asp Glu Asp Thr Ala Ser Tyr Phe Cys
85 90 95

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

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser

145		150		155		160
Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro						
		165		170		175
Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr						
		180		185		190
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr						
		195		200		205
Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys						
		210		215		220
Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu						
		225		230		235
Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro						
		245		250		255
Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro						
		260		265		270
Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp						
		275		280		285
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu						
		290		295		300
Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu						
		305		310		315
Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu						
		325		330		335
Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys						
		340		345		350
Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys						
		355		360		365

Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu
370 375 380

Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly
385 390 395 400

Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu
405 410 415

Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly
420 425 430

Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser
435 440 445

Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro
450 455 460

Pro Arg
465

<210> 270
<211> 466
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 270
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr His Tyr
20 25 30

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

Gly Arg Ile Asn Thr Glu Thr Gly Glu Pro Leu Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Cys Asp Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
145 150 155 160

Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
180 185 190

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
195 200 205

Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
210 215 220

Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
245 250 255

Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro

260

265

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Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
 275 280 285

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
 290 295 300

Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu
 305 310 315 320

Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu
 325 330 335

Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys
 340 345 350

Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys
 355 360 365

Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu
 370 375 380

Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly
 385 390 395 400

Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu
 405 410 415

Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly
 420 425 430

Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser
 435 440 445

Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro
 450 455 460

Pro Arg
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<210> 271

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<211> 462

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 392

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 Gly Phe Ala Leu Ser Asn His
20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser
130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr
210 215 220

Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr
225 230 235 240

Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser
245 250 255

Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly
260 265 270

Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp
275 280 285

Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile
290 295 300

Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys
305 310 315 320

Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys
325 330 335

Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val
340 345 350

Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn
355 360 365

Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val
370 375 380

Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg
385 390 395 400

Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys
405 410 415

Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg
420 425 430

Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys

435

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Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 450 455 460

<210> 393

<211> 445

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 393

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 Gly Phe Ala Leu Ser Asn His
 20 25 30

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

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

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

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

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala
 115 120 125

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
 130 135 140

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
145 150 155 160

Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg
165 170 175

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
180 185 190

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser
195 200 205

Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr
210 215 220

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
225 230 235 240

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
245 250 255

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
260 265 270

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
275 280 285

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
290 295 300

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
305 310 315 320

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
325 330 335

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
340 345 350

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
355 360 365

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
370 375 380

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
385 390 395 400

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
405 410 415

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
420 425 430

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
435 440 445

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<210> 501

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 501

Thr Tyr Trp Met His

1 5

<210> 502

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 502

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

Asn

<210> 503

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 503

Trp Thr Thr Gly Thr Gly Ala Tyr
1 5

<210> 504

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 504

Gly Tyr Thr Phe Thr Thr Tyr
1 5

<210> 505

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<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 505

Tyr Pro Gly Thr Gly Gly

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<210> 506

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 506

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

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

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

Gly Asn Ile Tyr Pro Gly Thr Gly Gly Ser Asn Phe Asp Glu Lys Phe
50 55 60

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

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

Thr Arg Trp Thr Thr Gly Thr Gly Ala Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 507

<211> 351

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 507

gaggtgcagc tgggtgcagtc aggcgccgaa gtgaagaagc ccggcgagtc actgagaatt 60
agctgtaaaag gttcaggcta caccttcact acctactgga tgcactgggt ccgccaggct 120
accggtcaag gcctcgagt gatgggtaat atctaccccg gcaccggcgg ctctaacttc 180
gacgagaagt ttaagaatag agtgactatc accgccgata agtctactag caccgcctat 240
atggaactgt ctagcctgag atcagaggac accgccgtct actactgcac taggtggact 300
accggcacag gcgcctactg ggggtcaaggc actaccgtga ccgtgtctag c 351

<210> 508

<211> 443

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 508

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

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

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

Gly Asn Ile Tyr Pro Gly Thr Gly Gly Ser Asn Phe Asp Glu Lys Phe
50 55 60

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

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

Thr Arg Trp Thr Thr Gly Thr Gly Ala Tyr Trp Gly Gln Gly Thr Thr

100

105

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly
435 440

<210> 509
<211> 1329
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 509
gaggtgcagc tgggtgcagtc aggcgccgaa gtgaagaagc ccggcgagtc actgagaatt 60
agctgtaaag gttcaggcta caccttcact acctactgga tgcactgggt ccgccaggct 120
accggtcaag gcctcgagtg gatgggtaat atctaccccg gcaccggcgg ctctaacttc 180
gacgagaagt ttaagaatag agtgactatc accgccgata agtctactag caccgcctat 240

atggaactgt ctagcctgag atcagaggac accgccgtct actactgcac taggtggact	300
accggcacag gcgcctactg ggggtcaaggc actaccgtga ccgtgtctag cgctagcact	360
aagggcccggt ccgtgttccc cctggcacct tgtagccgga gcactagcga atccaccgct	420
gccctcggct gcctgggtcaa ggattacttc ccggagcccg tgaccgtgtc ctggaacagc	480
ggagcccctga cctccggagt gcacaccttc cccgctgtgc tgcagagctc cgggctgtac	540
tcgctgtcgt cggtgggtcac ggtgccttca tctagcctgg gtaccaagac ctacacttgc	600
aacgtggacc acaagccttc caacactaag gtggacaagc gcgtcgaatc gaagtacggc	660
ccaccgtgcc cgccttgtcc cgcgccggag ttcctcggcg gtccctcgggt ctttctgttc	720
ccaccgaagc ccaaggacac tttgatgatt tcccgcaccc ctgaagtgac atgcgtggtc	780
gtggacgtgt cacaggaaga tccggagggtg cagttcaatt ggtacgtgga tggcgtcgag	840
gtgcacaacg ccaaaaccaa gccgagggag gagcagttca actccactta ccgcgtcgtg	900
tccgtgctga cggtgctgca tcaggactgg ctgaacggga aggagtacaa gtgcaaagtg	960
tccaacaagg gacttcctag ctcaatcgaa aagaccatct cgaaagccaa gggacagccc	1020
cgggaacccc aagtgtatac cctgccaccg agccaggaag aaatgactaa gaaccaagtc	1080
tcattgactt gccttgtgaa gggcttctac ccatcggata tcgccgtgga atgggagtcc	1140
aacggccagc cggaaaacaa ctacaagacc acccctccgg tgctggactc agacggatcc	1200
ttcttcctct actcgcggct gaccgtggat aagagcagat ggcaggaggg aaatgtgttc	1260
agctgttctg tgatgcatga agccctgcac aaccactaca ctcagaagtc cctgtccctc	1320
tccctggga	1329

<210> 510

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 510

Lys	Ser	Ser	Gln	Ser	Leu	Leu	Asp	Ser	Gly	Asn	Gln	Lys	Asn	Phe	Leu
1				5					10					15	

Thr

<210> 511
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 511
Trp Ala Ser Thr Arg Glu Ser
1 5

<210> 512
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 512
Gln Asn Asp Tyr Ser Tyr Pro Tyr Thr
1 5

<210> 513
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 513
Ser Gln Ser Leu Leu Asp Ser Gly Asn Gln Lys Asn Phe
1 5 10

<210> 514
<211> 3
<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 514

Trp Ala Ser

1

<210> 515

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 515

Asp Tyr Ser Tyr Pro Tyr

1

5

<210> 516

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 516

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 Lys Ser Ser Gln Ser Leu Leu Asp Ser

20

25

30

Gly Asn Gln Lys Asn Phe Leu Thr Trp Tyr Gln Gln Lys Pro Gly Lys

35

40

45

Ala Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val

50

55

60

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr
65 70 75 80

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

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

Lys

<210> 517
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 517
gagatcgtcc tgactcagtc acccgctacc ctgagcctga gccctggcga gcgggctaca 60
ctgagctgta aatctagtca gtcactgctg gatagcggta atcagaagaa cttcctgacc 120
tggtatcagc agaagcccgg taaagcccct aagctgctga tctactgggc ctctactaga 180
gaatcaggcg tgccctctag gtttagcggg agcggtagtg gcaccgactt caccttcact 240
atctctagcc tgcagcccga ggatatcgct acctactact gtcagaacga ctatagctac 300
ccctacacct tcggtcaagg cactaaggct gagattaag 339

<210> 518
<211> 220
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 518
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 Lys Ser Ser Gln Ser Leu Leu Asp Ser	20	25	30
Gly Asn Gln Lys Asn Phe Leu Thr Trp Tyr Gln Gln Lys Pro Gly Lys	35	40	45
Ala Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val	50	55	60
Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr	65	70	75
Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Asn	85	90	95
Asp Tyr Ser Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile	100	105	110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp	115	120	125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn	130	135	140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu	145	150	155
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp	165	170	175
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr	180	185	190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser	195	200	205
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys	210	215	220

<210> 519
<211> 660
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 519
gagatcgtcc tgactcagtc acccgctacc ctgagcctga gccctggcga gcgggctaca 60
ctgagctgta aatctagtca gtcactgctg gatagcggta atcagaagaa cttcctgacc 120
tggtatcagc agaagcccgg taaagcccct aagctgctga tctactgggc ctctactaga 180
gaatcaggcg tgccctctag gtttagcggg agcggtagtg gcaccgactt caccttcact 240
atctctagcc tgcagcccga ggatatcgct acctactact gtcagaacga ctatagctac 300
ccctacacct tcgggtcaagg cactaaggct gagattaagc gtacgggtggc cgctcccagc 360
gtgttcatct tccccccag cgacgagcag ctgaagagcg gcaccgccag cgtggtgtgc 420
ctgctgaaca acttctaccc ccgggaggcc aaggtgcagt ggaaggtgga caacgccctg 480
cagagcggca acagccagga gagcgtcacc gagcaggaca gcaaggactc cacctacagc 540
ctgagcagca ccctgaccct gagcaaggcc gactacgaga agcataaggt gtacgcctgc 600
gaggtgaccc accagggcct gtccagcccc gtgaccaaga gcttcaacag gggcgagtgc 660

<210> 520
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 520
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 Lys Ser Ser Gln Ser Leu Leu Asp Ser
20 25 30

Gly Asn Gln Lys Asn Phe Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

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

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr
65 70 75 80

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

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

Lys

<210> 521
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 521
gagatcgtcc tgactcagtc acccgctacc ctgagcctga gccctggcga gcgggctaca 60
ctgagctgta aatctagtca gtcactgctg gatagcggta atcagaagaa cttcctgacc 120
tggtatcagc agaagcccgg tcaagcccct agactgctga tctactgggc ctctactaga 180
gaatcaggcg tgccctctag gtttagcggt agcggtagtgc gcaccgactt caccttcact 240
atctctagcc tggaagccga ggacgccgct acctactact gtcagaacga ctatagctac 300
ccctacacct tcgggtcaagg cactaaggctc gagattaag 339

<210> 522
<211> 220
<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 522

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 Lys Ser Ser Gln Ser Leu Leu Asp Ser
20 25 30

Gly Asn Gln Lys Asn Phe Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

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

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr
65 70 75 80

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

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

Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160

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

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr

180

185

190

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

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215 220

<210> 523

<211> 660

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 523

gagatcgtcc tgactcagtc acccgctacc ctgagcctga gccctggcga gcgggctaca 60

ctgagctgta aatctagtca gtcactgctg gatagcggta atcagaagaa cttcctgacc 120

tggtatcagc agaagcccgg tcaagcccct agactgctga tctactgggc ctctactaga 180

gaatcaggcg tgccctctag gtttagcggg agcggtagtg gcaccgactt caccttcact 240

atctctagcc tggaagccga ggacgccgct acctactact gtcagaacga ctatagctac 300

ccctacacct tcggtcaagg cactaaggct gagattaagc gtacgggtggc cgctcccagc 360

gtgttcatct tccccccag cgacgagcag ctgaagagcg gcaccgccag cgtggtgtgc 420

ctgctgaaca acttctaccc ccgggaggcc aaggtgcagt ggaaggtgga caacgccctg 480

cagagcggca acagccagga gagcgtcacc gagcaggaca gcaaggactc cacctacagc 540

ctgagcagca ccctgaccct gagcaaggcc gactacgaga agcataaggt gtacgcctgc 600

gaggtgaccc accagggcct gtccagcccc gtgaccaaga gcttcaacag gggcgagtgc 660

<210> 524

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 524
acctactgga tgcac 15

<210> 525
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 525
aatatctacc ccggcaccgg cggctctaac ttcgacgaga agtttaagaa t 51

<210> 526
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 526
tggaactaccg gcacaggcgc ctac 24

<210> 527
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 527
ggctacacct tcactaccta c 21

<210> 528
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 528
 taccctggca ccggcggc 18

<210> 529
 <211> 51
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 529
 aaatctagtc agtcactgct ggatagcggc aatcagaaga acttcctgac c 51

<210> 530
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 530
 tgggcctcta ctagagaatc a 21

<210> 531
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 531
 cagaacgact atagctaccc ctacacc 27

<210> 532
 <211> 39

<212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 532
 agtcagtcac tgctggatag cggtaatcag aagaacttc

39

<210> 533
 <211> 9
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 533
 tgggcctct

9

<210> 534
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 534
 gactatagct acccctac

18

<210> 535
 <211> 440
 <212> PRT
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

 <400> 535
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

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

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

Ala Val Ile Trp Tyr Asp Gly Ser Lys Arg Tyr Tyr Ala Asp Ser Val
50 55 60

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

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

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

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

Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
130 135 140

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
145 150 155 160

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

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys
180 185 190

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

Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala
210 215 220

Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 225 230 235 240

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 245 250 255

Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val
 260 265 270

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
 275 280 285

Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
 290 295 300

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly
 305 310 315 320

Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
 325 330 335

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr
 340 345 350

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
 355 360 365

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

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
 385 390 395 400

Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe
 405 410 415

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
 420 425 430

Ser Leu Ser Leu Ser Leu Gly Lys
435 440

<210> 536

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 536

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 Gln Ser Val Ser Ser Tyr
20 25 30

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

Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Ser Ser Asn Trp Pro Arg
85 90 95

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
210

<210> 537

<211> 447

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 537

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

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

Gly Gly Ile Asn Pro Ser Asn Gly Gly Thr Asn Phe Asn Glu Lys Phe
50 55 60

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

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

Ala Arg Arg Asp Tyr Arg Phe Asp Met Gly Phe Asp Tyr Trp Gly Gln
100 105 110

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

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

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

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

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

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

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

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

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

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

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

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

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys

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

 <210> 538
 <211> 218
 <212> PRT
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

 <400> 538
 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 Lys Gly Val Ser Thr Ser
 20 25 30

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

Arg Leu Leu Ile Tyr Leu Ala Ser Tyr Leu Glu Ser Gly Val 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 His Ser Arg
85 90 95

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

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

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

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

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

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

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

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 539

<211> 447

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 539

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

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

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

Gly Trp Ile Asn Thr Asp Ser Gly Glu Ser Thr Tyr Ala Glu Glu Phe
50 55 60

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

<210> 540

<211> 213

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 540

Glu Ile Val 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 Arg Ser Ser Val Ser Tyr Met
20 25 30

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

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

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

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

Phe Gly Gly Gly Thr Lys Leu 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
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<210> 541

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 541

Gly Tyr Thr Phe Thr Thr Tyr Trp Met His
 1 5 10

<210> 542

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<210> 601

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 601

Ser Tyr Trp Met Tyr
1 5

<210> 602

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 602

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

Asn

<210> 603
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 603
Asp Tyr Arg Lys Gly Leu Tyr Ala Met Asp Tyr
1 5 10

<210> 604
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 604
Gly Tyr Thr Phe Thr Ser Tyr
1 5

<210> 605
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 605
Asp Pro Asn Ser Gly Ser
1 5

<210> 606
<211> 120

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 606
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Tyr Trp Val Arg Gln Ala Arg Gly Gln Arg Leu Glu Trp Ile
35 40 45

Gly Arg Ile Asp Pro Asn Ser Gly Ser Thr Lys Tyr Asn Glu Lys Phe
50 55 60

Lys Asn 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 Asp Tyr Arg Lys Gly Leu Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 607
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 607
gaagtgcagc tgggtgcagtc aggcgccgaa gtgaagaaac ccggcgctac cgtgaagatt

60

agctgtaaag tctcaggcta caccttcact agctactgga tgtactgggt ccgacaggct 120
agagggcaaa gactggagtg gatcggtaga atcgacccta atagcggctc tactaagtat 180
aacgagaagt ttaagaatag gttcactatt agtagggata actctaagaa caccctgtac 240
ctgcagatga atagcctgag agccgaggac accgccgtct actactgcgc tagagactat 300
agaaagggcc tgtacgctat ggactactgg ggtcaaggca ctaccgtgac cgtgtcttca 360

<210> 608
<211> 446
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 608
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Tyr Trp Val Arg Gln Ala Arg Gly Gln Arg Leu Glu Trp Ile
35 40 45

Gly Arg Ile Asp Pro Asn Ser Gly Ser Thr Lys Tyr Asn Glu Lys Phe
50 55 60

Lys Asn 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 Asp Tyr Arg Lys Gly Leu Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

<210> 609

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 609

Lys Ala Ser Gln Asp Val Gly Thr Ala Val Ala
1 5 10

<210> 610

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 610
Trp Ala Ser Thr Arg His Thr
1 5

<210> 611
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 611
Gln Gln Tyr Asn Ser Tyr Pro Leu Thr
1 5

<210> 612
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 612
Ser Gln Asp Val Gly Thr Ala
1 5

<210> 613
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 613
Trp Ala Ser
1

<210> 614
<211> 6

<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 614

Tyr Asn Ser Tyr Pro Leu

1 5

<210> 615

<211> 1338

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 615

gaagtgcagc tggatgcagtc aggcgccgaa gtgaagaaac ccggcgctac cgtgaagatt 60

agctgtaaag tctcaggcta caccttcact agctactgga tgtactgggt ccgacaggct 120

agagggcaaa gactggagtg gatcggtaga atcgacccta atagcggctc tactaagtat 180

aacgagaagt ttaagaatag gttcactatt agtagggata actctaagaa caccctgtac 240

ctgcagatga atagcctgag agccgaggac accgccgtct actactgcgc tagagactat 300

agaaagggcc tgtacgctat ggactactgg ggtcaaggca ctaccgtgac cgtgtcttca 360

gctagcacta agggcccgtc cgtgttcccc ctggcacctt gtagccggag cactagcgaa 420

tccaccgctg ccctcggctg cctgggtcaag gattacttcc cggagcccgt gaccgtgtcc 480

tggaacagcg gagccctgac ctccggagtg cacaccttcc ccgctgtgct gcagagctcc 540

gggctgtact cgctgtcgtc ggtgggtcacg gtgccttcat ctagcctggg taccaagacc 600

tacacttgca acgtggacca caagccttcc aacactaagg tggacaagcg cgtcgaatcg 660

aagtacggcc caccgtgccc gccttgtccc gcgccggagt tcctcggcgg tccctcggtc 720

tttctgttcc caccgaagcc caaggacact ttgatgattt cccgcacccc tgaagtgaca 780

tgcgtggctg tggacgtgtc acaggaagat ccggaggtgc agttcaattg gtacgtggat 840

ggcgtcgagg tgcacaacgc caaaaccaag ccgagggagg agcagttcaa ctccacttac 900

cgcgctcgtgt ccgtgctgac ggtgctgcat caggactggc tgaacgggaa ggagtacaag 960
 tgcaaagtgt ccaacaaggg acttcctagc tcaatcgaaa agaccatctc gaaagccaag 1020
 ggacagcccc gggaaccca agtgtatacc ctgccaccga gccaggaaga aatgactaag 1080
 aaccaagtct cattgacttg ccttgtgaag ggcttctacc catcggatat cgccgtggaa 1140
 tgggagtcca acggccagcc ggaaaacaac tacaagacca cccctccggt gctggactca 1200
 gacggatcct tcttcctcta ctgcgggctg accgtggata agagcagatg gcaggaggga 1260
 aatgtgttca gctgttctgt gatgcatgaa gccctgcaca accactacac tcagaagtcc 1320
 ctgtccctct ccctggga 1338

<210> 616

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 616

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

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

Tyr Trp Ala Ser Thr Arg His 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 Glu Ala
 65 70 75 80

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

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

<210> 617
 <211> 321
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 617
 gctattcagc tgactcagtc acctagtagc ctgagcgcta gtgtgggcga tagagtgact 60
 atcacctgta aagcctctca ggacgtgggc accgccgtgg cctggatatct gcagaagcct 120
 ggtcaatcac ctgagctgct gatctactgg gcctctacta gacacaccgg cgtgccctct 180
 aggttttagcg gtagcggtag tggcaccgac ttcaccttca ctatctcttc actggaagcc 240
 gaggacgccg ctacctacta ctgtcagcag tataatagct accccctgac cttcggtcaa 300
 ggcactaagg tcgagattaa g 321

<210> 618
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 618
 Ala 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 Lys Ala Ser Gln Asp Val Gly Thr Ala
 20 25 30

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

Tyr Trp Ala Ser Thr Arg His 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 Glu Ala
65 70 75 80

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

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
210

<210> 619

<211> 642

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 619

gctattcagc tgactcagtc acctagtagc ctgagcgcta gtgtgggcga tagagtgact 60
 atcacctgta aagcctctca ggacgtgggc accgccgtgg cctggatatct gcagaagcct 120
 ggtcaatcac ctgagctgct gatctactgg gcctctacta gacacaccgg cgtgccctct 180
 aggttttagcg gtagcggtag tggcaccgac ttcaccttca ctatctcttc actggaagcc 240
 gaggacgccg ctacctacta ctgtcagcag tataatagct accccctgac cttcgggtcaa 300
 ggactaagg tcgagattaa gcgtacggtg gccgctccca gcgtgttcat cttccccccc 360
 agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gcctgctgaa caacttctac 420
 ccccgggagg ccaaggtgca gtggaaggtg gacaacgccc tgcagagcgg caacagccag 480
 gagagcgtca ccgagcagga cagcaaggac tccacctaca gcctgagcag caccctgacc 540
 ctgagcaagg ccgactacga gaagcataag gtgtacgcct gcgaggtgac ccaccagggc 600
 ctgtccagcc ccgtgaccaa gagcttcaac aggggcgagt gc 642

<210> 620

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 620

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

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30

Trp Met Tyr Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Asn Ser Gly Ser Thr Lys Tyr Asn Glu Lys Phe
 50 55 60

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

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

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

Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 621
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 621
gaagtgcagc tgggtgcagtc aggcgccgaa gtgaagaaac ccggcgctac cgtgaagatt 60
agctgtaaag tctcaggcta caccttcact agctactgga tgtactgggt ccgacaggct 120
accggccaag gcctggagtg gatgggtaga atcgacccta atagcggctc tactaagtat 180
aacgagaagt ttaagaatag agtgactatc accgccgata agtctactag caccgcctat 240
atggaactgt ctagcctgag atcagaggac accgccgtct actactgcgc tagagactat 300
agaaagggcc tgtacgctat ggactactgg ggtcaaggca ctaccgtgac cgtgtcttca 360

<210> 622
<211> 446
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 622
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Ser Tyr

20

25

30

Trp Met Tyr Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Asn Ser Gly Ser Thr Lys Tyr Asn Glu Lys Phe
 50 55 60

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

<210> 623
<211> 1338
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 623
gaagtgcagc tggatgcagtc aggcgccgaa gtgaagaaac ccggcgctac cgtgaagatt 60
agctgtaaaag tctcaggcta caccttcact agctactgga tgtactgggt ccgacaggct 120
accggtcaag gcctggagtg gatgggtaga atcgacccta atagcggctc tactaagtat 180
aacgagaagt ttaagaatag agtgactatc accgccgata agtctactag caccgcctat 240
atggaactgt ctagcctgag atcagaggac accgccgtct actactgcgc tagagactat 300
agaaagggcc tgtacgctat ggactactgg ggtcaaggca ctaccgtgac cgtgtcttca 360
gctagcacta agggcccgtc cgtgttcccc ctggcacctt gtagccggag cactagcgaa 420
tccaccgtg ccctcggctg cctgggtcaag gattacttcc cggagcccgt gaccgtgtcc 480
tggaacagcg gagccctgac ctccggagtg cacaccttcc ccgctgtgct gcagagctcc 540
gggctgtact cgctgtcgtc ggtgggtcacg gtgccttcat ctagcctggg taccaagacc 600
tacacttgca acgtggacca caagccttcc aacactaagg tggacaagcg cgtcgaatcg 660
aagtacggcc caccgtgccc gccttgtccc gcgccggagt tcctcggcgg tccctcggtc 720
tttctgttcc caccgaagcc caaggacact ttgatgattt cccgcacccc tgaagtgaca 780
tgcgtggctc tggacgtgtc acaggaagat ccggaggtgc agttcaattg gtacgtggat 840
ggcgtcgagg tgcacaacgc caaaaccaag ccgagggagg agcagttcaa ctccacttac 900
cgcgtcgtgt ccgtgctgac ggtgctgcat caggactggc tgaacgggaa ggagtacaag 960
tgcaaagtgt ccaacaaggg acttcctagc tcaatcgaaa agaccatctc gaaagccaag 1020
ggacagcccc gggaaccca agtgtatacc ctgccaccga gccaggaaga aatgactaag 1080
aaccaagtct cattgacttg cttgtgaag ggcttctacc catcgatat cgccgtggaa 1140
tgggagtcca acggccagcc ggaaaacaac tacaagacca cccctccggt gctggactca 1200
gacggatcct tcttcctcta ctgcggctg accgtggata agagcagatg gcaggaggga 1260

aatgtgttca gctgttctgt gatgcatgaa gccctgcaca accactacac tcagaagtcc 1320
ctgtccctct ccctggga 1338

<210> 624
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 624
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

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

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

Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 625
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 625

gacgtcgtga tgactcagtc acccctgagc ctgcccgtga ccctggggca gcccgcctct	60
attagctgta aagcctctca ggacgtgggc accgccgtgg cctgggtatca gcagaagcca	120
gggcaagccc ctagactgct gatctactgg gcctctacta gacacaccgg cgtgccctct	180
aggttttagcg gtagcggtag tggcaccgag ttcaccctga ctatctcttc actgcagccc	240
gacgacttcg ctacctacta ctgtcagcag tataatagct accccctgac cttcggtcaa	300
ggcactaagg tcgagattaa g	321

<210> 626

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 626

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

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

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

Tyr	Trp	Ala	Ser	Thr	Arg	His	Thr	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
			50				55				60				

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

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

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
 210

<210> 627
 <211> 642
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 627
 gacgtcgtga tgactcagtc acccctgagc ctgcccgtga ccctggggca gcccgcctct 60
 attagctgta aagcctctca ggacgtgggc accgccgtgg cctggtatca gcagaagcca 120
 gggcaagccc ctagactgct gatctactgg gcctctacta gacacaccgg cgtgccctct 180
 aggttttagcg gtagcggtag tggcaccgag ttcaccctga ctatctcttc actgcagccc 240
 gacgacttcg ctacctacta ctgtcagcag tataatagct acccctgac cttcgggtcaa 300
 ggactaaggg tcgagattaa gcgtacggtg gccgctccca gcgtgttcat cttccccccc 360

agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gcctgctgaa caacttctac	420
ccccgggagg ccaaggtgca gtggaagggtg gacaacgccc tgcagagcgg caacagccag	480
gagagcgtca ccgagcagga cagcaaggac tccacctaca gcctgagcag caccctgacc	540
ctgagcaagg ccgactacga gaagcataag gtgtacgcct gcgaggtgac ccaccagggc	600
ctgtccagcc ccgtgaccaa gagcttcaac aggggcgagt gc	642

<210> 628
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

<400> 628	
agctactgga tgtac	15

<210> 629
 <211> 51
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

<400> 629	
agaatcgacc ctaatagcgg ctctactaag tataacgaga agtttaagaa t	51

<210> 630
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

<400> 630	
gactatagaa agggcctgta cgctatggac tac	33

<210> 631
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 631
 ggctacacct tcactagcta c 21

 <210> 632
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 632
 gaccctaata gcggtctt 18

 <210> 633
 <211> 33
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 633
 aaagcctctc aggacgtggg caccgccgtg gcc 33

 <210> 634
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 634

tgggcctcta ctagacacac c 21

<210> 635
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 635
cagcagtata atagctaccc cctgacc 27

<210> 636
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 636
tctcaggacg tgggcaccgc c 21

<210> 637
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 637
tgggcctct 9

<210> 638
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 638

tataatagct accccctg

18

<210> 639

<211> 448

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 639

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 Ser
20 25 30

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys

355

360

365

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

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

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

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

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

<210> 640

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 640

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

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

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
210

<210> 641

<211> 450

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 641

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

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

Ser Ser Ile Tyr Pro Ser Gly Gly Ile Thr Phe Tyr Ala Asp Thr 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 Ile Lys Leu Gly Thr Val Thr Thr Val Asp Tyr Trp Gly Gln
 100 105 110

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Gly Lys
450

<210> 642
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 642
Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

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

Met Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

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

Ser Thr Arg Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly Gln
100 105 110

Pro Lys Ala Asn Pro Thr Val Thr Leu Phe Pro Pro Ser Ser Glu Glu
115 120 125

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro Val Lys

145		150		155		160									
Ala	Gly	Val	Glu	Thr	Thr	Lys	Pro	Ser	Lys	Gln	Ser	Asn	Asn	Lys	Tyr
				165					170					175	

Ala	Ala	Ser	Ser	Tyr	Leu	Ser	Leu	Thr	Pro	Glu	Gln	Trp	Lys	Ser	His
			180					185					190		

Arg	Ser	Tyr	Ser	Cys	Gln	Val	Thr	His	Glu	Gly	Ser	Thr	Val	Glu	Lys
		195					200					205			

Thr	Val	Ala	Pro	Thr	Glu	Cys	Ser
	210					215	

<210> 643
 <211> 451
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 643															
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	Arg	Tyr
			20					25					30		

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Pro Gly Lys
450

<210> 644

<211> 215

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 644

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Val Ser Ser Ser
20 25 30

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

Ile Tyr Asp Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

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

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

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

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

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

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

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

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

Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 645
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 645
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Asp Thr Phe Ser Thr Tyr
20 25 30

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

Gly Gly Ile Ile Pro Ile Phe Gly Lys Ala His Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Lys Phe His Phe Val Ser Gly Ser Pro Phe Gly Met Asp Val
100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 646
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 646

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 Gln Ser Val Ser Ser Tyr
20 25 30

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

Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Thr
85 90 95

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

<210> 647

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 647

Gly Tyr Thr Phe Thr Ser Tyr Trp Met Tyr
1 5 10

<210> 648

<400> 648

000

<210> 649

<400> 649
000

<210> 650

<400> 650
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<210> 651

<400> 651
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<210> 701

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 701

Asn Tyr Gly Met Asn
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<210> 702

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 702

Trp Ile Asn Thr Asp Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe Lys
1 5 10 15

Gly

<210> 703

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 703

Asn Pro Pro Tyr Tyr Tyr Gly Thr Asn Asn Ala Glu Ala Met Asp Tyr
1 5 10 15

<210> 704

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 704

Gly Phe Thr Leu Thr Asn Tyr

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<210> 705

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 705

Asn Thr Asp Thr Gly Glu

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<210> 706

<211> 125

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 706

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

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10

15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Leu Thr Asn Tyr

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25

30

Gly Met Asn Trp Val Arg Gln Ala Arg Gly Gln Arg Leu Glu Trp Ile

35

40

45

Gly Trp Ile Asn Thr Asp Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe

50

55

60

Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr

65

70

75

80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Arg Asn Pro Pro Tyr Tyr Tyr Gly Thr Asn Asn Ala Glu Ala Met
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 707
<211> 375
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 707
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tcgtgcaagg catccggatt caccctcacc aattacggga tgaactgggt cagacaggcc 120
cgggggtcaac ggctggagtg gatcggatgg attaacaccg acaccgggga gcctacctac 180
gcggacgatt tcaagggacg gttcgtgttc tccctcgaca cctccgtgtc caccgcctac 240
ctccaaatct cctcactgaa agcggaggac accgccgtgt actattgcgc gaggaacccg 300
ccctactact acggaaccaa caacgccgaa gccatggact actggggcca gggcaccact 360
gtgactgtgt ccagc 375

<210> 708
<211> 375
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 708
caggtgcagc tgggtgcagtc tggcgccgaa gtgaagaaac ctggcgctc cgtgaagggtg 60
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aggggcccagc ggctggaatg gatcggctgg atcaacaccg acaccggcga gcctacctac 180
gccgacgact tcaagggcag attcgtgttc tccctggaca cctccgtgtc caccgcctac 240

ctgcagatct ccagcctgaa ggccgaggat accgccgtgt actactgcgc ccggaacccc 300
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 gtgaccgtgt cctct 375

<210> 709
 <211> 451
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 709
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

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

Gly Met Asn Trp Val Arg Gln Ala Arg Gly Gln Arg Leu Glu Trp Ile
 35 40 45

Gly Trp Ile Asn Thr Asp Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
 50 55 60

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

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

Ala Arg Asn Pro Pro Tyr Tyr Tyr Gly Thr Asn Asn Ala Glu Ala Met
 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr
 115 120 125

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

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

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

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

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

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

Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe 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

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

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe 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 Gly Leu Pro Ser Ser
 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 Gln 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 Arg Leu Thr
405 410 415

Val Asp Lys Ser Arg Trp Gln Glu 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 Leu Gly
450

<210> 710
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 710
Ser Ser Ser Gln Asp Ile Ser Asn Tyr Leu Asn
1 5 10

<210> 711
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 711
Tyr Thr Ser Thr Leu His Leu
1 5

<210> 712
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 712
Gln Gln Tyr Tyr Asn Leu Pro Trp Thr
1 5

<210> 713
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 713
Ser Gln Asp Ile Ser Asn Tyr
1 5

<210> 714
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 714
Tyr Thr Ser
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<210> 715
<211> 6
<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 715

Tyr Tyr Asn Leu Pro Trp

1 5

<210> 716

<211> 1353

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 716

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tcgtgcaagg catccggatt caccctcacc aattacggga tgaactgggt cagacaggcc	120
cgggggtcaac ggctggagtg gatcggatgg attaacaccg acaccgggga gcctacctac	180
gcggacgatt tcaagggacg gttcgtgttc tccctcgaca cctccgtgtc caccgcctac	240
ctccaaatct cctcactgaa agcggaggac accgccgtgt actattgcgc gaggaacccg	300
ccctactact acggaaccaa caacgccgaa gccatggact actggggcca gggcaccact	360
gtgactgtgt ccagcgcgtc cactaagggc ccgtccgtgt tccccctggc accttgtagc	420
cggagcacta gcgaatccac cgctgccctc ggctgcctgg tcaaggatta cttcccggag	480
cccgtgaccg tgtcctggaa cagcggagcc ctgacctcg gagtgcacac cttccccgct	540
gtgctgcaga gctccgggct gtactcgctg tcgtcggtgg tcacggtgcc ttcatttagc	600
ctgggtacca agacctacac ttgcaacgtg gaccacaagc cttccaacac taaggtggac	660
aagcgcgtcg aatcgaagta cggcccaccg tgcccgcctt gtcccgcgcc ggagttcctc	720
ggcgggtccct cggctctttct gttcccaccg aagcccaagg acactttgat gatttcccgc	780
accctgaag tgacatgcgt ggtcgtggac gtgtcacagg aagatccgga ggtgcagttc	840
aattggtacg tggatggcgt cgaggtgcac aacgcaaaa ccaagccgag ggaggagcag	900

ttcaactcca cttaccgcgt cgtgtccgtg ctgacggtgc tgcacagga ctggctgaac	960
gggaaggagt acaagtgcaa agtgtccaac aagggaacttc ctagctcaat cgaaaagacc	1020
atctcgaaag ccaagggaca gccccgggaa cccaagtgt ataccctgcc accgagccag	1080
gaagaaatga ctaagaacca agtctcattg acttgccctg tgaagggtt ctacccatcg	1140
gatatcgccg tggaatggga gtccaacggc cagccggaaa acaactacaa gaccaccct	1200
ccggtgctgg actcagacgg atccttcttc ctctactcgc ggctgaccgt ggataagagc	1260
agatggcagg agggaaatgt gttcagctgt tctgtgatgc atgaagccct gcacaaccac	1320
tacactcaga agtccctgtc cctctccctg gga	1353

<210> 717

<211> 1353

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 717

caggtgcagc tggtgcagtc tggcgccgaa gtgaagaaac ctggcgcttc cgtgaagggtg	60
tcctgcaagg cctctggctt caccctgacc aactacggca tgaactgggt gcgacaggcc	120
aggggccagc ggctggaatg gatcggctgg atcaacaccg acaccggcga gcctacctac	180
gccgacgact tcaagggcag attcgtgttc tccctggaca cctccgtgtc caccgcctac	240
ctgcagatct ccagcctgaa ggccgaggat accgccgtgt actactgcgc ccggaacccc	300
ccttactact acggcaccaa caacgccgag gccatggact attggggcca gggcaccacc	360
gtgaccgtgt cctctgcttc taccaagggg cccagcgtgt tccccctggc cccctgctcc	420
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cccgtgaccg tgtcctggaa cagcggagcc ctgaccagcg gcgtgcacac cttccccgcc	540
gtgctgcaga gcagcggcct gtacagcctg agcagcgtgg tgaccgtgcc cagcagcagc	600
ctgggcacca agacctacac ctgtaacgtg gaccacaagc ccagcaacac caaggtggac	660
aagagggtgg agagcaagta cggccccacc tgccccccct gccagcccc cgagttcctg	720
ggcggaccca gcgtgttcct gttccccccc aagcccaagg acaccctgat gatcagcaga	780

acccccgagg tgacctgtgt ggtggtggac gtgtcccagg aggaccccga ggtccagttc 840
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 gaggagatga ccaagaacca ggtgtccctg acctgtctgg tgaagggtt ctaccaagc 1140
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 agatggcagg agggcaacgt ctttagctgc tccgtgatgc acgaggccct gcacaaccac 1320
 tacaccaga agagcctgag cctgtccctg ggc 1353

<210> 718

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 718

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 Ser Ser Gln Asp Ile Ser Asn Tyr
 20 25 30

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

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

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

Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Asn Leu Pro Trp
85 90 95

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

<210> 719
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 719
gatattcaga tgactcagtc acctagtagc ctgagcgcta gtgtgggcga tagagtgact 60
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ggcgaatcac ctgagctgct gatctactac actagcaccg tgcacctggg cgtgccctct 180
aggttttagcg gtagcggtag tggcaccgag ttcaccctga ctatctctag cctgcagccc 240
gacgacttcg ctacctacta ctgtcagcag tactataacc tggcctggac cttcgggtcaa 300
ggcactaagg tcgagattaa g 321

<210> 720
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 720
gacatccaga tgaccagtc cccctccagc ctgtctgctt ccgtgggcga cagagtgacc 60
atcacctgtt cctccagcca ggacatctcc aactacctga actggtatct gcagaagccc 120
ggccagtccc ctgagctgct gatctactac acctccaccg tgcacctggg cgtgccctcc 180
agattttccg gctctggctc tggcaccgag tttaccctga ccatcagctc cctgcagccc 240
gacgacttcg ccacctacta ctgccagcag tactacaacc tggcctggac cttcggccag 300

ggcaccaagg tggaaatcaa g

321

<210> 721

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 721

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 Ser Ser Gln Asp Ile Ser Asn Tyr
20 25 30

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

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

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

Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Asn Leu Pro Trp
85 90 95

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
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<210> 722
<211> 642
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 722
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ggccaatcac ctgagctgct gatctactac actagcacc tgcacctggg cgtgccctct 180
aggttttagcg gtagcggtag tggcaccgag ttcaccctga ctatctctag cctgcagccc 240
gacgacttcg ctacctacta ctgtcagcag tactataacc tgccctggac cttcgggtcaa 300
ggcactaagg tcgagattaa gcgtacggtg gccgctccca gcgtgttcat cttccccccc 360
agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gcctgctgaa caacttctac 420
ccccgggagg ccaaggtgca gtggaagggtg gacaacgccc tgcagagcgg caacagccag 480
gagagcgtca ccgagcagga cagcaaggac tccacctaca gcctgagcag caccctgacc 540
ctgagcaagg ccgactacga gaagcataag gtgtacgcct gcgaggtgac ccaccagggc 600
ctgtccagcc ccgtgaccaa gagcttcaac aggggcgagt gc 642

<210> 723
<211> 642

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 723
gacatccaga tgaccagtc cccctccagc ctgtctgctt ccgtgggcga cagagtgacc 60
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ggccagtccc ctgagctgct gatctactac acctccaccc tgcacctggg cgtgccctcc 180
agattttccg gctctggctc tggcaccgag tttaccctga ccatcagctc cctgcagccc 240
gacgacttcg ccacctacta ctgccagcag tactacaacc tgccctggac cttcggccag 300
ggcaccaagg tggaaatcaa gcgtacggtg gccgctccca gcgtgttcat cttcccccca 360
agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gtctgctgaa caacttctac 420
cccagggagg ccaaggtgca gtggaaggtg gacaacgccc tgcaagcgga caacagccag 480
gagagcgtca ccgagcagga cagcaaggac tccacctaca gcctgagcag caccctgacc 540
ctgagcaagg ccgactacga gaagcacaag gtgtacgcct gtgaggtgac ccaccagggc 600
ctgtccagcc ccgtgaccaa gagcttcaac aggggcgagt gc 642

<210> 724
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 724
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

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

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

Gly Trp Ile Asn Thr Asp Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
50 55 60

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

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

Ala Arg Asn Pro Pro Tyr Tyr Tyr Gly Thr Asn Asn Ala Glu Ala Met
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 725
<211> 375
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 725
caggtgcagc tggtgcagtc aggcgccgaa gtgaagaaac ccggcgctag tgtgaaagtc 60
agctgtaaag ctagtggctt caccctgact aactacggga tgaactgggt ccgccaggcc 120
ccaggtcaag gcctcgagt gatgggctgg attaacaccg acaccggcga gcctacctac 180
gccgacgact ttaagggcag attcgtgttt agcctggaca ctagtgtgtc taccgcctac 240
ctgcagatct ctagcctgaa ggccgaggac accgccgtct actactgcgc tagaaacccc 300
ccctactact acggcactaa caacgccgag gctatggact actgggggtca aggcactacc 360
gtgaccgtgt ctagc 375

<210> 726
<211> 375
<212> DNA
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 726

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cctggacagg gcctggaatg gatgggctgg atcaacaccg acaccggcga gcctacctac      180
gccgacgact tcaagggcag attcgtgttc tccctggaca cctccgtgtc caccgcctac      240
ctgcagatct ccagcctgaa ggccgaggat accgccgtgt actactgcgc ccggaacccc      300
ccttactact acggcaccaa caacgccgag gccatggact attggggcca gggcaccacc      360
gtgaccgtgt cctct                                          375
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<210> 727

<211> 451

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 727

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

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

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

Gly Trp Ile Asn Thr Asp Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
          50          55          60

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

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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85

90

95

Ala Arg Asn Pro Pro Tyr Tyr Tyr Gly Thr Asn Asn Ala Glu Ala Met
 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr
 115 120 125

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

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

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

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

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

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

Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe 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

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

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe 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 Gly Leu Pro Ser Ser
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 Gln 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 Arg Leu Thr
405 410 415

Val Asp Lys Ser Arg Trp Gln Glu 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 Leu Gly
450

<210> 728

<211> 1353

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 728

caggtgcagc	tggtgcagtc	aggcgccgaa	gtgaagaaac	ccggcgctag	tgtgaaagtc	60
agctgtaaaag	ctagtggcctt	caccctgact	aactacggga	tgaactgggt	ccgccaggcc	120
ccaggtcaag	gcctcgagt	gatgggctgg	attaacaccg	acaccggcga	gcctacctac	180
gccgacgact	ttaagggcag	attcgtgttt	agcctggaca	ctagtgtgtc	taccgcctac	240
ctgcagatct	ctagcctgaa	ggccgaggac	accgccgtct	actactgcgc	tagaaaacccc	300
ccctactact	acggcactaa	caacgccgag	gctatggact	actgggggtca	aggcactacc	360
gtgaccgtgt	ctagcgctag	cactaagggc	ccgtccgtgt	tccccctggc	accttgtagc	420
cggagcacta	gcgaatccac	cgctgccctc	ggctgcctgg	tcaaggatta	cttcccggag	480
cccgtgaccg	tgtcctggaa	cagcggagcc	ctgacctccg	gagtgcacac	cttccccgct	540
gtgctgcaga	gctccgggct	gtactcgctg	tcgtcggtgg	tcacggtgcc	ttcatctagc	600
ctgggtacca	agacctacac	ttgcaacgtg	gaccacaagc	cttccaacac	taaggtggac	660
aagcgcgtcg	aatcgaagta	cggcccaccg	tgcccgcctt	gtcccgcgcc	ggagttcctc	720
ggcgggtccct	cgggtctttct	gttcccaccg	aagcccaagg	acactttgat	gattttccgc	780
acccctgaag	tgacatgcgt	ggtcgtggac	gtgtcacagg	aagatccgga	ggtgcagttc	840
aattgggtacg	tggtatggcgt	cgaggtgcac	aacgccaaaa	ccaagccgag	ggaggagcag	900
ttcaactcca	cttaccgcgt	cgtgtccgtg	ctgacggtgc	tgcatcagga	ctggctgaac	960
gggaaggagt	acaagtgcaa	agtgtccaac	aagggaacttc	ctagctcaat	cgaaaagacc	1020
atctcgaaaag	ccaagggaca	gccccgggaa	ccccaagtgt	ataccctgcc	accgagccag	1080
gaagaaatga	ctaagaacca	agtctcattg	acttgccctg	tgaagggttt	ctacccatcg	1140
gatatcgccg	tggaatggga	gtccaacggc	cagccggaaa	acaactacaa	gaccaccctt	1200
ccggtgctgg	actcagacgg	atccttcttc	ctctactcgc	ggctgaccgt	ggataagagc	1260
agatggcagg	agggaaatgt	gttcagctgt	tctgtgatgc	atgaagccct	gcacaaccac	1320
tacactcaga	agtcctgtc	cctctccctg	gga			1353

<210> 729

<211> 1353

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 729

caggtgcagc tgggtgcagtc tggcgccgaa gtgaagaaac ctggcgccctc cgtgaagggtg	60
tcctgcaagg cctctggctt caccctgacc aactacggca tgaactgggt gcgacaggcc	120
cctggacagg gcctggaatg gatgggctgg atcaacaccg acaccggcga gcctacctac	180
gccgacgact tcaagggcag attcgtgttc tccctggaca cctccgtgtc caccgcctac	240
ctgcagatct ccagcctgaa ggccgaggat accgccgtgt actactgcgc ccggaacccc	300
ccttactact acggcaccaa caacgccgag gccatggact attggggcca gggcaccacc	360
gtgaccgtgt cctctgcttc taccaagggg cccagcgtgt tccccctggc cccctgctcc	420
agaagcacca gcgagagcac agccgccctg ggctgcctgg tgaaggacta cttccccgag	480
cccgtgaccg tgtcctggaa cagcggagcc ctgaccagcg gcgtgcacac cttccccgcc	540
gtgctgcaga gcagcggcct gtacagcctg agcagcgtgg tgaccgtgcc cagcagcagc	600
ctgggcacca agacctacac ctgtaacgtg gaccacaagc ccagcaacac caaggtggac	660
aagaggggtg agagcaagta cggccccacc tgccccccct gccagcccc cgagttcctg	720
ggcggacca gcgtgttcct gttccccccc aagcccaagg acaccctgat gatcagcaga	780
acccccgagg tgacctgtgt ggtggtggac gtgtcccagg aggaccccga ggtccagttc	840
aactggtacg tggacggcgt ggaggtgcac aacgccaaga ccaagcccag agaggagcag	900
tttaacagca cctaccgggt ggtgtccgtg ctgaccgtgc tgcaccagga ctggctgaac	960
ggcaaagagt acaagtgtaa ggtctccaac aagggcctgc caagcagcat cgaaaagacc	1020
atcagcaagg ccaagggcca gcctagagag ccccaggtct acaccctgcc acccagccaa	1080
gaggagatga ccaagaacca ggtgtccctg acctgtctgg tgaagggtt ctaccaagc	1140
gacatcgccg tggagtggga gagcaacggc cagcccgaga acaactacaa gaccaccccc	1200
ccagtgctgg acagcgacgg cagcttcttc ctgtacagca ggctgaccgt ggacaagtcc	1260
agatggcagg agggcaacgt ctttagctgc tccgtgatgc acgaggccct gcacaaccac	1320
tacaccaga agagcctgag cctgtccctg ggc	1353

<210> 730

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 730
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 Ser Ser Gln Asp Ile Ser Asn Tyr
20 25 30

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

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

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

Glu Asp Ala Ala Tyr Tyr Phe Cys Gln Gln Tyr Tyr Asn Leu Pro Trp
85 90 95

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

<210> 731
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 731
gatattcaga tgactcagtc acctagtagc ctgagcgcta gtgtgggcga tagagtgact 60
atcacctgta gctctagtca ggatatctct aactacctga actggtatca gcagaagccc 120

ggtaaagccc ctaagctgct gatctactac actagcaccc tgcacctggg aatccccctt 180
 aggttttagcg gtagcggcta cggcaccgac ttcaccctga ctattaacaa tatcgagtca 240
 gaggacgccg cctactactt ctgtcagcag tactataacc tggcctggac cttcgggtcaa 300
 ggcaactaagg tcgagattaa g 321

<210> 732
 <211> 321
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 732
 gacatccaga tgaccagtc cccctccagc ctgtctgctt ccgtgggcga cagagtgacc 60
 atcacctgtt cctccagcca ggacatctcc aactacctga actggtatca gcagaagccc 120
 ggcaaggccc ccaagctgct gatctactac acctccaccc tgcacctggg catccccctt 180
 agatttctccg gctctggcta cggcaccgac ttcaccctga ccatcaacaa catcgagtcc 240
 gaggacgccg cctactactt ctgccagcag tactacaacc tggcctggac cttcggccag 300
 ggcaaccaagg tggaaatcaa g 321

<210> 733
 <211> 214
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 733
 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 Ser Ser Gln Asp Ile Ser Asn Tyr
 20 25 30

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

35

40

45

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

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

Glu Asp Ala Ala Tyr Tyr Phe Cys Gln Gln Tyr Tyr Asn Leu Pro Trp
 85 90 95

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
 210

<210> 734

<211> 642

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 734

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gatattcaga tgactcagtc acctagtagc ctgagcgcta gtgtgggcga tagagtgact      60
atcacctgta gctctagtca ggatatctct aactacctga actggtatca gcagaagccc      120
ggtaaagccc ctaagctgct gatctactac actagcaccc tgcacctggg aatccccccct      180
aggttttagcg gtagcggcta cggcaccgac ttcaccctga ctattaacaa tatcgagtca      240
gaggacgccg cctactactt ctgtcagcag tactataacc tgccctggac cttcgggtcaa      300
ggcactaagg tcgagattaa gcgtacggtg gccgctccca gcgtgttcat cttccccccc      360
agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gcctgctgaa caacttctac      420
ccccgggagg ccaaggtgca gtggaagggtg gacaacgccc tgcagagcgg caacagccag      480
gagagcgtca ccgagcagga cagcaaggac tccacctaca gcctgagcag caccctgacc      540
ctgagcaagg ccgactacga gaagcataag gtgtacgcct gcgaggtgac ccaccagggc      600
ctgtccagcc ccgtgaccaa gagcttcaac aggggcgagt gc                        642
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<210> 735

<211> 642

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 735

```
gacatccaga tgaccagtc cccctccagc ctgtctgctt ccgtgggcga cagagtgacc      60
atcacctgtt cctccagcca ggacatctcc aactacctga actggtatca gcagaagccc      120
ggcaaggccc ccaagctgct gatctactac acctccaccc tgcacctggg catccccccct      180
agattctccg gctctggcta cggcaccgac ttcaccctga ccatcaacaa catcgagtcc      240
gaggacgccg cctactactt ctgccagcag tactacaacc tgccctggac cttcggccag      300
ggcaccaagg tggaaatcaa gcgtacggtg gccgctccca gcgtgttcat cttcccccca      360
agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gtctgctgaa caacttctac      420
```

cccagggagg ccaaggtgca gtggaaggtg gacaacgccc tgcagagcgg caacagccag	480
gagagcgtca ccgagcagga cagcaaggac tccacctaca gcctgagcag caccctgacc	540
ctgagcaagg ccgactacga gaagcacaag gtgtacgcct gtgaggtgac ccaccagggc	600
ctgtccagcc ccgtgaccaa gagcttcaac aggggcgagt gc	642

<210> 736
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

<400> 736	
aattacggga tgaac	15

<210> 737
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

<400> 737	
aactacggca tgaac	15

<210> 738
 <211> 51
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

<400> 738	
tggattaaca ccgacaccgg ggagcctacc tacgcggacg atttcaaggg a	51

<210> 739
 <211> 51

<212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 739
 tggatcaaca ccgacaccgg cgagcctacc tacgccgacg acttcaaggg c 51

<210> 740
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 740
 aacccgccct actactacgg aaccaacaac gccgaagcca tggactac 48

<210> 741
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 741
 aacccccctt actactacgg caccaacaac gccgaggcca tggactat 48

<210> 742
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 742
 ggattcaccc tcaccaatta c 21

<210> 743
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 743
ggcttcaccc tgaccaacta c 21

<210> 744
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 744
aacaccgaca ccggggag 18

<210> 745
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 745
aacaccgaca ccggcgag 18

<210> 746
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 746
agctctagtc aggatatctc taactacctg aac 33

<210> 747
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 747
tcctccagcc aggacatctc caactacctg aac 33

<210> 748
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 748
tacactagca ccctgcacct g 21

<210> 749
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 749
tacacctcca ccctgcacct g 21

<210> 750
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 750
cagcagtact ataacctgcc ctggacc 27

<210> 751
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 751
cagcagtact acaacctgcc ctggacc 27

<210> 752
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 752
agtcaggata tctctaacta c 21

<210> 753
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 753
agccaggaca tctccaacta c 21

<210> 754
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 754
tacactagc

9

<210> 755
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 755
tacacctcc

9

<210> 756
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 756
tactataacc tgccctgg

18

<210> 757
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 757
tactacaacc tgccctgg

18

<210> 758

<211> 15
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 758
 aactacggga tgaac 15

<210> 759
 <211> 51
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 759
 tggattaaca ccgacaccgg cgagcctacc tacgccgacg actttaaggg c 51

<210> 760
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 760
 aacccccct actactacgg cactaacaac gccgaggcta tggactac 48

<210> 761
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

 <400> 761
 ggcttcaccc tgactaacta c 21

<210> 762
<211> 447
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 762
Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
1 5 10 15

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

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

Gly Glu Ile Asn His Arg Gly Ser Thr Asn Ser Asn Pro Ser Leu Lys
50 55 60

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

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

Phe Gly Tyr Ser Asp Tyr Glu Tyr Asn Trp Phe Asp Pro Trp Gly Gln
100 105 110

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

370

375

380

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

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

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

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

<210> 763

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 763

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 Gln Ser Ile Ser Ser Tyr
 20 25 30

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

Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
 50 55 60

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Leu
 85 90 95

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
210

<210> 764

<211> 446

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 764

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

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

Gly Val Asn Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Leu

35

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45

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

Ser Arg Leu Ser Ile Ser Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
 65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Arg Tyr Tyr Cys Ala
 85 90 95

Arg Glu Gly Asp Val Ala Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu
 100 105 110

Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
 115 120 125

Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu
 130 135 140

Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly
 145 150 155 160

Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser
 165 170 175

Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu
 180 185 190

Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr
 195 200 205

Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
 210 215 220

Cys Pro Pro Cys Pro Ala Pro Glu Leu 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 His Glu Asp Pro Glu Val
260 265 270

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275 280 285

Lys Pro Arg Glu Glu Gln Tyr 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 Ala Leu Pro Ala Pro 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 Arg Asp Glu Leu 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 Lys Leu Thr Val Asp Lys Ser Arg Trp
405 410 415

Gln Gln 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 Pro Gly Lys
435 440 445

<210> 765

<211> 220

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 765

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Gln Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Asn Gly
20 25 30

Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Ser Pro Lys Leu Leu Val Tyr Phe Ala Ser Thr Arg Asp Ser Gly Val
50 55 60

Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr Phe Cys Leu Gln
85 90 95

His Phe Gly Thr Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
100 105 110

Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
165 170 175

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr

180

185

190

Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 195 200 205

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215 220

<210> 766

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 766

Gly Phe Thr Leu Thr Asn Tyr Gly Met Asn
 1 5 10

<210> 767

<400> 767

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<210> 800

<400> 800
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<210> 801
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 801
Ser Tyr Asn Met His
1 5

<210> 802
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 802
Asp Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 803

<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 803
Val Gly Gly Ala Phe Pro Met Asp Tyr
1 5

<210> 804
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 804
Gly Tyr Thr Phe Thr Ser Tyr
1 5

<210> 805
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 805
Tyr Pro Gly Asn Gly Asp
1 5

<210> 806
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 806

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Asp Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Gly Gly Ala Phe Pro Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 807

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 807

caggtgcagc tgggtgcagtc aggcgccgaa gtgaagaaac ccggctctag cgtgaaagtt 60

tcttgtaaag ctagtggcta caccttcact agctataata tgcactgggt tcgccaggcc 120

ccagggcaag gcctcgagt gatgggcgat atctaccccg ggaacggcga cactagttat 180

aatcagaagt ttaagggtag agtcactatc accgccgata agtctactag caccgtctat 240

atggaactga gttccctgag gtctgaggac accgccgtct actactgcgc tagagtgggc 300

ggagccttcc ctatggacta ctgggggtcaa ggcactaccg tgaccgtgtc tagc 354

<210> 808

<211> 444

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 808

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Asp Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Gly Gly Ala Phe Pro Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly
130 135 140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn

145		150		155		160
Ser Gly Ala Leu Thr	Ser Gly Val His Thr Phe Pro Ala Val Leu Gln					
	165			170		175
Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser						
	180			185		190
Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser						
	195			200		205
Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys						
	210			215		220
Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu						
	225			230		235
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu						
	245			250		255
Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln						
	260			265		270
Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys						
	275			280		285
Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu						
	290			295		300
Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys						
	305			310		315
Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys						
	325			330		335
Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser						
	340			345		350
Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys						
	355			360		365

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
 370 375 380

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
 385 390 395 400

Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln
 405 410 415

Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
 420 425 430

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly
 435 440

<210> 809

<211> 1332

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 809

caggtgcagc tgggtgcagtc aggcgccgaa gtgaagaaac ccggctctag cgtgaaagtt	60
tcttgtaaag ctagtggcta caccttcact agctataata tgcactgggt tcgccaggcc	120
ccagggaag gcctcgagt gatgggcgat atctaccccg ggaacggcga cactagttat	180
aatcagaagt ttaagggtag agtcactatc accgccgata agtctactag caccgtctat	240
atggaactga gttccctgag gtctgaggac accgccgtct actactgcgc tagagtgggc	300
ggagccttcc ctatggacta ctgggggtcaa ggcactaccg tgaccgtgtc tagcgctagc	360
actaagggcc cgtccgtgtt ccccctggca cttgttagcc ggagcactag cgaatccacc	420
gctgccctcg gctgcctggt caaggattac ttcccgagc ccgtgaccgt gtcctggaac	480
agcggagccc tgacctccgg agtgcacacc ttccccgctg tgctgcagag ctccgggctg	540
tactcgctgt cgtcgggtgt cacggtgcct tcatctagcc tgggtaccaa gacctacact	600

tgcaacgtgg accacaagcc ttccaacact aaggtggaca agcgcgtcga atcgaagtac	660
ggcccaccgt gcccgcttg tcccgcgccc gagttcctcg gcggtccctc ggtctttctg	720
ttcccaccga agcccaagga cactttgatg atttcccga cccctgaagt gacatgcgtg	780
gtcgtggacg tgtcacagga agatccggag gtgcagttca attggtacgt ggatggcgtc	840
gaggtgcaca acgccaaaac caagccgagg gaggagcagt tcaactccac ttaccgcgtc	900
gtgtccgtgc tgacggtgct gcatcaggac tggctgaacg ggaaggagta caagtcaaaa	960
gtgtccaaca agggacttcc tagctcaatc gaaaagacca tctcgaaagc caagggacag	1020
ccccgggaac cccaagtgtg taccctgcc ccgagccagg aagaaatgac taagaaccaa	1080
gtctcattga cttgccttgt gaagggttc taccatcgg atatcgccgt ggaatgggag	1140
tccaacggcc agccggaaaa caactacaag accaccctc cgggtgctgga ctgagacgga	1200
tccttcttcc tctactcgcg gctgaccgtg gataagagca gatggcagga gggaaatgtg	1260
ttcagctgtt ctgtgatgca tgaagccctg cacaaccact acactcagaa gtcctgtcc	1320
ctctccctgg ga	1332

<210> 810

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 810

Arg	Ala	Ser	Glu	Ser	Val	Glu	Tyr	Tyr	Gly	Thr	Ser	Leu	Met	Gln
1				5					10				15	

<210> 811

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 811

Ala Ala Ser Asn Val Glu Ser
1 5

<210> 812
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 812
Gln Gln Ser Arg Lys Asp Pro Ser Thr
1 5

<210> 813
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 813
Ser Glu Ser Val Glu Tyr Tyr Gly Thr Ser Leu
1 5 10

<210> 814
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 814
Ala Ala Ser
1

<210> 815
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 815
Ser Arg Lys Asp Pro Ser
1 5

<210> 816
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 816
Ala 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 Arg Ala Ser Glu Ser Val Glu Tyr Tyr
20 25 30

Gly Thr Ser Leu Met Gln Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
35 40 45

Lys Leu Leu Ile Tyr Ala Ala Ser Asn Val Glu Ser Gly Val Pro Ser
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 Pro Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Ser Arg
85 90 95

Lys Asp Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 817
<211> 333
<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 817

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gctattcagc tgactcagtc acctagtagc ctgagcgcta gtgtgggcga tagagtgact      60
atcacctgta gagctagtga atcagtcgag tactacggca ctagcctgat gcagtggatat    120
cagcagaagc ccgggaaagc ccctaagctg ctgatctacg ccgcctctaa cgtggaatca    180
ggcgtgccct ctaggttttag cggtacgggt agtggcaccg acttcaccct gactatctct    240
agcctgcagc ccgaggactt cgctacctac ttctgtcagc agtctaggaa ggaccctagc    300
accttcggcg gaggcactaa ggtcgagatt aag                                   333
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<210> 818

<211> 218

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 818

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Ala 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 Arg Ala Ser Glu Ser Val Glu Tyr Tyr
          20          25          30

Gly Thr Ser Leu Met Gln Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
          35          40          45

Lys Leu Leu Ile Tyr Ala Ala Ser Asn Val Glu Ser Gly Val Pro Ser
          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 Pro Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Ser Arg
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85

90

95

Lys Asp Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 100 105 110

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 115 120 125

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
 130 135 140

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
 145 150 155 160

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
 165 170 175

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
 180 185 190

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
 195 200 205

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 819

<211> 654

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 819

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atcacctgta gagctagtga atcagtcgag tactacggca ctagcctgat gcagtggtat 120

cagcagaagc ccgggaaagc ccctaagctg ctgatctacg ccgcctctaa cgtggaatca 180

ggcgtgccct ctaggttttag cggtagcggg agtggcaccg acttcaccct gactatctct 240

agcctgcagc ccgaggactt cgctacctac ttctgtcagc agtctaggaa ggaccctagc 300
 accttcggcg gaggcactaa ggtcgagatt aagcgtaggg tggccgctcc cagcgtgttc 360
 atcttccccc ccagcgacga gcagctgaag agcggcaccg ccagcgtggg gtgcctgctg 420
 aacaacttct acccccggga ggccaaggtg cagtggaagg tggacaacgc cctgcagagc 480
 ggcaacagcc aggagagcgt caccgagcag gacagcaagg actccaccta cagcctgagc 540
 agcaccctga ccctgagcaa ggccgactac gagaagcata aggtgtacgc ctgcgaggtg 600
 acccaccagg gcctgtccag ccccgtagcc aagagcttca acaggggcga gtgc 654

<210> 820
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 820
 Asp Ile Tyr Pro Gly Gln Gly Asp Thr Ser Tyr Asn Gln Lys Phe Lys
 1 5 10 15

Gly

<210> 821
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 821
 Tyr Pro Gly Gln Gly Asp
 1 5

<210> 822
 <211> 118
 <212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 822

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Asp Ile Tyr Pro Gly Gln Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Ala Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Gly Gly Ala Phe Pro Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 823

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 823

caggtgcagc tgggtgcagtc aggcgccgaa gtgaagaaac ccggcgctag tgtgaaagtt

60

agctgtaaag ctagtggcta tacttttact tcttataata tgcactgggt ccgccaggcc 120
ccaggtcaag gcctcgagtg gatcggcgat atctaccccg gtcaaggcga cacttcctat 180
aatcagaagt ttaagggtag agctactatg accgccgata agtctacttc taccgtctat 240
atggaactga gttccctgag gtctgaggac accgccgtct actactgcgc tagagtgggc 300
ggagccttcc caatggacta ctgggggtcaa ggcaccctgg tcaccgtgtc tagc 354

<210> 824

<211> 444

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 824

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Asp Ile Tyr Pro Gly Gln Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Ala Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Gly Gly Ala Phe Pro Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly
130 135 140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
145 150 155 160

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
165 170 175

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
180 185 190

Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser
195 200 205

Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys
210 215 220

Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu
225 230 235 240

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
245 250 255

Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln
260 265 270

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
275 280 285

Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu
290 295 300

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
305 310 315 320

Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys
325 330 335

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
340 345 350

Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
355 360 365

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
370 375 380

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
385 390 395 400

Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln
405 410 415

Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
420 425 430

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly
435 440

<210> 825

<211> 1332

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

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<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

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20 25 30

Gly Thr Ser Leu Met Gln Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro

35

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45

Lys Leu Leu Ile Tyr Ala Ala Ser Asn Val 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 Ser Arg
 85 90 95

Lys Asp Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105 110

<210> 827

<211> 333

<212> DNA

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
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cagcagaagc ccggtcaacc ccctaagctg ctgatctacg ccgcctctaa cgtggaatca 180

ggcgtgcccc ataggttttag cggtagcggg agtggcaccg acttcaccct gactattagt 240

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<223> /note="Description of Artificial Sequence: Synthetic
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Gly Thr Ser Leu Met Gln Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Tyr Ala Ala Ser Asn Val 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 Ser Arg
85 90 95

Lys Asp Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
100 105 110

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
115 120 125

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
130 135 140

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
145 150 155 160

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
165 170 175

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
180 185 190

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
195 200 205

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
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 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

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 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 830
 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
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Ser Leu Arg Leu Ser Cys Ala Ala Ala Ser Gly Phe Thr Phe Ser Ser
20 25 30

Tyr Asp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Asp Trp
35 40 45

Val Ser Thr Ile Ser Gly Gly Gly Thr Tyr Thr Tyr Tyr Gln Asp Ser
50 55 60

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu
65 70 75 80

Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Ser Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser
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<210> 831

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 831

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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Arg Arg Tyr
20 25 30

Leu Asn Trp Tyr His Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Gly Ala Ser Thr 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
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Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Ser His Ser Ala Pro Leu
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Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 832

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Ser Leu Arg Leu Tyr Cys Val Ala Ser Gly Phe Thr Phe Ser Gly Ser
20 25 30

Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
35 40 45

Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser
50 55 60

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu
65 70 75 80

Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Lys Lys Tyr Tyr Val Gly Pro Ala Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly
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polypeptide"

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Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
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Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln His Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
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Tyr Tyr Ser Ser Pro Leu Thr Phe Gly Gly Gly Thr Lys Ile Glu Val
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<213> Homo sapiens

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Gln Ser Met His Ile Asp Ala Thr Leu Tyr Thr Glu Ser Asp Val His

20

25

30

Pro Ser Cys Lys Val Thr Ala Met Lys Cys Phe Leu Leu Glu Leu Gln
 35 40 45

Val Ile Ser Leu Glu Ser Gly Asp Ala Ser Ile His Asp Thr Val Glu
 50 55 60

Asn Leu Ile Ile Leu Ala Asn Asn Ser Leu Ser Ser Asn Gly Asn Val
 65 70 75 80

Thr Glu Ser Gly Cys Lys Glu Cys Glu Glu Leu Glu Glu Lys Asn Ile
 85 90 95

Lys Glu Phe Leu Gln Ser Phe Val His Ile Val Gln Met Phe Ile Asn
 100 105 110

Thr Ser

<210> 1002

<211> 170

<212> PRT

<213> Homo sapiens

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Ile Thr Cys Pro Pro Pro Met Ser Val Glu His Ala Asp Ile Trp Val
 1 5 10 15

Lys Ser Tyr Ser Leu Tyr Ser Arg Glu Arg Tyr Ile Cys Asn Ser Gly
 20 25 30

Phe Lys Arg Lys Ala Gly Thr Ser Ser Leu Thr Glu Cys Val Leu Asn
 35 40 45

Lys Ala Thr Asn Val Ala His Trp Thr Thr Pro Ser Leu Lys Cys Ile
 50 55 60

Arg Asp Pro Ala Leu Val His Gln Arg Pro Ala Pro Pro Ser Thr Val
 65 70 75 80

Thr Thr Ala Gly Val Thr Pro Gln Pro Glu Ser Leu Ser Pro Ser Gly
85 90 95

Lys Glu Pro Ala Ala Ser Ser Pro Ser Ser Asn Asn Thr Ala Ala Thr
100 105 110

Thr Ala Ala Ile Val Pro Gly Ser Gln Leu Met Pro Ser Lys Ser Pro
115 120 125

Ser Thr Gly Thr Thr Glu Ile Ser Ser His Glu Ser Ser His Gly Thr
130 135 140

Pro Ser Gln Thr Thr Ala Lys Asn Trp Glu Leu Thr Ala Ser Ala Ser
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His Gln Pro Pro Gly Val Tyr Pro Gln Gly
165 170

<210> 1003

<211> 114

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<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic
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Asn Trp Val Asn Val Ile Ser Asp Leu Lys Lys Ile Glu Asp Leu Ile
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Gln Ser Met His Ile Asp Ala Thr Leu Tyr Thr Glu Ser Asp Val His
20 25 30

Pro Ser Cys Lys Val Thr Ala Met Lys Cys Phe Leu Leu Glu Leu Gln
35 40 45

Val Ile Ser Leu Glu Ser Gly Asp Ala Ser Ile His Asp Thr Val Glu
50 55 60

Asn Leu Ile Ile Leu Ala Asn Asp Ser Leu Ser Ser Asn Gly Asn Val
65 70 75 80

Thr Glu Ser Gly Cys Lys Glu Cys Glu Glu Leu Glu Glu Lys Asn Ile
85 90 95

Lys Glu Phe Leu Gln Ser Phe Val His Ile Val Gln Met Phe Ile Asn
100 105 110

Thr Ser

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Lys Ser Tyr Ser Leu Tyr Ser Arg Glu Arg Tyr Ile Cys Asn Ser Gly
20 25 30

Phe Lys Arg Lys Ala Gly Thr Ser Ser Leu Thr Glu Cys Val Leu Asn
35 40 45

Lys Ala Thr Asn Val Ala His Trp Thr Thr Pro Ser Leu Lys Cys Ile
50 55 60

Arg Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro
65 70 75 80

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
85 90 95

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
100 105 110

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
115 120 125

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
130 135 140

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
145 150 155 160

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
165 170 175

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
180 185 190

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
195 200 205

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
210 215 220

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
225 230 235 240

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
245 250 255

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
260 265 270

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
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Lys Ser Leu Ser Leu Ser Pro Gly Lys
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<210> 1005
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          20         25         30

Pro Ser Cys Lys Val Thr Ala Met Lys Cys Phe Leu Leu Glu Leu Gln
          35         40         45

Val Ile Ser Leu Glu Ser Gly Asp Ala Ser Ile His Asp Thr Val Glu
50          55         60

Asn Leu Ile Ile Leu Ala Asn Asn Ser Leu Ser Ser Asn Gly Asn Val
65          70         75         80

Thr Glu Ser Gly Cys Lys Glu Cys Glu Glu Leu Glu Glu Lys Asn Ile
          85         90         95

Lys Glu Phe Leu Gln Ser Phe Val His Ile Val Gln Met Phe Ile Asn
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Thr Ser

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<210> 1006
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Lys Ser Tyr Ser Leu Tyr Ser Arg Glu Arg Tyr Ile Cys Asn Ser Gly	20	25	30
Phe Lys Arg Lys Ala Gly Thr Ser Ser Leu Thr Glu Cys Val Leu Asn	35	40	45
Lys Ala Thr Asn Val Ala His Trp Thr Thr Pro Ser Leu Lys Cys Ile	50	55	60
Arg Asp Pro Ala Leu Val His Gln Arg Pro Ala Pro Pro	65	70	75

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<400> 1007	
cgtagaggctc cgggtgcccgt cagtgggcag agcgcacatc gccacagtc cccgagaagt	60
tggggggagg ggtcggcaat tgaaccggtg cctagagaag gtggcgcggg gtaaactggg	120
aaagtgatgt cgtgtactgg ctccgccttt ttcccagggg tgggggagaa ccgtatataa	180
gtgcagtagt cgccgtgaac gttctttttc gcaacggggtt tgccgccaga acacaggtaa	240
gtgccgtgtg tggttccgc gggcctggcc tctttacggg ttatggcct tgcgtgcctt	300
gaattacttc cacctggctg cagtacgtga ttcttgatcc cgagcttcgg gttggaagtg	360
ggtgggagag ttcgaggcct tgcgcttaag gagccccttc gcctcgtgct tgagttgagg	420
cctggcctgg gcgctggggc cgccgcgtgc gaatctggtg gcaccttcgc gcctgtctcg	480
ctgctttcga taagtctcta gccatttaaa atttttgatg acctgctgcg acgctttttt	540
tctggcaaga tagtcttgta aatgcggggc aagatctgca cactgggtatt tcggtttttg	600
gggcccgcggg cggcgacggg gcccggtgcgt cccagcgcac atgttcggcg aggcggggcc	660
tgcgagcgcg gccaccgaga atcggacggg ggtagtctca agctggccgg cctgctctgg	720

tgccctggcct cgcgccgccg tgtatcgccc cgccctgggc ggcaaggctg gcccggtcgg	780
caccagttgc gtgagcggaa agatggccgc ttcccgcccc tgctgcaggg agctcaaaat	840
ggaggacgcg gcgctcggga gagcgggcgg gtgagtcacc cacacaaagg aaaagggcct	900
ttccgtcctc agccgtcgct tcatgtgact ccacggagta ccgggcgccg tccaggcacc	960
tcgattagtt ctcgagcttt tggagtacgt cgtcttttagg ttggggggag gggttttatg	1020
cgatggagtt tccccacact gagtgggtgg agactgaagt taggccagct tggcacttga	1080
tgtaattctc cttggaattt gccctttttg agtttggatc ttggttcatt ctcaagcctc	1140
agacagtggg tcaaagtttt tttcttccat ttcaggtgtc gtga	1184

<210> 1008
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1008
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro
 20

<210> 1009
 <211> 63
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1009
 atggccctgc ctgtgacagc cctgctgctg cctctggctc tgctgctgca tgccgctaga 60
 ccc 63

<210> 1010
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1010
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccc 63

<210> 1011
<211> 45
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1011
Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
1 5 10 15

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
20 25 30

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40 45

<210> 1012
<211> 135
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1012
accacgacgc cagcgccgcg accaccaaca ccggcgccca ccatcgcgtc gcagcccctg 60
tccctgcgcc cagaggcgtg ccggccagcg gcggggggcg cagtgcacac gaggggggctg 120

gacttcgcct gtgat

135

<210> 1013

<211> 230

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1013

Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
1 5 10 15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
20 25 30

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
35 40 45

Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
50 55 60

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65 70 75 80

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
85 90 95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
100 105 110

Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
115 120 125

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
130 135 140

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
145 150 155 160

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
165 170 175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
180 185 190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
195 200 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
210 215 220

Leu Ser Leu Gly Lys Met
225 230

<210> 1014
<211> 690
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1014
gagagcaagt acggccctcc ctgccccct tgccctgccc ccgagttcct gggcggaccc 60
agcgtgttcc tgttcccccc caagcccaag gacaccctga tgatcagccg gacccccgag 120
gtgacctgtg tgggtggtgga cgtgtcccag gaggaccccg aggtccagtt caactggtac 180
gtggacggcg tggaggtgca caacgccaag accaagcccc gggaggagca gttcaatagc 240
acctaccggg tgggtgtccgt gctgaccgtg ctgcaccagg actggctgaa cggcaaggaa 300
tacaagtgtg aggtgtccaa caagggcctg cccagcagca tcgagaaaac catcagcaag 360
gccaagggcc agcctcggga gccccaggtg tacaccctgc cccctagcca agaggagatg 420
accaagaacc aggtgtccct gacctgcctg gtgaagggtt tctaccccag cgacatcgcc 480
gtggagtggg agagcaacgg ccagcccag aacaactaca agaccacccc ccctgtgctg 540
gacagcgacg gcagcttctt cctgtacagc cggctgaccg tggacaagag ccggtggcag 600

gagggcaacg tcttttagctg ctccgtgatg cacgaggccc tgcacaacca ctacaccag 660
aagagcctga gcctgtccct gggcaagatg 690

<210> 1015
<211> 282
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1015
Arg Trp Pro Glu Ser Pro Lys Ala Gln Ala Ser Ser Val Pro Thr Ala
1 5 10 15

Gln Pro Gln Ala Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro Ala
20 25 30

Thr Thr Arg Asn Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu Lys
35 40 45

Glu Lys Glu Glu Gln Glu Glu Arg Glu Thr Lys Thr Pro Glu Cys Pro
50 55 60

Ser His Thr Gln Pro Leu Gly Val Tyr Leu Leu Thr Pro Ala Val Gln
65 70 75 80

Asp Leu Trp Leu Arg Asp Lys Ala Thr Phe Thr Cys Phe Val Val Gly
85 90 95

Ser Asp Leu Lys Asp Ala His Leu Thr Trp Glu Val Ala Gly Lys Val
100 105 110

Pro Thr Gly Gly Val Glu Glu Gly Leu Leu Glu Arg His Ser Asn Gly
115 120 125

Ser Gln Ser Gln His Ser Arg Leu Thr Leu Pro Arg Ser Leu Trp Asn
130 135 140

Ala Gly Thr Ser Val Thr Cys Thr Leu Asn His Pro Ser Leu Pro Pro

145		150		155		160
Gln Arg Leu Met	Ala Leu Arg Glu Pro	Ala Ala Gln Ala Pro	Val Lys			
	165	170	175			
Leu Ser Leu Asn	Leu Leu Ala Ser	Ser Asp Pro Pro	Glu Ala Ala Ser			
	180	185	190			
Trp Leu Leu Cys	Glu Val Ser Gly	Phe Ser Pro Pro	Asn Ile Leu Leu			
	195	200	205			
Met Trp Leu Glu	Asp Gln Arg Glu	Val Asn Thr Ser	Gly Phe Ala Pro			
	210	215	220			
Ala Arg Pro Pro	Pro Gln Pro Gly	Ser Thr Thr Phe	Trp Ala Trp Ser			
	225	230	235	240		
Val Leu Arg Val	Pro Ala Pro Pro	Ser Pro Gln Pro	Ala Thr Tyr Thr			
	245	250	255			
Cys Val Val Ser	His Glu Asp Ser	Arg Thr Leu Leu	Asn Ala Ser Arg			
	260	265	270			
Ser Leu Glu Val	Ser Tyr Val Thr	Asp His				
	275	280				

<210> 1016
 <211> 847
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1016	
aggtggcccg aaagtcccaa ggcccaggca tctagtgttc ctactgcaca gccccaggca	60
gaaggcagcc tagccaaagc tactactgca cctgccacta cgcgcaatac tggccgtggc	120
ggggaggaga agaaaaagga gaaagagaaa gaagaacagg aagagaggga gaccaagacc	180
cctgaatgtc catcccatac ccagccgctg ggcgtctatc tcttgactcc cgcagtagac	240

gacttgtggc ttagagataa ggccaccttt acatgtttcg tcgtgggctc tgacctgaag	300
gatgcccatt tgacttggga ggttgccgga aaggtaccca caggggggggt tgaggaaggg	360
ttgctggagc gccattccaa tggctctcag agccagcact caagactcac ctttccgaga	420
tccctgtgga acgccgggac ctctgtcaca tgtactctaa atcatcctag cctgccccca	480
cagcgtctga tggcccttag agagccagcc gccagggcac cagttaagct tagcctgaat	540
ctgctcgcca gtagtgatcc cccagaggcc gccagctggc tcttatgcga agtgtccggc	600
tttagccgc ccaacatctt gctcatgtgg ctggaggacc agcgagaagt gaacaccagc	660
ggcttcgctc cagcccggcc cccaccccag ccgggttcta ccacattctg ggcctggagt	720
gtcttaaggg tcccagcacc acctagcccc cagccagcca catacacctg tgttgtgtcc	780
catgaagata gcaggaccct gctaaatgct tctaggagtc tggaggtttc ctacgtgact	840
gaccatt	847

<210> 1017
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1017
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10

<210> 1018
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1018 ggtggcggag gttctggagg tggaggttcc	30
--	----

<210> 1019
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1019
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys
20

<210> 1020
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1020
atctacatct gggcgccctt ggccgggact tgtgggggtcc ttctcctgtc actggttatc 60
accctttact gc 72

<210> 1021
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1021
atctacattt gggcccctct ggctggtact tgcgggggtcc tgctgctttc actcgtgatc 60
actctttact gt 72

<210> 1022
<211> 42

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1022
Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
1 5 10 15

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
20 25 30

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
35 40

<210> 1023
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1023
aaacggggca gaaagaaact cctgtatata ttcaaacaac catttatgag accagtacaa 60
actactcaag aggaagatgg ctgtagctgc cgatttccag aagaagaaga aggaggatgt 120
gaactg 126

<210> 1024
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1024
aagcgcggtc ggaagaagct gctgtacatc tttaagcaac ccttcatgag gcctgtgcag 60
actactcaag aggaggacgg ctgttcatgc cggttcccag aggaggagga aggcggctgc 120

gaactg

126

<210> 1025

<211> 48

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1025

Gln Arg Arg Lys Tyr Arg Ser Asn Lys Gly Glu Ser Pro Val Glu Pro
1 5 10 15

Ala Glu Pro Cys Arg Tyr Ser Cys Pro Arg Glu Glu Glu Gly Ser Thr
20 25 30

Ile Pro Ile Gln Glu Asp Tyr Arg Lys Pro Glu Pro Ala Cys Ser Pro
35 40 45

<210> 1026

<211> 123

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1026

aggagtaaga ggagcaggct cctgcacagt gactacatga acatgactcc ccgccgcccc 60

gggcccaccc gcaagcatta ccagccctat gccccaccac gcgacttcgc agcctatcgc 120

tcc 123

<210> 1027

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1027

Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1028

<211> 336

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1028

agagtgaagt tcagcaggag cgcagacgcc cccgcgtaca agcagggcca gaaccagctc 60
tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120
cgggaccctg agatgggggg aaagccgaga aggaagaacc ctgaggaagg cctgtacaat 180
gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240
cggagggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300
tacgacgccc ttcacatgca ggccctgccc cctcgc 336

<210> 1029
 <211> 336
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1029
 cgcggtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc 60
 tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga 120
 cgggacccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac 180
 gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc 240
 agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc 300
 tatgacgctc ttcacatgca ggccctgccg cctcgg 336

<210> 1030
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1030
 Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
 1 5 10 15
 Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
 20 25 30
 Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
 35 40 45
 Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
 50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1031
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1031
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60
tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120
cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180
gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240
cggagggggca agggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300
tacgacgccc ttcacatgca ggccctgccc cctcgc 336

<210> 1032
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1032
Gly Gly Gly Gly Ser
1 5

<210> 1033
<211> 30

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1033
ggtggcggag gttctggagg tggaggttcc

30

<210> 1034
<211> 150
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1034
Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro Trp Asn Pro Pro Thr
1 5 10 15

Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly Asp Asn Ala Thr Phe
20 25 30

Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe Val Leu Asn Trp Tyr
35 40 45

Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu Ala Ala Phe Pro Glu
50 55 60

Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe Arg Val Thr Gln Leu
65 70 75 80

Pro Asn Gly Arg Asp Phe His Met Ser Val Val Arg Ala Arg Arg Asn
85 90 95

Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser Leu Ala Pro Lys Ala
100 105 110

Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg Val Thr Glu Arg Arg
115 120 125

Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser Pro Arg Pro Ala Gly
 130 135 140

Gln Phe Gln Thr Leu Val
 145 150

<210> 1035
 <211> 450
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1035
 cccggatggt ttctggactc tccggatcgc ccgtggaatc ccccaacctt ctcaccggca 60
 ctcttggttg tgactgaggg cgataatgcg accttcacgt gtcggttctc caacacctcc 120
 gaatcattcg tgctgaactg gtaccgcatg agcccgtaa accagaccga caagctcgcc 180
 gcgtttccgg aagatcggtc gcaaccggga caggattgtc gggtccgcgt gactcaactg 240
 ccgaatggca gagacttcca catgagcgtg gtccgcgcta ggcgaaacga ctccgggacc 300
 tacctgtgcg gagccatctc gctggcgcct aaggcccaaa tcaaagagag cttgagggcc 360
 gaactgagag tgaccgagcg cagagctgag gtgccaaactg cacatccatc cccatcgctt 420
 cggcctgcgg ggcagtttca gaccctggtc 450

<210> 1036
 <211> 394
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1036
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro
20 25 30

Trp Asn Pro Pro Thr Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly
35 40 45

Asp Asn Ala Thr Phe Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe
50 55 60

Val Leu Asn Trp Tyr Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu
65 70 75 80

Ala Ala Phe Pro Glu Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe
85 90 95

Arg Val Thr Gln Leu Pro Asn Gly Arg Asp Phe His Met Ser Val Val
100 105 110

Arg Ala Arg Arg Asn Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser
115 120 125

Leu Ala Pro Lys Ala Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg
130 135 140

Val Thr Glu Arg Arg Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser
145 150 155 160

Pro Arg Pro Ala Gly Gln Phe Gln Thr Leu Val Thr Thr Thr Pro Ala
165 170 175

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
180 185 190

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
195 200 205

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
210 215 220

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys

225		230		235		240
Lys Arg Gly Arg	Lys Lys Leu Leu Tyr	Ile Phe Lys Gln Pro Phe Met				
	245	250				255
Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe						
	260	265				270
Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg						
	275	280				285
Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn						
	290	295				300
Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg						
305		310		315		320
Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro						
	325		330			335
Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala						
	340		345			350
Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His						
	355		360			365
Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp						
	370		375			380
Ala Leu His Met Gln Ala Leu Pro Pro Arg						
385		390				

<210> 1037
 <211> 1182
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1037
atggccctcc ctgtcactgc cctgcttctc cccctcgcac tcctgctcca cgccgctaga 60
ccacccggat ggtttctgga ctctccggat cgcccgtgga atccccaac cttctcaccg 120
gcactcttgg ttgtgactga gggcgataat gcgaccttca cgtgctcggt ctccaacacc 180
tccgaatcat tcgtgctgaa ctggtaccgc atgagcccggt caaaccagac cgacaagctc 240
gccgcgtttc cggaagatcg gtcgcaaccg ggacaggatt gtcggttccg cgtgactcaa 300
ctgccgaatg gcagagactt ccacatgagc gtgggtccgcg ctaggcgaaa cgactccggg 360
acctacctgt gcggagccat ctcgctggcg cctaaggccc aaatcaaaga gagcttgagg 420
gccgaactga gaggtagcga gcgcagagct gaggtgcaa ctgcacatcc atccccatcg 480
cctcggcctg cggggcagtt tcagaccctg gtcacgacca ctccggcgcc gcgcccaccg 540
actccggccc caactatcgc gagccagccc ctgtcgtgga ggccggaagc atgccgcctt 600
gccgccggag gtgctgtgca taccggggga ttggacttcg catgcgacat ctacatttgg 660
gctcctctcg ccggaacttg tggcgtgctc cttctgtccc tggatcatcac cctgtactgc 720
aagcggggtc ggaaaaagct tctgtacatt ttcaagcagc ctttcatgag gcccgtagaa 780
accaccagg aggaggacgg ttgctcctgc cggttccccg aagaggaaga aggaggttgc 840
gagctgcgcg tgaagttctc ccggagcgcc gacgccccg cctataagca gggccagaac 900
cagctgtaca acgaactgaa cctgggacgg cggaagagt acgatgtgct ggacaagcgg 960
cgcgggccggg accccgaaat gggcggggaag cctagaagaa agaaccctca ggaaggcctg 1020
tataacgagc tgcagaagga caagatggcc gaggcctact ccgaaattgg gatgaaggga 1080
gagcggcgga ggggaaagg gcacgacggc ctgtaccaag gactgtccac cgccaccaag 1140
gacacatacg atgccctgca catgcaggcc cttccccctc gc 1182

<210> 1038

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<220>
<221> SITE
<222> (1)..(40)
<223> /note="This sequence may encompass 1-10 'Gly Gly Gly Ser'
repeating units"

<400> 1038
Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
20 25 30

Gly Gly Gly Ser Gly Gly Gly Ser
35 40

<210> 1039
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1039
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1040
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1040
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 1041
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1041
Gly Gly Gly Ser
1

<210> 1042
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1042
Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly
1 5 10 15

Ser

<210> 1043
<211> 5000
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<220>
<221> misc_feature
<222> (1)..(5000)
<223> /note="This sequence may encompass 50-5000 nucleotides"

<220>
<221> source
<223> /note="See specification as filed for detailed description of

substitutions and preferred embodiments"

<400> 1043

aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	60
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aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	240
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	300
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	360
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	420
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	480
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	540
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	600
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	660
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	720
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	780
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	840
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	900
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	960
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1020
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1080
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1140
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1200
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1260
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1320
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1380
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1440
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1500

[illegible]

[illegible]

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4740
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4800
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4980
aaaaaaaaaa aaaaaaaaaa	5000

<210> 1044
 <211> 373
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1044
 Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro Trp Asn Pro Pro Thr
 1 5 10 15

Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly Asp Asn Ala Thr Phe
 20 25 30

Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe Val Leu Asn Trp Tyr
 35 40 45

Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu Ala Ala Phe Pro Glu
 50 55 60

Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe Arg Val Thr Gln Leu
 65 70 75 80

Pro Asn Gly Arg Asp Phe His Met Ser Val Val Arg Ala Arg Arg Asn
 85 90 95

Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser Leu Ala Pro Lys Ala
 100 105 110

Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg Val Thr Glu Arg Arg

115

120

125

Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser Pro Arg Pro Ala Gly
 130 135 140

Gln Phe Gln Thr Leu Val Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 145 150 155 160

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
 165 170 175

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 180 185 190

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
 195 200 205

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
 210 215 220

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
 225 230 235 240

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
 245 250 255

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
 260 265 270

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
 275 280 285

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
 290 295 300

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
 305 310 315 320

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
 325 330 335

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
 340 345 350

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 355 360 365

Ala Leu Pro Pro Arg
 370

<210> 1045
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1045
 Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro Asn Gly Glu Tyr
 1 5 10 15

Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser Arg Leu Thr Asp
 20 25 30

Val Thr Leu
 35

<210> 1046
 <211> 105
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1046
 acaaaaaaga agtattcatc cagtgtgcac gaccctaacg gtgaatacat gttcatgaga 60
 gcagtgaaca cagccaaaaa atccagactc acagatgtga cccta 105

<210> 1047
 <211> 69
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1047
 Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
 1 5 10 15

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
 20 25 30

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Phe Trp Leu
 35 40 45

Pro Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile
 50 55 60

Leu Ile Cys Trp Leu
 65

<210> 1048
 <211> 207
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1048
 accacgacgc cagcgccgcg accaccaaca ccggcgccca ccatcgcgtc gcagcccctg 60
 tccctgcgcc cagaggcgtg ccggccagcg gcggggggcg cagtgcacac gagggggctg 120
 gacttcgcct gtgatttctg gttaccata ggatgtgcag cttttgttgt agtctgcatt 180
 ttgggatgca tacttatttg ttggcctt 207

<210> 1049
 <211> 41

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1049
Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr
1 5 10 15

Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro
20 25 30

Pro Arg Asp Phe Ala Ala Tyr Arg Ser
35 40

<210> 1050
<211> 123
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1050
aggagtaaga ggagcaggct cctgcacagt gactacatga acatgactcc ccgccgcccc 60
gggcccaccc gcaagcatta ccagccctat gccccaccac gcgacttcgc agcctatcgc 120
tcc 123

<210> 1051
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1051
Asn His Gly Met Ser
1 5

<210> 1052
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1052
Asn Tyr Ala Met Ser
1 5

<210> 1053
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1053
Asp Tyr Ala Met His
1 5

<210> 1054
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1054
Asn His Gly Met Ser
1 5

<210> 1055
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1055
Asn Phe Gly Ile Asn
1 5

<210> 1056
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1056
Ser Asp Ala Met Thr
1 5

<210> 1057
<211> 5
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<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1057
Asn Tyr Gly Ile Thr
1 5

<210> 1058
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1058
Asn His Gly Met Ser
1 5

<210> 1059
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1059
Asn His Gly Met Ser
1 5

<210> 1060
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1060
Asn His Gly Met Ser
1 5

<210> 1061
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1061
Asp Tyr Tyr Met Ser
1 5

<210> 1062
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

peptide"

<400> 1062
Asp Tyr Tyr Met Ser
1 5

<210> 1063
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1063
Asn His Gly Met Ser
1 5

<210> 1064
<211> 5
<212> PRT
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1064
Asn His Gly Met Ser
1 5

<210> 1065
<211> 5
<212> PRT
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1065
Asn His Gly Met Ser
1 5

<210> 1066

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1066
Ser Ser Tyr Tyr Trp Gly
1 5

<210> 1067
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1067
Thr Ser Gly Met Cys Val Ser
1 5

<210> 1068
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1068
Ser Tyr Ser Met Asn
1 5

<210> 1069
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1069
Asp Tyr Tyr Met Ser
1 5

<210> 1070
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1070
Ser His Tyr Ile His
1 5

<210> 1071
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1071
Ser Gly Gly Tyr Tyr Trp Ser
1 5

<210> 1072
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1072
Ser Tyr Ala Ile Ser
1 5

<210> 1073
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1073
Ser Asn Ser Ala Ala Trp Asn
1 5

<210> 1074
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1074
Ser Tyr Ala Met Ser
1 5

<210> 1075
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1075
Arg Tyr Pro Met Ser
1 5

<210> 1076
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1076
Ser Tyr Ala Met Ser
1 5

<210> 1077
<211> 5
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1077
Ser Tyr Ala Met Ser
1 5

<210> 1078
<211> 5
<212> PRT
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1078
Asp Tyr Ala Met His
1 5

<210> 1079
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1079
Asp Tyr Ala Met His
1 5

<210> 1080
<211> 5
<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1080

Ser Tyr Ala Met Ser
1 5

<210> 1081

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1081

Ser Tyr Ala Met Ser
1 5

<210> 1082

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1082

Ser Tyr Ala Met Ser
1 5

<210> 1083

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1083

Ser Tyr Ala Met Ser
1 5

<210> 1084
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1084
Ser Tyr Ala Met Ser
1 5

<210> 1085
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1085
Ser Tyr Ala Met Ser
1 5

<210> 1086
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1086
Ser Tyr Ala Met Ser
1 5

<210> 1087
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1087
Asn Phe Gly Met Asn
1 5

<210> 1088
<211> 5
<212> PRT
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1088
Asp Tyr Ser Ile Asn
1 5

<210> 1089
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1089
His Tyr Ser Met Asn
1 5

<210> 1090
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1090
His Tyr Ser Met Asn

<210> 1091
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1091
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1092
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1092
Gly Ile Ser Arg Ser Gly Glu Asn Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1093
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1093
Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1094
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1094
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1095
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1095
Trp Ile Asn Pro Lys Asn Asn Asn Thr Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 1096
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1096
Val Ile Ser Gly Ser Gly Gly Thr Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1097
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1097
Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 1098
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1098
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1099
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1099
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1100

<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1100
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1101
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1101
Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1102
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1102
Tyr Ile Ser Ser Ser Gly Asn Thr Ile Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1103

<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1103
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1104
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1104
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1105
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1105
Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys Gly
1 5 10 15

<210> 1106
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1106
Ser Ile Tyr Tyr Ser Gly Ser Ala Tyr Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 1107
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1107
Arg Ile Asp Trp Asp Glu Asp Lys Phe Tyr Ser Thr Ser Leu Lys Thr
1 5 10 15

<210> 1108
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1108
Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1109
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1109
Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1110
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1110
Met Ile Asn Pro Ser Gly Gly Val Thr Ala Tyr Ser Gln Thr Leu Gln
1 5 10 15

Gly

<210> 1111
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1111
Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 1112
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1112
Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 1113
<211> 18
<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1113
Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Phe Tyr Ala Ile Ser Leu
1 5 10 15

Lys Ser

<210> 1114
<211> 17
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1114
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1115
<211> 17
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1115
Gly Ile Ser Asp Ser Gly Val Ser Thr Tyr Tyr Ala Asp Ser Ala Lys
1 5 10 15

Gly

<210> 1116
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<220>
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peptide"

<400> 1116
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1117
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peptide"

<400> 1117
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1118
<211> 17
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1118
Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1119
<211> 17
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<220>
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<400> 1119
Ser Ile Asn Trp Lys Gly Asn Ser Leu Ala Tyr Gly Asp Ser Val Lys
1 5 10 15

Gly

<210> 1120
<211> 17
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1120
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1121

<211> 17
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1121
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1122
<211> 17
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1122
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1123
<211> 17
<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1123
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1124
<211> 17
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<220>
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<400> 1124
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1125
<211> 17
<212> PRT
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<220>
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<400> 1125
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1 5 10 15

Gly

<210> 1126
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<220>
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<400> 1126
Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys

1 5 10 15

Gly

<210> 1127
<211> 17
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<400> 1127
Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe Lys
1 5 10 15

Gly

<210> 1128
<211> 17
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1128
Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe Arg
1 5 10 15

Gly

<210> 1129
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1129

Arg Ile Asn Thr Glu Ser Gly Val Pro Ile Tyr Ala Asp Asp Phe Lys
1 5 10 15

Gly

<210> 1130

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1130

Arg Ile Asn Thr Glu Thr Gly Glu Pro Leu Tyr Ala Asp Asp Phe Lys
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Gly

<210> 1131

<211> 7

<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1131

His Gly Gly Glu Ser Asp Val
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<210> 1132

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1132
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1 5 10

<210> 1133
<211> 6
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<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1133
His Ser Phe Leu Ala Tyr
1 5

<210> 1134
<211> 7
<212> PRT
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<220>
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peptide"

<400> 1134
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1 5

<210> 1135
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1135
Gly Pro Tyr Tyr Tyr Gln Ser Tyr Met Asp Val
1 5 10

<210> 1136

<211> 14
<212> PRT
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<220>
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Leu Asp Ser Ser Gly Tyr Tyr Tyr Ala Arg Gly Pro Arg Tyr
1 5 10

<210> 1137
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1137
Gly Pro Tyr Tyr Tyr Met Asp Val
1 5

<210> 1138
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1138
His Gly Gly Glu Ser Asp Val
1 5

<210> 1139
<211> 7
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1139
His Gly Gly Glu Ser Asp Val
1 5

<210> 1140
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1140
His Gly Gly Glu Ser Asp Val
1 5

<210> 1141
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1141
Glu Ser Gly Asp Gly Met Asp Val
1 5

<210> 1142
<211> 8
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1142
Ser Thr Met Val Arg Glu Asp Tyr
1 5

<210> 1143
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<212> PRT
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<220>
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<400> 1143
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1 5

<210> 1144
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<400> 1144
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1 5

<210> 1145
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<400> 1145
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1 5

<210> 1146
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<220>
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<400> 1146
His Trp Gln Glu Trp Pro Asp Ala Phe Asp Ile
1 5 10

<210> 1147
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<220>
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peptide"

<400> 1147
Ser Gly Ala Gly Gly Thr Ser Ala Thr Ala Phe Asp Ile
1 5 10

<210> 1148
<211> 10
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<220>
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peptide"

<400> 1148
Thr Ile Ala Ala Val Tyr Ala Phe Asp Ile
1 5 10

<210> 1149
<211> 8
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1149
Asp Leu Arg Gly Ala Phe Asp Ile
1 5

<210> 1150
<211> 11
<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1150

Glu Gly Ser Gly Ser Gly Trp Tyr Phe Asp Phe
1 5 10

<210> 1151

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1151

Ala Gly Ile Ala Ala Arg Leu Arg Gly Ala Phe Asp Ile
1 5 10

<210> 1152

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1152

Arg Gly Gly Tyr Gln Leu Leu Arg Trp Asp Val Gly Leu Leu Arg Ser
1 5 10 15

Ala Phe Asp Ile
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<210> 1153

<211> 13

<212> PRT

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<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1153

Ser Ser Pro Glu Gly Leu Phe Leu Tyr Trp Phe Asp Pro
1 5 10

<210> 1154

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1154

Val Glu Gly Ser Gly Ser Leu Asp Tyr
1 5

<210> 1155

<211> 9

<212> PRT

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1155

Arg Ala Gly Ser Glu Ala Ser Asp Ile
1 5

<210> 1156

<211> 15

<212> PRT

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<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1156

Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp Val
1 5 10 15

<210> 1157
<211> 15
<212> PRT
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<220>
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<400> 1157
Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp Val
1 5 10 15

<210> 1158
<211> 8
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1158
Val Gly Lys Ala Val Pro Asp Val
1 5

<210> 1159
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1159
His Gln Gly Val Ala Tyr Tyr Asn Tyr Ala Met Asp Val
1 5 10

<210> 1160
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<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

peptide"

<400> 1160

Val Val Arg Asp Gly Met Asp Val
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<210> 1161

<211> 9

<212> PRT

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<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1161

Ile Pro Gln Thr Gly Thr Phe Asp Tyr
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<210> 1162

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1162

Ala Asn Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp Val
1 5 10 15

<210> 1163

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1163

Ala Leu Val Gly Ala Thr Gly Ala Phe Asp Ile
1 5 10

<210> 1164

<211> 8
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<400> 1164
Trp Phe Gly Glu Gly Phe Asp Pro
1 5

<210> 1165
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<400> 1165
Val Gly Tyr Asp Ser Ser Gly Tyr Tyr Arg Asp Tyr Tyr Gly Met Asp
1 5 10 15

Val

<210> 1166
<211> 13
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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Met Gly Trp Ser Ser Gly Tyr Leu Gly Ala Phe Asp Ile
1 5 10

<210> 1167
<211> 13
<212> PRT
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<220>
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<400> 1167
Gly Glu Ile Tyr Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr
1 5 10

<210> 1168
<211> 8
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1168
Asp Tyr Ser Tyr Ala Met Asp Tyr
1 5

<210> 1169
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1169
Asp Tyr Leu Tyr Ser Leu Asp Phe
1 5

<210> 1170
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1170
Asp Tyr Leu Tyr Ser Cys Asp Tyr
1 5

<210> 1171
<211> 11
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1171
Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
1 5 10

<210> 1172
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1172
Arg Ala Ser Gln Ser Ile Ser Ser Ser Phe Leu Ala
1 5 10

<210> 1173
<211> 16
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1173
Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
1 5 10 15

<210> 1174
<211> 16
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<220>

<221> source
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 Lys Ser Ser Gln Ser Leu Leu Arg Asn Asp Gly Lys Thr Pro Leu Tyr
 1 5 10 15

 <210> 1175
 <211> 16
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 <220>
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 <400> 1175
 Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asn
 1 5 10 15

 <210> 1176
 <211> 11
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 <220>
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 Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
 1 5 10

 <210> 1177
 <211> 16
 <212> PRT
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 <220>
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 <223> /note="Description of Artificial Sequence: Synthetic peptide"

 <400> 1177
 Arg Ser Ser Gln Ser Leu Leu Tyr Ser Asn Gly Tyr Asn Tyr Val Asp
 1 5 10 15

<210> 1178
<211> 11
<212> PRT
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<220>
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<400> 1178
Arg Ala Ser Gln Ser Val Ser Ser Asn Leu Ala
1 5 10

<210> 1179
<211> 11
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1179
Arg Ala Ser Gln Ser Val Ser Ser Lys Leu Ala
1 5 10

<210> 1180
<211> 12
<212> PRT
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<220>
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<400> 1180
Arg Ala Ser Gln Ser Val Gly Ser Thr Asn Leu Ala
1 5 10

<210> 1181
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1181

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
1 5 10

<210> 1182

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1182

Lys Ser Ser Glu Ser Leu Val His Asn Ser Gly Lys Thr Tyr Leu Asn
1 5 10 15

<210> 1183

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1183

Gln Ala Ser Glu Asp Ile Asn Lys Phe Leu Asn
1 5 10

<210> 1184

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1184

Arg Ala Ser Gln Ser Val Gly Ser Asn Leu Ala
1 5 10

<210> 1185
<211> 12
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1185
Arg Ala Ser Gln Ser Ile Gly Ser Ser Ser Leu Ala
1 5 10

<210> 1186
<211> 11
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<220>
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<400> 1186
Lys Ala Ser Gln Asp Ile Asp Asp Ala Met Asn
1 5 10

<210> 1187
<211> 11
<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1187
Arg Ala Ser Gln Asp Ile Tyr Asn Asn Leu Ala
1 5 10

<210> 1188
<211> 16
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

peptide"

<400> 1188

Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
1 5 10 15

<210> 1189

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1189

Gly Gly Asn Asn Ile Gly Thr Lys Ser Val His
1 5 10

<210> 1190

<211> 11

<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 1190

Ser Gly Asp Gly Leu Ser Lys Lys Tyr Val Ser
1 5 10

<210> 1191

<211> 11

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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1191

Arg Ala Ser Gln Gly Ile Arg Asn Trp Leu Ala
1 5 10

<210> 1192

<211> 11
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<400> 1192
Gly Gly Asn Asn Ile Gly Ser Lys Ser Val His
1 5 10

<210> 1193
<211> 11
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<400> 1193
Gln Gly Asp Ser Leu Gly Asn Tyr Tyr Ala Thr
1 5 10

<210> 1194
<211> 12
<212> PRT
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<400> 1194
Arg Ala Ser Gln Ser Val Ser Ser Ala Tyr Leu Ala
1 5 10

<210> 1195
<211> 11
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<400> 1195
Arg Ala Ser Gln Ser Val Ser Asn Ser Leu Ala
1 5 10

<210> 1196
<211> 12
<212> PRT
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peptide"

<400> 1196
Arg Ala Ser Gln Ser Val Ser Ser Ser Phe Leu Ala
1 5 10

<210> 1197
<211> 12
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1197
Arg Ala Ser Gln Ser Val Ser Thr Thr Phe Leu Ala
1 5 10

<210> 1198
<211> 11
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<220>
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peptide"

<400> 1198
Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
1 5 10

<210> 1199
<211> 12

<212> PRT
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<220>
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<400> 1199
Arg Ala Thr Gln Ser Ile Gly Ser Ser Phe Leu Ala
1 5 10

<210> 1200
<211> 12
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1200
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala
1 5 10

<210> 1201
<211> 12
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<400> 1201
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala
1 5 10

<210> 1202
<211> 12
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1202
Arg Ala Ser Gln Arg Val Ala Ser Asn Tyr Leu Ala
1 5 10

<210> 1203
<211> 12
<212> PRT
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<220>
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peptide"

<400> 1203
Arg Ala Ser Gln Ser Leu Ser Ser Asn Phe Leu Ala
1 5 10

<210> 1204
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1204
Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
1 5 10 15

<210> 1205
<211> 12
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<220>
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peptide"

<400> 1205
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala
1 5 10

<210> 1206
<211> 12
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1206

Arg Ala Ser Gln Ser Val Ala Ser Ser Phe Leu Ala
1 5 10

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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<210> 1208

<211> 15

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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<210> 1209

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Arg Ala Ser Glu Ser Val Thr Ile Leu Gly Ser His Leu Ile Tyr
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Gly Ala Ser Thr Leu Ala Ser

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<210> 1217
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1 5

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<210> 1223
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<210> 1234
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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<210> 1235

<211> 7

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<220>

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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1 5

<210> 1237

<211> 7

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<220>

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1237

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1 5

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peptide"

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Gly Ala Ser Ser Arg Ala Thr
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<223> /note="Description of Artificial Sequence: Synthetic
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Gly Ala Ser Asn Trp Ala Thr
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<400> 1244

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<400> 1245
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1 5

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<400> 1246
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1 5

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<400> 1249
Leu Ala Ser Asn Val Gln Thr
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peptide"

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<220>
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1 5

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<400> 1256
Gln Gln Ser Tyr Lys Arg Ala Ser
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<210> 1257
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<400> 1257
Met Gln Gly Arg Gln Phe Pro Tyr Ser
1 5

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<400> 1258
Gln Gln Tyr Gly Ser Ser Leu Thr
1 5

<210> 1259
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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Gln Gln Tyr Gly Ser Ser Ser Trp Thr
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

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<210> 1261

<211> 7

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1261

Gln Gln Ser Tyr Thr Leu Ala
1 5

<210> 1262

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Met Gln Gly Thr His Trp Pro Gly Thr
1 5

<210> 1263
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peptide"

<400> 1263
Gln Gln Tyr Glu Ser Leu Pro Leu Thr
1 5

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peptide"

<400> 1264
Gln Gln Tyr Asn Asp Trp Leu Pro Val Thr
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peptide"

<400> 1265
Gln Gln Tyr Ala Gly Ser Pro Pro Phe Thr
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1 5

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Gln His Tyr Tyr Arg Phe Pro Tyr Ser
1 5

<210> 1268
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<210> 1271
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Ser Ser Arg Asp Ser Ser Gly Asp His Leu Arg Val
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Asn Ser Arg Asp Ser Ser Gly His His Leu Leu
1 5 10

<210> 1274
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Gln His Tyr Gly Ser Ser Phe Asn Gly Ser Ser Leu Phe Thr
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Gln Gln Tyr His Ser Ser Pro Ser Trp Thr
1 5 10

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1 5 10

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1 5

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Gln Gln Tyr Gly Ser Pro Pro Arg Phe Thr
1 5 10

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<400> 1282
Gln His Tyr Asp Ser Ser Pro Ser Trp Thr
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<210> 1283
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<400> 1283
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<210> 1284
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<400> 1284
Met Gln Ala Leu Gln Thr Pro Leu Thr
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<400> 1285
Gln His Tyr Gly Asn Ser Pro Pro Lys Phe Thr
1 5 10

<210> 1286
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<400> 1286
Gln His Tyr Gly Gly Ser Pro Arg Leu Thr
1 5 10

<210> 1287
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1287

Gln Gln His Tyr Ser Thr Pro Trp Thr
1 5

<210> 1288

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1288

Leu Gln Ser Arg Ile Phe Pro Arg Thr
1 5

<210> 1289

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1289

Leu Gln Ser Arg Thr Ile Pro Arg Thr
1 5

<210> 1290

<211> 9

<212> PRT

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1290

Leu Gln Ser Arg Thr Ile Pro Arg Thr
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<211> 521
<212> DNA
<213> Unknown

<220>
<221> source
<223> /note="Description of Unknown:
PGK Promoter sequence"

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cgcggcgacg caaagggcct tgggtcgggt ctcgtcggcg cagggacgcg tttgggtccc 480
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

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<210> 1293
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<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1293

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gggcggaggg cgtggcgggg aagggccggc gacgagagcc gcgcgggacg actcgtcggc	180
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<210> 1294

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<212> DNA

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<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1294

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gataaccggt gtcgggtagc gccagccgcg cgacggtaac gagggaccgc gacaggcaga	240
cgctcccatg atcactctgc acgccgaagg caaatagtgc aggccgtgcg gcgcttggcg	300
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<210> 1295

<211> 422

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

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gggcggaggg cgtggcgggg aagggccggc gacgagagcc gcgcgggacg actcgtcggc	180

gataaccggt gtcgggtagc gccagccgcg cgacggtaac gagggaccgc gacaggcaga 240
 cgctcccatg atcactctgc acgccgaagg caaatagtgc aggccgtgcg gcgcttggcg 300
 ttccttggaa gggctgaatc cccgcctcgt ccttcgcagc ggccccccgg gtgttcccat 360
 cgccgcttct aggcccactg cgacgcttgc ctgcatttct tacacgctct ggggtcccagc 420
 cg 422

<210> 1296
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
 <221> VARIANT
 <222> (1)..(3)
 <223> /replace=" "

<220>
 <221> SITE
 <222> (1)..(21)
 <223> /note="Variant residues given in the sequence have no preference with respect to those in the annotations for variant positions"

<400> 1296
 Gly Ser Gly Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu
 1 5 10 15

Glu Asn Pro Gly Pro
 20

<210> 1297
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(3)
<223> /replace=" "

<220>
<221> SITE
<222> (1)..(22)
<223> /note="Variant residues given in the sequence have no
preference with respect to those in the annotations
for variant positions"

<400> 1297
Gly Ser Gly Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val
1 5 10 15

Glu Glu Asn Pro Gly Pro
20

<210> 1298
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<220>
<221> VARIANT
<222> (1)..(3)
<223> /replace=" "

<220>
<221> SITE
<222> (1)..(23)
<223> /note="Variant residues given in the sequence have no
preference with respect to those in the annotations
for variant positions"

<400> 1298
Gly Ser Gly Gln Cys Thr Asn Tyr Ala Leu Leu Lys Leu Ala Gly Asp
1 5 10 15

Val Glu Ser Asn Pro Gly Pro
20

<210> 1299
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(3)
<223> /replace=" "

<220>
<221> SITE
<222> (1)..(25)
<223> /note="Variant residues given in the sequence have no preference with respect to those in the annotations for variant positions"

<400> 1299
Gly Ser Gly Val Lys Gln Thr Leu Asn Phe Asp Leu Leu Lys Leu Ala
1 5 10 15

Gly Asp Val Glu Ser Asn Pro Gly Pro
20 25

<210> 1300
<211> 486
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1300
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu
20 25 30

Ser Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr
50 55 60

Val Lys Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
85 90 95

Ser Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
130 135 140

Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser
145 150 155 160

Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser
195 200 205

Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys
210 215 220

Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys
225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly

245

250

255

Thr Ser Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 1301
 <211> 1458
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1301
 atggccttac cagtgaccgc cttgctcctg ccgctggcct tgctgctcca cgccgccagg 60
 ccggacatcc agatgacaca gactacatcc tccctgtctg cctctctggg agacagagtc 120
 accatcagtt gcagggcaag tcaggacatt agtaaattatt taaattggta tcagcagaaa 180
 ccagatggaa ctgttaaact cctgatctac catacatcaa gattacactc aggagtccca 240
 tcaaggttca gtggcagtgg gtctggaaca gattattctc tcaccattag caacctggag 300
 caagaagata ttgccactta cttttgcca cagggttaata cgcttccgta cacgttcgga 360
 ggggggacca agctggagat cacaggtggc ggtggctcgg gcggtgggtgg gtcgggtggc 420
 ggcggatctg aggtgaaact gcaggagtca ggacctggcc tgggtggcgcc ctcacagagc 480
 ctgtccgtca catgcactgt ctcaggggtc tcattaccgc actatggtgt aagctggatt 540
 cgccagcctc cacgaaaggg tctggagtgg ctgggagtaa tatggggtag tgaaaccaca 600
 tactataatt cagctctcaa atccagactg accatcatca aggacaactc caagagccaa 660
 gttttcttaa aaatgaacag tctgcaaact gatgacacag ccatttacta ctgtgccaaa 720
 cattattact acggtggtag ctatgctatg gactactggg gccaaaggaa ctcagtcacc 780
 gtctcctcaa ccacgacgcc agcgccgcga ccaccaacac cggcgccac catcgcgctg 840
 cagcccctgt ccctgcgccc agaggcgtgc cggccagcgg cggggggcgc agtgcacacg 900
 agggggctgg acttcgcctg tgatatctac atctgggcgc ctttgcccg gacttgtggg 960

gtccttctcc tgtcactggt tatcaccctt tactgcaaac ggggcagaaa gaaactcctg 1020
tatatatattca aacaaccatt tatgagacca gtacaaacta ctcaagagga agatggctgt 1080
agctgccgat ttccagaaga agaagaagga ggatgtgaac tgagagtga gttcagcagg 1140
agcgcagacg cccccgcgta caagcagggc cagaaccagc tctataacga gctcaatcta 1200
ggacgaagag aggagtacga tgttttggac aagagacgtg gccgggaccc tgagatgggg 1260
ggaaagccga gaaggaagaa ccctcaggaa ggcctgtaca atgaactgca gaaagataag 1320
atggcggagg cctacagtga gattgggatg aaaggcgagc gccggagggg caaggggcac 1380
gatggccttt accagggtct cagtacagcc accaaggaca cctacgacgc cttcacatg 1440
caggccctgc cccctcgc 1458

<210> 1302
<211> 242
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1302
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Lys Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser Val Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu Thr Ile Ile
180 185 190

Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln
195 200 205

Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val
225 230 235 240

Ser Ser

<210> 1303

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1303

Gln Val Gln Leu Leu Glu Ser Gly Ala Glu Leu Val Arg Pro Gly Ser

1	5	10	15
Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Tyr	20	25	30
Trp Met Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile	35	40	45
Gly Gln Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe	50	55	60
Lys Gly Gln Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr	65	70	75
Met Gln Leu Ser Gly Leu Thr Ser Glu Asp Ser Ala Val Tyr Ser Cys	85	90	95
Ala Arg Lys Thr Ile Ser Ser Val Val Asp Phe Tyr Phe Asp Tyr Trp	100	105	110
Gly Gln Gly Thr Thr Val Thr Gly Gly Gly Ser Gly Gly Gly Ser Gly	115	120	125
Gly Gly Ser Gly Gly Gly Ser Glu Leu Val Leu Thr Gln Ser Pro Lys	130	135	140
Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser Val Thr Cys Lys Ala	145	150	155
Ser Gln Asn Val Gly Thr Asn Val Ala Trp Tyr Gln Gln Lys Pro Gly	165	170	175
Gln Ser Pro Lys Pro Leu Ile Tyr Ser Ala Thr Tyr Arg Asn Ser Gly	180	185	190
Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu	195	200	205
Thr Ile Thr Asn Val Gln Ser Lys Asp Leu Ala Asp Tyr Phe Cys Gln	210	215	220

Tyr Asn Arg Tyr Pro Tyr Thr Ser Phe Phe Phe Thr Lys Leu Glu Ile
 225 230 235 240

Lys Arg Arg Ser

<210> 1304
 <211> 464
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1304
 Gln Val Gln Leu Leu Glu Ser Gly Ala Glu Leu Val Arg Pro Gly Ser
 1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Tyr
 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45

Gly Gln Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe
 50 55 60

Lys Gly Gln Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
 65 70 75 80

Met Gln Leu Ser Gly Leu Thr Ser Glu Asp Ser Ala Val Tyr Ser Cys
 85 90 95

Ala Arg Lys Thr Ile Ser Ser Val Val Asp Phe Tyr Phe Asp Tyr Trp
 100 105 110

Gly Gln Gly Thr Thr Val Thr Gly Gly Gly Ser Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Ser Glu Leu Val Leu Thr Gln Ser Pro Lys
130 135 140

Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser Val Thr Cys Lys Ala
145 150 155 160

Ser Gln Asn Val Gly Thr Asn Val Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ser Pro Lys Pro Leu Ile Tyr Ser Ala Thr Tyr Arg Asn Ser Gly
180 185 190

Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

Thr Ile Thr Asn Val Gln Ser Lys Asp Leu Ala Asp Tyr Phe Cys Gln
210 215 220

Tyr Asn Arg Tyr Pro Tyr Thr Ser Phe Phe Phe Thr Lys Leu Glu Ile
225 230 235 240

Lys Arg Arg Ser Lys Ile Glu Val Met Tyr Pro Pro Pro Tyr Leu Asp
245 250 255

Asn Glu Lys Ser Asn Gly Thr Ile Ile His Val Lys Gly Lys His Leu
260 265 270

Cys Pro Ser Pro Leu Phe Pro Gly Pro Ser Lys Pro Phe Trp Val Leu
275 280 285

Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser Leu Leu Val Thr Val
290 295 300

Ala Phe Ile Ile Phe Trp Val Arg Ser Lys Arg Ser Arg Leu Leu His
305 310 315 320

Ser Asp Tyr Met Asn Met Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys
325 330 335

His Tyr Gln Pro Tyr Ala Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser

340

345

350

Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
 355 360 365

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
 370 375 380

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
 385 390 395 400

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
 405 410 415

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
 420 425 430

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
 435 440 445

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 450 455 460

<210> 1305

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1305

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
 1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
 35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
100 105 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
115 120 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
130 135 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145 150 155 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
165 170 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
180 185 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
195 200 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
210 215 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225 230 235 240

Val Thr Val Ser Ser Glu
245

<210> 1306
<211> 439
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1306
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
100 105 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
115 120 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
130 135 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145 150 155 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
165 170 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
180 185 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
195 200 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
210 215 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225 230 235 240

Val Thr Val Ser Ser Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys
245 250 255

Pro Met Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr
260 265 270

Ser Leu Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val Lys Arg Gly
275 280 285

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
290 295 300

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Glu Glu Glu
305 310 315 320

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
325 330 335

Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
340 345 350

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
355 360 365

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
370 375 380

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
385 390 395 400

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
405 410 415

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
420 425 430

Gln Ala Leu Pro Pro Arg Leu
435

<210> 1307

<211> 819

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1307

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly

100

105

110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
 115 120 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
 130 135 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
 145 150 155 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
 165 170 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
 180 185 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
 195 200 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
 210 215 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
 225 230 235 240

Val Thr Val Ser Ser Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys
 245 250 255

Pro Met Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr
 260 265 270

Ser Leu Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val Lys Arg Gly
 275 280 285

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
 290 295 300

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Glu Glu Glu
 305 310 315 320

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
325 330 335

Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
340 345 350

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
355 360 365

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
370 375 380

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
385 390 395 400

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
405 410 415

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
420 425 430

Gln Ala Leu Pro Pro Arg Leu Glu Gly Gly Gly Glu Gly Arg Gly Ser
435 440 445

Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro Gly Pro Arg Met Leu
450 455 460

Leu Leu Val Thr Ser Leu Leu Leu Cys Glu Leu Pro His Pro Ala Phe
465 470 475 480

Leu Leu Ile Pro Arg Lys Val Cys Asn Gly Ile Gly Ile Gly Glu Phe
485 490 495

Lys Asp Ser Leu Ser Ile Asn Ala Thr Asn Ile Lys His Phe Lys Asn
500 505 510

Cys Thr Ser Ile Ser Gly Asp Leu His Ile Leu Pro Val Ala Phe Arg
515 520 525

Gly Asp Ser Phe Thr His Thr Pro Pro Leu Asp Pro Gln Glu Leu Asp
530 535 540

Ile Leu Lys Thr Val Lys Glu Ile Thr Gly Phe Leu Leu Ile Gln Ala
545 550 555 560

Trp Pro Glu Asn Arg Thr Asp Leu His Ala Phe Glu Asn Leu Glu Ile
565 570 575

Ile Arg Gly Arg Thr Lys Gln His Gly Gln Phe Ser Leu Ala Val Val
580 585 590

Ser Leu Asn Ile Thr Ser Leu Gly Leu Arg Ser Leu Lys Glu Ile Ser
595 600 605

Asp Gly Asp Val Ile Ile Ser Gly Asn Lys Asn Leu Cys Tyr Ala Asn
610 615 620

Thr Ile Asn Trp Lys Lys Leu Phe Gly Thr Ser Gly Gln Lys Thr Lys
625 630 635 640

Ile Ile Ser Asn Arg Gly Glu Asn Ser Cys Lys Ala Thr Gly Gln Val
645 650 655

Cys His Ala Leu Cys Ser Pro Glu Gly Cys Trp Gly Pro Glu Pro Arg
660 665 670

Asp Cys Val Ser Cys Arg Asn Val Ser Arg Gly Arg Glu Cys Val Asp
675 680 685

Lys Cys Asn Leu Leu Glu Gly Glu Pro Arg Glu Phe Val Glu Asn Ser
690 695 700

Glu Cys Ile Gln Cys His Pro Glu Cys Leu Pro Gln Ala Met Asn Ile
705 710 715 720

Thr Cys Thr Gly Arg Gly Pro Asp Asn Cys Ile Gln Cys Ala His Tyr
725 730 735

Ile Asp Gly Pro His Cys Val Lys Thr Cys Pro Ala Gly Val Met Gly
740 745 750

Glu Asn Asn Thr Leu Val Trp Lys Tyr Ala Asp Ala Gly His Val Cys
755 760 765

His Leu Cys His Pro Asn Cys Thr Tyr Gly Cys Thr Gly Pro Gly Leu
770 775 780

Glu Gly Cys Pro Thr Asn Gly Pro Lys Ile Pro Ser Ile Ala Thr Gly
785 790 795 800

Met Val Gly Ala Leu Leu Leu Leu Leu Val Val Ala Leu Gly Ile Gly
805 810 815

Leu Phe Met

<210> 1308

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1308

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
100 105 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
115 120 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
130 135 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145 150 155 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
165 170 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
180 185 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn
195 200 205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
210 215 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
225 230 235 240

Val Thr Val Ser Ser
245

<210> 1309
<211> 467
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1309

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Ser Thr Ser Gly
100 105 110

Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr Lys Gly Glu Val Lys
115 120 125

Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser
130 135 140

Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser
145 150 155 160

Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile
165 170 175

Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu
180 185 190

Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn

195

200

205

Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr
 210 215 220

Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
 225 230 235 240

Val Thr Val Ser Ser Ala Ala Ala Ile Glu Val Met Tyr Pro Pro Pro
 245 250 255

Tyr Leu Asp Asn Glu Lys Ser Asn Gly Thr Ile Ile His Val Lys Gly
 260 265 270

Lys His Leu Cys Pro Ser Pro Leu Phe Pro Gly Pro Ser Lys Pro Phe
 275 280 285

Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser Leu Leu
 290 295 300

Val Thr Val Ala Phe Ile Ile Phe Trp Val Arg Ser Lys Arg Ser Arg
 305 310 315 320

Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro Arg Arg Pro Gly Pro
 325 330 335

Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro Arg Asp Phe Ala Ala
 340 345 350

Tyr Arg Ser Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
 355 360 365

Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
 370 375 380

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
 385 390 395 400

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
 405 410 415

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
420 425 430

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
435 440 445

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
450 455 460

Pro Pro Arg
465

<210> 1310
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1310
Gln Val Gln Leu Leu Glu Ser Gly Ala Glu Leu Val Arg Pro Gly Ser
1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Tyr
20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Gln Ile Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Gln Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Gly Leu Thr Ser Glu Asp Ser Ala Val Tyr Ser Cys
85 90 95

Ala Arg Lys Thr Ile Ser Ser Val Val Asp Phe Tyr Phe Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr
115

<210> 1311

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1311

Glu Leu Val Leu Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly
1 5 10 15

Asp Arg Val Ser Val Thr Cys Lys Ala Ser Gln Asn Val Gly Thr Asn
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Pro Leu Ile
35 40 45

Tyr Ser Ala Thr Tyr Arg Asn Ser Gly Val Pro Asp Arg Phe Thr Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Thr Asn Val Gln Ser
65 70 75 80

Lys Asp Leu Ala Asp Tyr Phe Tyr Phe Cys Gln Tyr Asn Arg Tyr Pro
85 90 95

Tyr Thr Ser Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Arg Ser
100 105 110

<210> 1312

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1312

Glu Ile Val Met 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 Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 1313

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1313

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser
195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 1314
<211> 242
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1314

Glu Ile Val Met 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 Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
 210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
 225 230 235 240

Ser Ser

<210> 1315
 <211> 813
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1315
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgaaattg tgatgaccga gtcacccgcc actcttagcc tttcaccggt tgagcgcgca 120
 accctgtctt gcagagcctc ccaagacatc tcaaaatacc ttaattggta tcaacagaag 180
 cccggacagg ctctctgcct tctgatctac cacaccagcc ggctccattc tggaatccct 240
 gccagggttca gcggtagcgg atctgggacc gactacaccc tcactatcag ctactgcag 300
 ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga 360
 cagggcacca agctcgagat taaaggtgga ggtggcagcg gaggaggtgg gtccggcggt 420
 ggaggaagcc aggtccaact ccaagaaagc ggaccgggtc ttgtgaagcc atcagaaact 480
 ctttactga cttgtactgt gagcggagtg tctctccccg attacggggt gtcttggatc 540
 agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact 600
 tactaccaat catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag 660
 gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag 720
 cattactatt atggcgggag ctacgcaatg gattactggg gacagggtac tctggtcacc 780
 gtgtccagcc accaccatca tcaccatcac cat 813

<210> 1316
<211> 486
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1316
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly

165

170

175

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser
 195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
 210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
 245 250 255

Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 1317
 <211> 1458
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1317
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgaaattg tgatgaccca gtcacccgcc actcttagcc tttcaccggt tgagcgcgca 120
 accctgtctt gcagagcctc ccaagacatc tcaaaatacc ttaattggta tcaacagaag 180
 cccggacagg ctctcgcct tctgatctac cacaccagcc ggctccattc tggaatcctt 240
 gccaggttca gcggtagcgg atctgggacc gactacaccc tcactatcag ctactgcag 300
 ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga 360

cagggcacca agctcgagat taaaggtgga ggtggcagcg gaggaggtgg gtccggcggt	420
ggaggaagcc aggtccaact ccaagaaagc ggaccggggtc ttgtgaagcc atcagaaact	480
ctttcactga cttgtactgt gagcggagtg tctctccccg attacgggggt gtcttgatc	540
agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact	600
tactaccaat catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag	660
gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag	720
cattactatt atggcgggag ctacgcaatg gattactggg gacagggtac tctggtcacc	780
gtgtccagca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcgag ctggtggggc cgtgcatacc	900
cgggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 1318
 <211> 271
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1318
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser
195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
 245 250 255

Thr Leu Val Thr Val Ser Ser His His His His His His His
 260 265 270

<210> 1319
 <211> 242
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1319
 Gln Val Gln Leu Gln 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 Val Ser Leu Pro Asp Tyr
 20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys
 50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn 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

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln
210 215 220

Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
225 230 235 240

Ile Lys

<210> 1320

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1320

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
165 170 175

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
195 200 205

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln

245

250

255

Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 1321
 <211> 242
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1321
 Gln Val Gln Leu Gln 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 Val Ser Leu Pro Asp Tyr
 20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
 35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys
 50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn 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

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln
210 215 220

Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
225 230 235 240

Ile Lys

<210> 1322
<211> 486
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1322
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
165 170 175

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
195 200 205

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
245 250 255

Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 1323
 <211> 247
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1323
 Glu Ile Val Met 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 Gln Asp Ile Ser Lys Tyr
 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
 100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
 115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
 130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
 145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser
 180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
 195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
 225 230 235 240

Thr Leu Val Thr Val Ser Ser
 245

<210> 1324
 <211> 491
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1324
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
 35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser
195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
210 215 220

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
225 230 235 240

Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro

260

265

270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
 275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
 290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
 305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
 325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
 340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
 355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
 370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
 385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
 405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
 420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
 435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
 450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
 465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1325
<211> 247
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1325
Glu Ile Val Met 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 Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
 145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser
 180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
 195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
 225 230 235 240

Thr Leu Val Thr Val Ser Ser
 245

<210> 1326
 <211> 491
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1326
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
 35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
 50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln
195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
210 215 220

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
225 230 235 240

Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1327
<211> 247
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1327
Gln Val Gln Leu Gln 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 Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn 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

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
130 135 140

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
145 150 155 160

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
180 185 190

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
210 215 220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
245

<210> 1328

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1328

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro
165 170 175

Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys
180 185 190

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro
245 250 255

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu

275

280

285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
 290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
 305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
 325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
 340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
 355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
 370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
 385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
 405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
 420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
 435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
 450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
 465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1329
<211> 247
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1329
Gln Val Gln Leu Gln 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 Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn 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

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
130 135 140

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
145 150 155 160

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
180 185 190

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
210 215 220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
245

<210> 1330
<211> 491
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1330
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro
165 170 175

Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys
180 185 190

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro
245 250 255

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
 290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
 305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
 325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
 340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
 355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
 370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
 385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
 405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
 420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
 435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
 450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
 465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1331
<211> 247
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1331
Glu Ile Val Met 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 Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser
180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
225 230 235 240

Thr Leu Val Thr Val Ser Ser
245

<210> 1332
<211> 491
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1332
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn
195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
210 215 220

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
225 230 235 240

Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His

290

295

300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
 305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
 325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
 340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
 355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
 370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
 385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
 405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
 420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
 435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
 450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
 465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1333

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1333

Gln Val Gln Leu Gln 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 Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn 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

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
130 135 140

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
145 150 155 160

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
180 185 190

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
210 215 220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
245

<210> 1334
<211> 491
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1334
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn
195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
210 215 220

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
225 230 235 240

Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1335

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1335

Glu Ile Val Met 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 Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 1336

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1336

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Asn Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro
165 170 175

Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys
180 185 190

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro
245 250 255

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu

305		310		315		320
Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr						
		325		330		335
Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe						
		340		345		350
Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg						
		355		360		365
Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser						
		370		375		380
Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr						
		385		390		400
Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys						
		405		410		415
Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn						
		420		425		430
Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu						
		435		440		445
Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly						
		450		455		460
His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr						
		465		470		480
Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg						
		485		490		

<210> 1337
 <211> 242
 <212> PRT
 <213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1337

Gln Val Gln Leu Gln 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 Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn 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

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln
210 215 220

Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
225 230 235 240

Ile Lys

<210> 1338

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1338

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser
195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 1339

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1339

Asp Tyr Gly Val Ser
1 5

<210> 1340

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1340

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser
1 5 10 15

<210> 1341

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1341

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr
1 5 10

<210> 1342

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1342

Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn
1 5 10

<210> 1343

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1343
His Thr Ser Arg Leu His Ser
1 5

<210> 1344
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1344
Gln Gln Gly Asn Thr Leu Pro Tyr Thr
1 5

<210> 1345
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1345
Asp Tyr Gly Val Ser
1 5

<210> 1346
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1346
Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser
1 5 10 15

<210> 1347
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1347
His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr
1 5 10

<210> 1348
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1348
Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn
1 5 10

<210> 1349
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1349
His Thr Ser Arg Leu His Ser
1 5

<210> 1350
<211> 9

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1350
Gln Gln Gly Asn Thr Leu Pro Tyr Thr
1 5

<210> 1351
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1351
Asp Tyr Gly Val Ser
1 5

<210> 1352
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1352
Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser
1 5 10 15

<210> 1353
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1353
His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr
1 5 10

<210> 1354
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1354
Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn
1 5 10

<210> 1355
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1355
His Thr Ser Arg Leu His Ser
1 5

<210> 1356
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1356
Gln Gln Gly Asn Thr Leu Pro Tyr Thr
1 5

<210> 1357
<211> 5
<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1357

Asp Tyr Gly Val Ser
1 5

<210> 1358

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1358

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser
1 5 10 15

<210> 1359

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1359

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr
1 5 10

<210> 1360

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1360

Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn
1 5 10

<210> 1361
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1361
His Thr Ser Arg Leu His Ser
1 5

<210> 1362
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1362
Gln Gln Gly Asn Thr Leu Pro Tyr Thr
1 5

<210> 1363
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1363
Asn Tyr Asn Leu His
1 5

<210> 1364
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

 <400> 1364
 Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe Lys
 1 5 10 15

Gly

<210> 1365
 <211> 13
 <212> PRT
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1365
 Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
 1 5 10

<210> 1366
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1366
 Gly Tyr Thr Phe Thr Asn Tyr
 1 5

<210> 1367
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1367

Tyr Pro Gly Asn Tyr Asp
1 5

<210> 1368

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1368

Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1369

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1369

Gly Tyr Thr Phe Thr Asn Tyr Asn
1 5

<210> 1370

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1370

Ile Tyr Pro Gly Asn Tyr Asp Thr
1 5

<210> 1371

<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1371
Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10 15

<210> 1372
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1372
Gly Tyr Thr Phe Thr Asn Tyr Asn Leu His
1 5 10

<210> 1373
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1373
Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1374
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1374
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1375
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1375
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1376
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1376
caagtccaac tcgtccagtc cggtgcagaa gtcaagaaac ctggagcatc cgtgaaagtg 60
tcttgcaaag cctccggcta caccttcacc aactacaacc tccattgggt cagacaggcc 120
cccggacaag gactcgaatg gatgggagcg atctaccgga gaaactacga caccagctac 180
aaccagaagt tcaagggccg cgtgactatg accgccgata agagcacctc caccgcctac 240
atggaactgt cctcgctgag gtccgaggac actgcggtgt actactgcgc ccgcgtggac 300
ttcggacact cacggtattg gtacttcgac gtctggggac agggcactac cgtgaccgtg 360
tcgagc 366

<210> 1377
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1377
Arg Ala Thr Ser Ser Val Ser Ser Met Asn
1 5 10

<210> 1378
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1378
Ala Thr Ser Asn Leu Ala Ser

1

5

<210> 1379
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1379
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1380
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1380
Thr Ser Ser Val Ser Ser
1 5

<210> 1381
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1381
Ala Thr Ser
1

<210> 1382
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1382
Trp Thr Phe Asn Pro Pro
1 5

<210> 1383
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1383
Ser Ser Val Ser Ser
1 5

<210> 1384
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1384
Ala Thr Ser
1

<210> 1385
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1385
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1386
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1386
Arg Ala Thr Ser Ser Val Ser Ser Met Asn
1 5 10

<210> 1387
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1387
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1388
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1388
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1389
<211> 106
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1389

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Thr Ser Ser Val Ser Ser Met
20 25 30

Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile His
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1390

<211> 318

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1390

gatatccagc tgactcagtc cccgtcattc ctgtccgcct ccgtgggaga cagagtgacc 60

atcacctgtc gggccacttc ctccgtgtca agcatgaact ggtatcagca gaagcccggg 120

aaggcccaa agccgctgat tcacgcgacg tccaacctgg cttccggcgt gccgagccgg 180

ttctccggct cggggagcgg gactgagtac accctgacta tttcctcgct tcaacccgag 240

gactttgcta cctactactg ccaacagtgg accttcaatc ctccgacatt cggacagggt 300

accaagttgg aaatcaag

318

<210> 1391
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1391
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1392
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1392
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Thr Ser Ser Val Ser Ser Met Asn Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile His Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 1393

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 1393

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caagtccaac tcgtccagtc cgggtgcagaa gtcaagaaac ctggagcatc cgtgaaagtg      60
tcttgcaaag cctccggcta caccttcacc aactacaacc tccattgggt cagacaggcc      120
cccggaacaag gactcgaatg gatgggagcg atctaccgga gaaactacga caccagctac      180
aaccagaagt tcaagggccg cgtgactatg accgccgata agagcacctc caccgcctac      240
atggaactgt cctcgctgag gtccgaggac actgcggtgt actactgcgc ccgcgtggac      300
ttcggacact cacggtattg gtacttcgac gtctggggac agggcactac cgtgaccgtg      360
tcgagcggcg gaggagggttc gggagggggc ggatcagggg gcggcggcag cgggtggaggg      420
ggctcggata tccagctgac tcagtccccg tcattcctgt ccgcctcgt gggagacaga      480
gtgaccatca cctgtcgggc cacttcctcc gtgtcaagca tgaactggta tcagcagaag      540
cccggaaggg ccccaaagcc gctgattcac gcgacgtcca acctggcttc cggcgtgccg      600
agccggttct ccggctcggg gagcgggact gactacaccc tgactatttc ctcgcttcaa      660
cccgaggact ttgctaccta ctactgccaa cagtggacct tcaatcctcc gacattcggg      720
caggtacca agttggaaat caag                                             744
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<210> 1394

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1394

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Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
          20          25          30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
          35          40          45
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Thr Phe Thr Asn Tyr Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser
65 70 75 80

Tyr Asn Gln Lys Phe Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Thr Ser Ser Val
180 185 190

Ser Ser Met Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro
195 200 205

Leu Ile His Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr

260

265

270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
 275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
 290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
 305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
 325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
 340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
 355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1395
<211> 1476
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1395
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtcc aactcgtcca gtccggtgca gaagtcaaga aacctggagc atccgtgaaa 120
gtgtcttgca aagcctccgg ctacaccttc accaactaca acctccattg ggtcagacag 180
gccccggac aaggactcga atggatggga gcatctacc cgggaaacta cgacaccagc 240
tacaaccaga agttcaaggg ccgctgact atgaccgccg ataagagcac ctccaccgcc 300
tacatggaac tgtcctcgct gaggtccgag gacactgcgg tgtactactg cgcccgcgtg 360
gacttcggac actcacggta ttggtacttc gacgtctggg gacagggcac taccgtgacc 420
gtgtcgagcg gcggaggagg ttccggaggg ggcggatcag ggggcggcgg cagcgggtgga 480
gggggctcgg atatccagct gactcagtcc ccgtcattcc tgtccgcctc cgtgggagac 540
agagtgacca tcacctgtcg ggccacttcc tccgtgtcaa gcatgaactg gtatcagcag 600
aagcccggga agggcccaaa gccgctgatt cacgcgacgt ccaacctggc ttccggcgtg 660
ccgagccggt tctccggctc ggggagcggg actgagtaca ccctgactat ttctctgctt 720
caaccgagg actttgctac ctactactgc caacagtgga cttcaatcc tccgacattc 780
ggacagggta ccaagttgga aatcaagacc actacccag caccgaggcc acccaccg 840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag accgcagct 900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttggggccct 960
ctggctggta cttgcgggggt cctgctgctt tctctctga tctcttcta ctgtaagcgc 1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact 1080

caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gagtacgacg tgctggacaa gcggagagga	1260
cgggacccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 1396
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1396
 Ser Tyr Asn Met His
 1 5

<210> 1397
 <211> 17
 <212> PRT
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1397
 Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys
 1 5 10 15

Gly

<210> 1398
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1398
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1399
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1399
Gly Tyr Thr Phe Thr Ser Tyr
1 5

<210> 1400
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1400
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1401
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1401
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val

1 5 10

<210> 1402
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1402
Gly Tyr Thr Phe Thr Ser Tyr Asn
1 5

<210> 1403
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1403
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1404
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1404
Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10 15

<210> 1405
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1405
Gly Tyr Thr Phe Thr Ser Tyr Asn Met His
1 5 10

<210> 1406
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1406
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys
1 5 10 15

Gly

<210> 1407
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1407
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1408
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1408

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1409

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1409

caagtgcagc tcgtccagtc cgggtgcagaa gtcaagaaac ccggtgcttc agtgaaagtg 60

tcctgcaagg cctccgggta caccttcacc tcctacaaca tgcactgggt ccgccaagcc 120

ccgggccagg gactcgaatg gatgggagcc atctaccctg gcaacgggga cacctcatat 180

aaccctaagt tcaagggcag agtgaccatg actgcggaca agtccactag aacagcgtac 240

atggagctga gcagcctgcg gtccgaggat actgccgtgt actactgcgc ccgctcctac 300
 ttctacggaa gtcgctcgtg gtacttcgat gtctggggac agggcaccac tgtgactgtg 360
 tcctcc 366

<210> 1410
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1410
 Arg Ala Ser Ser Ser Val Ser Ser Met His
 1 5 10

<210> 1411
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1411
 Ala Thr Ser Asn Leu Ala Ser
 1 5

<210> 1412
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1412
 Gln Gln Trp Ile Phe Asn Pro Pro Thr
 1 5

<210> 1413

<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1413
Ser Ser Ser Val Ser Ser
1 5

<210> 1414
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1414
Ala Thr Ser
1

<210> 1415
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1415
Trp Ile Phe Asn Pro Pro
1 5

<210> 1416
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1416
Ser Ser Val Ser Ser
1 5

<210> 1417
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1417
Ala Thr Ser
1

<210> 1418
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1418
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1419
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1419
Arg Ala Ser Ser Ser Val Ser Ser Met His
1 5 10

<210> 1420
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1420
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1421
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1421
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1422
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1422
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 Ser Ser Val Ser Ser Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile Phe
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
65 70 75 80

Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1423
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1423
gaaattgtgc tgactcagag ccccgccacc ctgagcttgt cccccgggga aagggaacg 60
ctgtcatgcc gcgcctcgtc atccgtgtcc tccatgcatt ggtaccagca gaagccggga 120
caggccccctc ggccgctgat cttcgccacc tccaatctcg cttccggcat tccggcccgg 180
ttctcgggaa gcgggtcggg gaccgactat accctgacca tctctagcct tgaacctgag 240
gacgccgcgg tgtactattg tcaacagtgg atctttaacc ccccaacctt cggtggaggc 300
accaaagtgg agattaag 318

<210> 1424
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1424
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1425

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1425

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
130 135 140

Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Ser Ser Val Ser Ser Met His Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile Phe Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala
210 215 220

Ala Val Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1426
<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1426
caagtgcagc tcgtccagtc cggtgcagaa gtcaagaaac ccggtgcttc agtgaaagtg 60
tcctgcaagg cctccggtta caccttcacc tcctacaaca tgcactgggt ccgccaagcc 120
ccgggccagg gactcgaatg gatgggagcc atctaccctg gcaacgggga cacctcatac 180
aaccctaagt tcaagggcag agtgaccatg actgcggaca agtccactag aacagcgtac 240
atggagctga gcagcctgcg gtccgaggat actgccgtgt actactgcgc ccgctcctac 300
ttctacggaa gtcgctcgtg gtacttcgat gtctggggac agggcaccac tgtgactgtg 360
tcctccggtg gcggaggctc gggcggaggc ggaagcggcg gcgggggatc gggaggagga 420
gggtccgaaa ttgtgctgac tcagagcccc gccaccctga gcttgtcccc cggggaaagg 480

gcaacgctgt catgccgcgc ctcgtcatcc gtgtcctcca tgcattggta ccagcagaag 540
 ccgggacagg cccctcggcc gctgatcttc gccacctcca atctcgcttc cggcattccg 600
 gcccggttct cgggaagcgg gtcggggacc gactataccc tgaccatctc tagccttgaa 660
 cctgaggacg ccgcggtgta ctattgtcaa cagtggatct ttaaccccc aaccttcggt 720
 ggaggcacca aagtggagat taag 744

<210> 1427
 <211> 492
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1427
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Ser Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
 65 70 75 80

Tyr Asn Pro Lys Phe Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser
 85 90 95

Thr Arg Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp
 115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu
165 170 175

Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Ser Ser Val
180 185 190

Ser Ser Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro
195 200 205

Leu Ile Phe Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1428

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1428

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg

60

ccccaaagtgc agctcgtcca gtccggtgca gaagtcaaga aacccggtgc ttcagtga	120
gtgtcctgca aggcctccgg ttacaccttc acctcctaca acatgcactg ggtccgcaa	180
gccccgggccc agggactcga atggatggga gccatctacc ctggcaacgg ggacacctca	240
tacaacccta agttcaaggg cagagtgacc atgactgcgg acaagtccac tagaacagcg	300
tacatggagc tgagcagcct gcggtccgag gatactgccg tgtactactg cgcccgtcc	360
tactttctacg gaagctcgtc gtgggtacttc gatgtctggg gacagggcac cactgtgact	420
gtgtcctccg gtggcggagg ctgggcgga ggcggaagcg gcggcggggg atcgggagga	480
ggagggtccg aaattgtgct gactcagagc cccgccacc tgagcttgct ccccggggaa	540
agggcaacgc tgtcatgccg cgcctcgtca tccgtgtcct ccatgcattg gtaccagcag	600
aagccgggac agggccctcg gccgctgac ttgccacct ccaatctcgc ttccggcatt	660
ccggcccgggt tctcggaag cgggtcgggg accgactata ccctgaccat ctctagcctt	720
gaacctgagg acgcccggt gtactattgt caacagtga tctttaacc cccaaccttc	780
ggtggaggca ccaaagtga gattaagacc actacccag caccgaggcc acccaccctg	840
gctcctacca tcgcctccca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcggggt cctgctgctt tctctctga tctctctta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caaccctta tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctcaaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 1429

<211> 5

<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1429
Asn Tyr Trp Met His
1 5

<210> 1430
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1430
Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1431
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1431
Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1432
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

peptide"

<400> 1432

Gly Tyr Thr Phe Thr Asn Tyr
1 5

<210> 1433

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1433

Thr Pro Thr Thr Gly Tyr
1 5

<210> 1434

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1434

Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1435

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1435

Gly Tyr Thr Phe Thr Asn Tyr Trp
1 5

<210> 1436

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1436
Ile Thr Pro Thr Thr Gly Tyr Pro
1 5

<210> 1437
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1437
Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10 15

<210> 1438
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1438
Gly Tyr Thr Phe Thr Asn Tyr Trp Met His
1 5 10

<210> 1439
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1439

Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1440

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1440

Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1441

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1441

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr

65		70		75		80									
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Arg	Arg	Lys	Val	Gly	Lys	Gly	Val	Tyr	Tyr	Ala	Leu	Asp	Tyr	Trp
			100				105					110			
Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser						
		115					120								

<210> 1442
 <211> 366
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1442
 caagtgcaac tcgtccagtc cgggtgcagaa gtcaagaaac caggcgcatac cgtgaaagtc 60
 tcctgcaaag cctccggcta cacattcact aactattgga tgcattgggt gcgccaggcc 120
 ccgggacagg ggctggagt gatggggttc attacccta ccaccggcta ccctgagtac 180
 aaccagaagt tcaaggatag ggtcaccatg accgctgaca agtccacctc caccgcgtac 240
 atggaactgt catcgctccg gtccgaggat accgcggtgt actactgcgc ccggagaaaa 300
 gtcggaaagg gagggtatta cgccttggac tactggggac aggggactac cgtgaccgtg 360
 tcgagc 366

<210> 1443
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1443
 Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala

1

5

10

<210> 1444
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1444
Asn Thr Lys Thr Leu Ala Asp
1 5

<210> 1445
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1445
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1446
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1446
Ser Gly Asn Ile His Asn Tyr
1 5

<210> 1447
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1447
Asn Thr Lys
1

<210> 1448
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1448
Phe Trp Ser Ser Pro Trp
1 5

<210> 1449
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1449
Gly Asn Ile His Asn Tyr
1 5

<210> 1450
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1450
Asn Thr Lys
1

<210> 1451
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1451
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1452
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1452
Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
1 5 10

<210> 1453
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1453
Asn Thr Lys Thr Leu Ala Asp
1 5

<210> 1454
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1454
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1455
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1455
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 Gly Asn Ile His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1456
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

 <400> 1456
 gacatccaga tgaccagtc cccgtcaagc cttagcgctt ccgtgggcga ccgcgtgacc 60
 attacttgtc gggcgtcggg aaacatccac aactacctcg cctggtacca gcagaagccg 120
 ggaaaggtcc ccaagctgct gatctacaat accaagactc tggccgacgg agtgccttcc 180
 cgctttttccg gttcgggaag cgggactgac tacaccctga ctatctcctc gctgcaaccc 240
 gaagatgtgg ctacgtacta ctgccagcac ttctggctct ctccctggac cttcggcggt 300
 ggcactaagg tcgagattaa g 321

<210> 1457
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

 <400> 1457
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 1 5 10 15

Gly Gly Gly Ser
 20

<210> 1458
 <211> 249
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

 <400> 1458
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile Tyr Asn
180 185 190

Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
210 215 220

Val Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp Thr Phe

225

230

235

240

Gly Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1459

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1459

caagtgcaac tcgtccagtc cgggtgcagaa gtcaagaaac caggcgcatac cgtgaaagtc 60

tcctgcaaag cctccggcta cacattcact aactattgga tgcattgggt gcgccaggcc 120

ccgggacagg ggctggagt gatggggttc attacccta ccaccggcta ccctgagtac 180

aaccagaagt tcaaggatag ggtcacatg accgctgaca agtccacctc caccgcgtac 240

atggaactgt catcgctccg gtccgaggat accgcggtgt actactgcgc ccggagaaaa 300

gtcggaaagg gagtgtatta cgccttggac tactggggac aggggactac cgtgaccgtg 360

tcgagcgggtg gaggcggctc cggcggagga ggaagcgggg gaggcggttc agggggcgga 420

ggaagcgaca tccagatgac ccagtccccg tcaagcctta gcgcctccgt gggcgaccgc 480

gtgaccatta cttgtcgggc gtcgggaaac atccacaact acctgcctg gtaccagcag 540

aagccgggaa aggtcccaa gctgctgata tacaatacca agactctggc cgacggagtg 600

ccttcccgct tttccggttc gggaagcggg actgactaca ccctgactat ctctctgctg 660

caaccgaag atgtggctac gtactactgc cagcacttct ggtcctctcc ctggaccttc 720

ggcggtaggca ctaaggctga gattaag 747

<210> 1460

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1460

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Asn Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr
115 120 125

Ala Leu Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile
180 185 190

His Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys
195 200 205

Leu Leu Ile Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg
 210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser
 225 230 235 240

Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser
 245 250 255

Ser Pro Trp Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr
 260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
 275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
 290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
 305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
 325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
 340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
 355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
 370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln
 385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1461
<211> 1479
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1461
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtgc aactcgtcca gtccggtgca gaagtcaaga aaccaggcgc atccgtgaaa 120
gtctcctgca aagcctccgg ctacacattc actaactatt ggatgcattg ggtgcgccag 180
gccccgggac aggggctgga gtggatgggg ttcattaccc ctaccaccgg ctaccctgag 240
tacaaccaga agttcaagga tagggtcacc atgaccgctg acaagtccac ctccaccgcg 300
tacatggaac tgtcatcgct ccggtccgag gataccgcgg tgtactactg cgcccggaga 360
aaagtcgga agggagtgtt ttacgccttg gactactggg gacaggggac taccgtgacc 420
gtgtcgagcg gtggaggcgg ctccggcgga ggaggaagcg ggggaggcgg ttcagggggc 480
ggaggaagcg acatccagat gaccagtc ccgtcaagcc ttagcgcctc cgtgggcgac 540
cgcgtgacca ttacttgtcg ggcgtcggga aacatccaca actacctcgc ctggtaccag 600
cagaagccgg gaaaggtccc caagctgctg atctacaata ccaagactct ggccgacgga 660

gtgccttccc gcttttccgg ttcgggaagc gggactgact acaccctgac tatctcctcg	720
ctgcaacccg aagatgtggc tacgtactac tgccagcact tctggtcctc tccctggacc	780
ttcggcgggtg gcactaaggt cgagattaag accactaccc cagcaccgag gccacccacc	840
ccggctccta ccatcgcctc ccagcctctg tccctgcgtc cggaggcatg tagaccgcga	900
gctgggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgagg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcattgccg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct accagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccaggagc tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 1462
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1462
 Asn Tyr Trp Met His
 1 5

<210> 1463
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1463

Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1464

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1464

Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1465

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1465

Gly Tyr Thr Phe Thr Asn Tyr
1 5

<210> 1466

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1466

Thr Pro Thr Thr Gly Tyr

<210> 1467
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1467
Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1468
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1468
Gly Tyr Thr Phe Thr Asn Tyr Trp
1 5

<210> 1469
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1469
Ile Thr Pro Thr Thr Gly Tyr Pro
1 5

<210> 1470
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1470
Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10 15

<210> 1471
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1471
Gly Tyr Thr Phe Thr Asn Tyr Trp Met His
1 5 10

<210> 1472
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1472
Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1473
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1473

Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1474

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1474

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1475

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1475

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caagtccaac tcgtccaatc aggagcagaa gtcaagaagc ccggaagctc tgtcaaagtg      60
tcctgcaagg cctccggtta caccttcacc aactattgga tgcactgggt cagacaggcc      120
ccgggacagg gcttggaatg gatgggtttc atcactccaa ccaccggtta cccggagtac      180
aaccagaagt ttaaggaccg cgtgaccatt actgccgaca agtccacgag caccgcttac      240
atggaactta gcagcctgcg gtccgaggac actgccgtgt attactgcgc gcggaggaag      300
gtcggaaagg gagtgtacta cgcactggac tactggggcc agggaaccac cgtgactgtg      360
tcctcc                                     366
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<210> 1476

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1476

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Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
1           5           10
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<210> 1477

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1477

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Asn Thr Lys Thr Leu Ala Asp
1           5
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<210> 1478

<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1478
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1479
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1479
Ser Gly Asn Ile His Asn Tyr
1 5

<210> 1480
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1480
Asn Thr Lys
1

<210> 1481
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1481
Phe Trp Ser Ser Pro Trp
1 5

<210> 1482
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1482
Gly Asn Ile His Asn Tyr
1 5

<210> 1483
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1483
Asn Thr Lys
1

<210> 1484
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1484
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1485
<211> 11

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1485
Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
1 5 10

<210> 1486
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1486
Asn Thr Lys Thr Leu Ala Asp
1 5

<210> 1487
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1487
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1488
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1488

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 Gly Asn Ile His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45

Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1489

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1489

gatattcaga tgaccagtc cccttcatcc ctgagcgcct cagtgggcga tagagtgacc 60
atcacttgtc ggcctcggg caatatccac aactacctcg cctggtacca gcagaagccg 120
ggaaaagtgc ctaagctgct gatctacaac actaagaccc tggcggatgg agtgcccagc 180
cggttctccg gctccggcag cggcacagac tacaccctca ccattctctc gctgcaacca 240
gaggacgtgg ctacctacta ctgccagcat ttctggtcgt cccctggac tttcggaggg 300
gggaccaaag tggagattaa g 321

<210> 1490
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1490
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1491
<211> 249
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1491
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile Tyr Asn
180 185 190

Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
210 215 220

Val Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp Thr Phe
225 230 235 240

Gly Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1492
<211> 747
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1492
caagtccaac tcgtccaatc aggagcagaa gtcaagaagc ccggaagctc tgtcaaagtg

60

tcctgcaagg cctccggtta caccttcacc aactattgga tgcactgggt cagacaggcc	120
ccgggacagg gcttggaatg gatgggtttc atcactccaa ccaccggtta cccggagtac	180
aaccagaagt ttaaggaccg cgtgaccatt actgccgaca agtccacgag caccgcttac	240
atggaactta gcagcctgcg gtccgaggac actgccgtgt attactgcgc gcggaggaag	300
gtcggaaagg gagtgtacta cgcactggac tactggggcc agggaaccac cgtgactgtg	360
tcctccggtg gcggagggtc gggagggggg ggctcgggag gaggagggtc cgggggcggt	420
ggctcagata ttcatgatgac ccagtcccct tcatccctga gcgcctcagt gggcgataga	480
gtgaccatca cttgtcgcgc ctccgggcaat atccacaact acctcgctg gtaccagcag	540
aagccgggaa aagtgcctaa gctgctgata tacaacacta agaccctggc ggatggagtg	600
cccagccggt tctccggctc cggcagcggc acagactaca ccctcaccat ctctcgctg	660
caaccagagg acgtggctac ctactactgc cagcatttct ggctgtcccc ctggactttc	720
ggagggggga ccaaagtga gattaag	747

<210> 1493

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1493

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5				10					15	

His	Ala	Ala	Arg	Pro	Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val
			20					25					30		

Lys	Lys	Pro	Gly	Ser	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr
		35						40				45			

Thr	Phe	Thr	Asn	Tyr	Trp	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln
	50						55				60				

Gly Leu Glu Trp Met Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Ile Thr Ala Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr
115 120 125

Ala Leu Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile
180 185 190

His Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys
195 200 205

Leu Leu Ile Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg
210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser
245 250 255

Ser Pro Trp Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln

275

280

285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
 290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
 305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
 325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
 340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
 355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
 370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln
 385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
 420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
 435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
 450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
 465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1494
 <211> 1479
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1494
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 cccaagtcc aactcgtcca atcaggagca gaagtcaaga agcccggaag ctctgtcaaa 120
 gtgtcctgca aggcctccgg ttacaccttc accaactatt ggatgcactg ggtcagacag 180
 gccccgggac agggcttgga atggatgggt ttcactctc caaccaccgg ttaccggag 240
 tacaaccaga agtttaagga ccgcgtgacc attactgccg acaagtccac gagcaccgct 300
 tacatggaac ttagcagcct gcggtccgag gacactgccg tgtattactg cgcgcgagg 360
 aaggtcggaa agggagtgtg ctacgcactg gactactggg gccagggaac caccgtgact 420
 gtgtcctccg gtggcggagg gtcgggaggg gggggctcgg gaggaggagg gtccgggggc 480
 ggtggctcag atattcagat gaccagtc cttcatccc tgagcgcctc agtgggagat 540
 agagtacca tcacttgtcg cgcctcgggc aatatccaca actacctcgc ctggtaccag 600
 cagaagccgg gaaaagtgcc taagctgctg atctacaaca ctaagaccct ggcggatgga 660
 gtgcccagcc ggttctccgg ctccggcagc ggcacagact acaccctcac catctcctcg 720
 ctgcaaccag aggacgtggc tacctactac tgccagcatt tctggtcgtc cccctggact 780
 ttcggagggg ggaccaaagt ggagattaag accactaccc cagcaccgag gccaccacc 840
 ccggctccta ccatcgcctc ccagcctctg tccctgcgtc cggaggcatg tagaccgca 900
 gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatattcta catttgggcc 960
 cctctggctg gtacttgctg ggtcctgctg ctttactctg tgatcactct ttactgtaag 1020
 cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact 1080
 actcaagagg aggacggctg ttcattgccg ttcccagagg aggaggaagg cggctgcgaa 1140
 ctgcgctga aattcagccg cagcgcagat gctccagcct accagcaggg gcagaaccag 1200

ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga 1260
ggacggggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac 1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa 1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac 1440
acctatgacg ctcttcacat gcaggccctg cgcctcgg 1479

<210> 1495
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1495
Asn Tyr Trp Met His
1 5

<210> 1496
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1496
Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1497
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

peptide"

<400> 1497

Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1498

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1498

Gly Tyr Thr Phe Thr Asn Tyr
1 5

<210> 1499

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1499

Thr Pro Thr Thr Gly Tyr
1 5

<210> 1500

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1500

Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1501

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1501
Gly Tyr Thr Phe Thr Asn Tyr Trp
1 5

<210> 1502
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1502
Ile Thr Pro Thr Thr Gly Tyr Pro
1 5

<210> 1503
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1503
Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10 15

<210> 1504
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1504
Gly Tyr Thr Phe Thr Asn Tyr Trp Met His
1 5 10

<210> 1505
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1505
Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1506
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1506
Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1507
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1507
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1508
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1508
caagtccaac tcgtccagtc cgggtgcagaa gtcaagaaac ccggagcttc cgtgaaagtg 60
tcctgcaaag cctccggtta cacctttacg aactactgga tgcattgggt gcgccaggcc 120
ccgggacagg ggctggaatg gatgggcttc attaccccca ccaccggata ccccgagtac 180
aatcagaagt tcaaggaccg ggtcaccatg accgccgaca agtcaacctc tactgcttac 240
atggagctgt ccagcctgcg gtcggaagat accgccgtgt attactgcmc gagaaggaaa 300
gtcggaaaagg gagtgtacta tgccctggac tactggggac aggggaccac tgtgactgtg 360

<210> 1509
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1509
Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
1 5 10

<210> 1510
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1510
Asn Thr Lys Thr Leu Ala Asp
1 5

<210> 1511
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1511
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1512
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1512
Ser Gly Asn Ile His Asn Tyr
1 5

<210> 1513
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1513
Asn Thr Lys
1

<210> 1514
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1514
Phe Trp Ser Ser Pro Trp
1 5

<210> 1515
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1515
Gly Asn Ile His Asn Tyr
1 5

<210> 1516
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1516
Asn Thr Lys
1

<210> 1517
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1517
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1518
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1518
Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
1 5 10

<210> 1519
<211> 7
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1519
Asn Thr Lys Thr Leu Ala Asp
1 5

<210> 1520
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1520
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1521
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1521
Ala Ile Arg Met Thr Gln Ser Pro Phe Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Ala Lys Ala Pro Lys Leu Phe Ile
35 40 45

Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1522
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1522
gcgatccgca tgaccagag cccgttctcc ctgtccgcgt ccgtggggga ccgcgtgact 60
atcacgtgtc gggcctccgg gaacatccac aactacctcg catggtacca gcagaagccg 120
gccaaggccc ctaagttggt catctacaac accaagactc ttgccgacgg agtgccgtcc 180
cggtttagcg gaagcgggtc cggcaccgac tacaccctga ctatctcgag cctgcaacca 240
gaagatttcg ccacttacta ctgccagcac ttctggtcgt ccccttgac attcggcggc 300
ggcaccaagg tcgagattaa g 321

<210> 1523
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1523
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1524
<211> 249
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1524
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Ile
130 135 140

Arg Met Thr Gln Ser Pro Phe Ser Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Ala Lys Ala Pro Lys Leu Phe Ile Tyr Asn
180 185 190

Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
210 215 220

Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp Thr Phe
225 230 235 240

Gly Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1525
<211> 747
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1525
caagtccaac tcgtccagtc cgggtgcagaa gtcaagaaac ccggagcttc cgtgaaagtg 60
tcctgcaaag cctccgggta cacctttacg aactactgga tgcattgggt gcgccaggcc 120
ccgggacagg ggctggaatg gatgggcttc attaccccca ccaccgata ccccgagtac 180
aatcagaagt tcaaggaccg ggtcaccatg accgccgaca agtcaacctc tactgcttac 240
atggagctgt ccagcctgcg gtcggaagat accgccgtgt attactgcgc gagaaggaaa 300
gtcggaaagg gagtgtacta tgccctggac tactggggac aggggaccac tgtgactgtg 360
tcaagcggag gcggaggctc ggggggcgga ggttcgggcg gaggaggatc agggggcggc 420
ggttccgcga tccgcatgac ccagagcccg ttctccctgt ccgcgtccgt gggggaccgc 480
gtgactatca cgtgtcgggc ctccgggaac atccacaact acctcgcgtg gtaccagcag 540
aagccggcca aggcccctaa gttgttcatt tacaacacca agactcttgc cgacggagtg 600

ccgtcccggt ttagcggaag cggttccggc accgactaca ccctgactat ctcgagcctg 660
 caaccagaag atttcgccac ttactactgc cagcacttct ggtcgtcccc ttggacattc 720
 ggcggcggca ccaaggtcga gattaag 747

<210> 1526
 <211> 493
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1526
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Asn Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu
 65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser
 85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr
 115 120 125

Ala Leu Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
 130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Ala Ile Arg Met Thr Gln Ser Pro Phe Ser Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile
180 185 190

His Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Ala Lys Ala Pro Lys
195 200 205

Leu Phe Ile Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg
210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser
245 250 255

Ser Pro Trp Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1527
<211> 1479
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1527
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtcc aactcgtcca gtccggtgca gaagtcaaga aaccgggagc ttccgtgaaa 120
gtgtcctgca aagcctccgg ttacaccttt acgaactact ggatgcattg ggtgcgccag 180

gccccgggac aggggctgga atggatgggc ttcattaccc ccaccaccgg ataccccgag	240
tacaatcaga agttcaagga ccgggtcacc atgaccgccg acaagtcaac ctctactgct	300
tacatggagc tgtccagcct gcggtcggaa gataccgccg tgtattactg cgcgagaagg	360
aaagtcggaa agggagtgtg ctatgccctg gactactggg gacaggggac cactgtgact	420
gtgtcaagcg gaggcggagg ctcggggggc ggaggttcgg gcggaggagg atcagggggc	480
ggcggttccg cgatccgcat gaccagagc ccgttctccc tgtccgcgtc cgtgggggac	540
cgcgtgacta tcacgtgtcg ggcctccggg aacatccaca actacctcgc atggtaccag	600
cagaagccgg ccaaggcccc taagttgttc atctacaaca ccaagactct tgccgacgga	660
gtgccgtccc ggtttagcgg aagcggttcc ggcaccgact acaccctgac tatctcgagc	720
ctgcaaccag aagatttcgc cacttactac tgccagcact tctggtcgtc cccttggaca	780
ttcggcggcg gcaccaaggt cgagattaag accactaccc cagcaccgag gccaccacc	840
ccggctccta ccatcgcctc ccagcctctg tccctgcgtc cggaggcatg tagaccgcga	900
gctgggtggg ccgtgcatac ccgggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgagg ggtcctgctg ctttactcgt tgatcactct ttactgtaag	1020
cgcggtcgga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct accagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 1528

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1528
Asn Tyr Trp Met His
1 5

<210> 1529
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1529
Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1530
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1530
Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1531
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1531
Gly Tyr Thr Phe Thr Asn Tyr

1

5

<210> 1532
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1532
Thr Pro Thr Thr Gly Tyr
1 5

<210> 1533
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1533
Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1534
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1534
Gly Tyr Thr Phe Thr Asn Tyr Trp
1 5

<210> 1535
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1535
Ile Thr Pro Thr Thr Gly Tyr Pro
1 5

<210> 1536
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1536
Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10 15

<210> 1537
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1537
Gly Tyr Thr Phe Thr Asn Tyr Trp Met His
1 5 10

<210> 1538
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1538
Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 1539
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1539
Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr
1 5 10

<210> 1540
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1540
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
 100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 1541

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1541

caagtccaac tcgtccaaag cgggtgcagaa gtcaagaagc ccggttcctc cgtgaaagtg 60

tcctgcaaag cctcgggcta caccttcact aattactgga tgcattgggt ccgccaggcg 120

cccggacagg gattggaatg gatgggggttc atcacgccga ccaccggata cccggagtac 180

aaccagaagt tcaaggacag agtgaccatt accgccgata agtccacctc caccgcttac 240

atggagctct cctcactgcg gtccgaagat acagccgtgt actattgtgc tcgccgaaa 300

gtcggaaagg gagtgtacta cgccctggac tattggggcc agggcaccac cgtgaccgtg 360

tcctcg 366

<210> 1542

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 1542

Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
 1 5 10

<210> 1543

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1543
Asn Thr Lys Thr Leu Ala Asp
1 5

<210> 1544
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1544
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1545
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1545
Ser Gly Asn Ile His Asn Tyr
1 5

<210> 1546
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1546
Asn Thr Lys
1

<210> 1547
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1547
Phe Trp Ser Ser Pro Trp
1 5

<210> 1548
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1548
Gly Asn Ile His Asn Tyr
1 5

<210> 1549
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1549
Asn Thr Lys
1

<210> 1550
<211> 9

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1550
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1551
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1551
Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
1 5 10

<210> 1552
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1552
Asn Thr Lys Thr Leu Ala Asp
1 5

<210> 1553
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1553
Gln His Phe Trp Ser Ser Pro Trp Thr
1 5

<210> 1554
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1554
Ala Ile Arg Met Thr Gln Ser Pro Phe Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Ala Lys Ala Pro Lys Leu Phe Ile
35 40 45

Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1555
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1555
gccattagga tgactcagtc ccctttctcc ctctccgcga gcgtgggcga ccgcgtgacg 60
atcacttgcc gggcctcggg gaacattcac aactacctgg cctggtacca gcagaagccg 120
gccaaggccc ctaagctggt catctacaac accaagaccc ttgcggacgg agtgccatcg 180
agattttccg gctcgggctc tgggaccgat tacactctga ctatctcaag cctgcaacct 240
gaggacttcg ccacttacta ctgccagcac ttctggagca gcccctggac tttcggtggc 300
gggaccaagg tcgaaatcaa g 321

<210> 1556
<211> 20
<212> PRT
<213> Artificial Sequence
<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1556
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1557
<211> 249
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1557
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Ile
130 135 140

Arg Met Thr Gln Ser Pro Phe Ser Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Ala Lys Ala Pro Lys Leu Phe Ile Tyr Asn
180 185 190

Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
210 215 220

Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp Thr Phe
225 230 235 240

Gly Gly Gly Thr Lys Val Glu Ile Lys

<210> 1558
 <211> 747
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1558
 caagtccaac tcgtccaaag cgggtgcagaa gtcaagaagc ccggttcctc cgtgaaagtg 60
 tcctgcaaag cctcgggcta caccttcact aattactgga tgcattgggt ccgccaggcg 120
 cccggacagg gattggaatg gatgggggttc atcacgccga ccaccggata cccggagtac 180
 aaccagaagt tcaaggacag agtgaccatt accgccgata agtccacctc caccgcttac 240
 atggagctct cctcactgcg gtccgaagat acagccgtgt actattgtgc tcgccgaaa 300
 gtcggaaagg gagtgtacta cgccctggac tattggggcc agggcaccac cgtgaccgtg 360
 tcctcgggag gaggggggttc gggcggaggc ggctccggtg gaggcggaag cggagggggc 420
 ggatcagcca ttaggatgac tcagtcccct ttctccctct ccgcgagcgt gggcgaccgc 480
 gtgacgatca cttgccgggc ctccggggaac attcacaact acctggcctg gtaccagcag 540
 aagccggcca agggccctaa gctgttcac tacaacacca agacccttgc ggacggagtg 600
 ccatcgagat tttccggctc gggctctggg accgattaca ctctgactat ctcaagcctg 660
 caacctgagg acttcgccac ttactactgc cagcacttct ggagcagccc ctggactttc 720
 ggtggcggga ccaaggtcga aatcaag 747

<210> 1559
 <211> 493
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1559
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1	5	10	15
His	Ala	Ala	Arg
	20		
Pro	Gln	Val	Gln
		25	
Leu	Val	Gln	Ser
Gly	Ala	Glu	Val
	30		
Lys	Lys	Pro	Gly
	35		
Ser	Ser	Val	Lys
		40	
Val	Ser	Cys	Lys
			45
Ala	Ser	Gly	Tyr
Thr	Phe	Thr	Asn
	50		
Tyr	Trp	Met	His
		55	
Trp	Val	Arg	Gln
			60
Ala	Pro	Gly	Gln
Gly	Leu	Glu	Trp
Met	Gly	Phe	Ile
	70		
Thr	Pro	Thr	Thr
		75	
Gly	Tyr	Pro	Glu
			80
Tyr	Asn	Gln	Lys
Phe	Lys	Asp	Arg
	85		
Val	Thr	Ile	Thr
Ala	Asp	Lys	Ser
		95	
Thr	Ser	Thr	Ala
Tyr	Met	Glu	Leu
Ala	Tyr	Met	Glu
Leu	Ser	Ser	Leu
Arg	Ser	Glu	Asp
Thr	Asp	Lys	Ser
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys
Gly	Lys	Gly	Val
Tyr	Tyr		
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Arg
Lys	Val	Gly	Lys

Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser
 225 230 235 240

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser
 245 250 255

Ser Pro Trp Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr
 260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
 275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
 290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
 305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
 325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
 340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
 355 360 365

Cys Arg Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
 370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln
 385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
 420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 1560

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1560

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtcc aactcgtcca aagcgggtgca gaagtcaaga agcccgggttc ctccgtgaaa	120
gtgtcctgca aagcctcggg ctacaccttc actaattact ggatgcattg ggtccgccag	180
gcgcccggaac agggattgga atggatgggg ttcatcacgc cgaccaccgg ataccggag	240
tacaaccaga agttcaagga cagagtgacc attaccgccg ataagtccac ctccaccgt	300
tacatggagc tctcctcact gcggtccgaa gatacagccg tgtactattg tgctcgccgg	360
aaagtcggaa agggagtgtg ctacgccctg gactattggg gccagggcac caccgtgacc	420
gtgtcctcgg gaggaggggg ttcgggcgga ggcggctccg gtggaggcgg aagcggaggg	480
ggcggatcag ccattaggat gactcagtcc cttttctccc tctccgcgag cgtgggcgac	540
cgcgtagcga tcacttgccg ggcctcgggg aacattcaca actacctggc ctggtaccag	600
cagaagccgg ccaaggcccc taagctgttc atctacaaca ccaagaccct tgcggacgga	660
gtgccatcga gatcttcagg ctcggtctct gggaccgatt acactctgac tatctcaagc	720
ctgcaacctg aggacttcgc cacttactac tgccagcact tctggagcag cccctggact	780

ttcgggtggcg ggaccaaggt cgaaatcaag accactaccc cagcaccgag gccacccacc	840
ccgggtccta ccatcgcctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca	900
gctgggtgggg ccgtgcatac ccgggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgcgg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct accagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacggggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 1561
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1561
 Asn Tyr Asn Leu His
 1 5

<210> 1562
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1562
 Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe Lys

1 5 10 15

Gly

<210> 1563
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1563
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1564
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1564
Gly Tyr Thr Phe Thr Asn Tyr
1 5

<210> 1565
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1565
Tyr Pro Gly Asn Tyr Asp
1 5

<210> 1566

<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1566
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1567
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1567
Gly Tyr Thr Phe Thr Asn Tyr Asn
1 5

<210> 1568
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1568
Ile Tyr Pro Gly Asn Tyr Asp Thr
1 5

<210> 1569
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1569
Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10 15

<210> 1570
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1570
Gly Tyr Thr Phe Thr Asn Tyr Asn Leu His
1 5 10

<210> 1571
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1571
Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1572
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1572
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1573
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1573
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1574
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 1574
caagtccaac tcgtccaatc cgggtgcagaa gtcaagaaac ccggtgcatc cgtgaaagtg 60
tcatgcaaag cctccgggta caccttcact aactacaacc tccactgggt ccgccaggcc 120
ccgggacagg gactggagtg gatggggggc atctaccgg gaaactacga cacttcatac 180
aaccagaagt tcaagggcag agtgaccatg actgccgaca agagcacatc gaccgcctac 240
atggaactca gtcctctgcg ctccgaggat actgccgtct actactgtgc ccgggtggac 300
ttcggccact cccggtattg gtatttcgat gtctggggac agggaaccac cgtgactgtg 360
tccagc 366

<210> 1575
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1575
Arg Ala Thr Ser Ser Val Ser Ser Met Asn
1 5 10

<210> 1576
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1576
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1577
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1577
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1578
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1578
Thr Ser Ser Val Ser Ser
1 5

<210> 1579
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1579
Ala Thr Ser
1

<210> 1580
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1580
Trp Thr Phe Asn Pro Pro
1 5

<210> 1581
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1581
Ser Ser Val Ser Ser
1 5

<210> 1582
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1582
Ala Thr Ser
1

<210> 1583
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1583
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1584
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1584
Arg Ala Thr Ser Ser Val Ser Ser Met Asn
1 5 10

<210> 1585
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1585
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1586
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1586
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1587
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1587
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 Thr Ser Ser Val Ser Ser Met
20 25 30

Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile His
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
65 70 75 80

Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1588
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1588
gaaatcgtgc tgaccagtc ccctgcgact ctgagcctga gccctgggga acgcgccact 60
ttgtcatgcc gggccacctc ctccgtgtcc tccatgaact ggtaccagca gaagcccgga 120
caggctccgc ggccgctgat ccatgccacc tccaacctgg ccagcggcat tcccgcgagg 180
ttttccggct cgggctctgg taccgactac accctgacca tctcgagcct tgagccagaa 240
gatgctgcgg tgtactactg ccaacagtgg accttcaatc cgcctacgtt cggacagggg 300
accaagctgg agattaag 318

<210> 1589
<211> 20
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1589

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1590

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1590

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
 130 135 140

Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Thr Ser Ser Val Ser Ser Met Asn Trp
 165 170 175

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile His Ala Thr
 180 185 190

Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser
 195 200 205

Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala
 210 215 220

Ala Val Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr Phe Gly
 225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys
 245

<210> 1591
 <211> 744
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1591
 caagtccaac tcgtccaatc cgggtgcagaa gtcaagaaac ccggtgcatc cgtgaaagtg 60
 tcatgcaaag cctccgggta caccttcact aactacaacc tccactgggt ccgccaggcc 120
 ccgggacagg gactggagtg gatgggggcc atctaccgga gaaactacga cacttcatac 180

aaccagaagt tcaagggcag agtgaccatg actgccgaca agagcacatc gaccgcctac 240
atggaactca gctccctgcg ctccgaggat actgccgtct actactgtgc ccgggtggac 300
ttcggccact cccggtattg gtatttcgat gtctggggac agggaaccac cgtgactgtg 360
tccagcgggg gcggaggatc ggggtggcgga ggttcggggg gaggaggatc aggcggcggc 420
ggatcggaaa tcgtgctgac ccagtcccct gcgactctga gcctgagccc tggggaacgc 480
gccactttgt catgccgggc cacctcctcc gtgtcctcca tgaactggta ccagcagaag 540
cccggacagg ctccgcggcc gctgatccat gccacctcca acctggccag cggcattccc 600
gcgaggtttt ccggctcggg ctctggtacc gactacaccc tgaccatctc gagccttgag 660
ccagaagatg ctgcggtgta ctactgcaa cagtggacct tcaatccgcc tacgttcgga 720
caggggacca agctggagat taag 744

<210> 1592
<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1592
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Asn Tyr Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser
65 70 75 80

Tyr Asn Gln Lys Phe Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu
165 170 175

Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Thr Ser Ser Val
180 185 190

Ser Ser Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro
195 200 205

Leu Ile His Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Thr Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val

290

295

300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
 305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
 325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
 340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
 355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1593

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1593

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca atccggtgca gaagtcaaga aacccggtgc atccgtgaaa	120
gtgtcatgca aagcctccgg gtacaccttc actaactaca acctccactg ggtccgccag	180
gccccgggac agggactgga gtggatgggg gccatctacc cgggaaacta cgacacttca	240
tacaaccaga agttcaaggg cagagtgacc atgactgccg acaagagcac atcgaccgcc	300
tacatggaac tcagctccct gcgctccgag gatactgccg tctactactg tgcccgggtg	360
gacttcggcc actcccggta ttggtatttc gatgtctggg gacagggaac caccgtgact	420
gtgtccagcg ggggcggagg atcgggtggc ggagggttcgg ggggaggagg atcaggcggc	480
ggcggatcgg aaatcgtgct gaccagtc cctgcgactc tgagcctgag ccctggggaa	540
cgcgccactt tgtcatgccg ggccacctcc tccgtgtcct ccatgaactg gtaccagcag	600
aagcccggac aggctccgcg gccgctgac catgccacct ccaacctggc cagcggcatt	660
cccgcgaggt tttccggctc gggctctggt accgactaca ccctgaccat ctcgagcctt	720
gagccagaag atgctgcggt gtactactgc caacagtgga ccttcaatcc gcctacgttc	780
ggacagggga ccaagctgga gattaagacc actaccccag caccgaggcc acccaccgcc	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag accgcagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttgggcccct	960
ctggctggta cttgcgggggt cctgctgctt tcactcgtga tcactcttta ctgtaagcgc	1020
ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gagtacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320

gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc 1380
 agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc 1440
 tatgacgctc ttcacatgca ggccctgccg cctcgg 1476

<210> 1594
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1594
 Asn Tyr Asn Leu His
 1 5

<210> 1595
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1595
 Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe Lys
 1 5 10 15

Gly

<210> 1596
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1596
 Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val

1 5 10

<210> 1597
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1597
Gly Tyr Thr Phe Thr Asn Tyr
1 5

<210> 1598
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1598
Tyr Pro Gly Asn Tyr Asp
1 5

<210> 1599
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1599
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1600
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1600
Gly Tyr Thr Phe Thr Asn Tyr Asn
1 5

<210> 1601
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1601
Ile Tyr Pro Gly Asn Tyr Asp Thr
1 5

<210> 1602
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1602
Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10 15

<210> 1603
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1603
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1604
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1604
caagtccaac tcgtccagtc gggagcagaa gtcaagaagc ccggatcatc cgtgaaagtg 60
tcctgcaaag cctcaggcta cacctttacc aactacaact tgcactgggt cagacaggcc 120
ccgggacagg gcctggagtg gatgggcgcc atctaccccg gaaactatga cacctcgtac 180
aaccagaagt tcaagggtcg cgtgactatc acggctgaca agtccactag caccgcgtac 240
atggaacttt cctcactgcg gtccgaggat actgcggtgt actactgcgc ccgggtggac 300
ttcggacact cgagatatg gtacttcgat gtctggggac aggggaccac cgtgactgtg 360

<210> 1605
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1605
Arg Ala Thr Ser Ser Val Ser Ser Met Asn
1 5 10

<210> 1606
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1606
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1607
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1607
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1608
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1608
Thr Ser Ser Val Ser Ser
1 5

<210> 1609
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1609
Ala Thr Ser
1

<210> 1610
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1610
Trp Thr Phe Asn Pro Pro
1 5

<210> 1611
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1611
Ser Ser Val Ser Ser
1 5

<210> 1612
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1612
Ala Thr Ser
1

<210> 1613
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1613
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1614
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1614
Arg Ala Thr Ser Ser Val Ser Ser Met Asn
1 5 10

<210> 1615
<211> 7
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1615
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1616
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1616
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1617
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1617
Ala Ile Arg Met Thr Gln Ser Pro Phe Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Ala Lys Ala Pro Lys Leu Phe Ile
35 40 45

Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1618
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1618
gaaattgtgc tgaccagtc tcccgaacc ctgtccctga gccctggaga gcgcgccacc 60
ctgtcctgcc gggccacatc ctccgtgtcg tccatgaact ggtaccagca gaagcccggc 120
caagccccga ggcctctgat tcatgctacc tcaaattctgg ccagcggaat cccggcgcgc 180
ttctccggct cgggcagcgg tactgactac actctcacca tctcgtccct cgaaccggag 240
gacgccgccg tctactactg tcagcagtgg accttcaacc cacctacttt cggacaaggg 300
accaagctgg agatcaag 318

<210> 1619
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1619
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
1 5 10 15

Gly Gly Ser

<210> 1620
<211> 249
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1620
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Ile
130 135 140

Arg Met Thr Gln Ser Pro Phe Ser Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Ala Lys Ala Pro Lys Leu Phe Ile Tyr Asn
180 185 190

Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
210 215 220

Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp Thr Phe
225 230 235 240

Gly Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1621
<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1621
caagtccaac tcgtccagtc gggagcagaa gtcaagaagc ccggatcatc cgtgaaagtg 60
tcctgcaaag cctcaggcta cacctttacc aactacaact tgcactgggt cagacaggcc 120
ccgggacagg gcctggagtg gatgggcgcc atctaccccg gaaactatga cacctcgtac 180
aaccagaagt tcaagggtcg cgtgactatc acggctgaca agtccactag caccgcgtac 240
atggaacttt cctcactgcg gtccgaggat actgcggtgt actactgcgc ccgggtggac 300
ttcggacact cgagatattg gtacttcgat gtctggggac aggggaccac cgtgactgtg 360
tcctccgggg gcggtggcag cgggggaggc ggaagcggcg gagggggttc cgggggtgga 420
ggaagcgaag ttgtgctgac ccagtctccc gcaaccctgt ccctgagccc tggagagcgc 480
gccaccctgt cctgccgggc cacatcctcc gtgtcgtcca tgaactggta ccagcagaag 540
cccggccaag ccccgaggcc tctgattcat gctacctcaa atctggccag cggaatcccg 600

gcgcgcttct ccggctcggg cagcgggtact gactacactc tcaccatctc gtccttcgaa 660
ccggaggacg ccgccgtcta ctactgtcag cagtggacct tcaaccacc tactttcgga 720
caagggacca agctggagat caag 744

<210> 1622
<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1622
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Asn Tyr Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser
65 70 75 80

Tyr Asn Gln Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu
 165 170 175

Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Thr Ser Ser Val
 180 185 190

Ser Ser Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro
 195 200 205

Leu Ile His Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe
 210 215 220

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu
 225 230 235 240

Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Thr Phe Asn
 245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr
 260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
 275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
 290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
 305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
 325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
 340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
 355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1623
 <211> 1476
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1623
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccaagtcc aactcgtcca gtcgggagca gaagtcaaga agcccggatc atccgtgaaa 120
 gtgtcctgca aagcctcagg ctacaccttt accaactaca acttgcaactg ggtcagacag 180

gccccgggac agggcctgga gtggatgggc gccatctacc ccggaacta tgacacctcg	240
tacaaccaga agttcaaggg tcgctgact atcacggctg acaagtccac tagcaccgcg	300
tacatggaac tttcctcact gcggtccgag gatactgcgg tgtactactg cgcccgggtg	360
gacttcggac actcgagata ttggtacttc gatgtctggg gacaggggac caccgtgact	420
gtgtcctccg ggggcggtgg cagcggggga ggcggaagcg gcggaggggg ttccgggggt	480
ggaggaagcg aaattgtgct gaccagtct cccgaaccc tgtccctgag ccctggagag	540
cgcgccaccc tgtcctgccg ggccacatcc tccgtgtcgt ccatgaactg gtaccagcag	600
aagcccggcc aagccccgag gcctctgatt catgctacct caaatctggc cagcggaatc	660
ccggcgcgct tctccggctc gggcagcggg actgactaca ctctcaccat ctcgctccctc	720
gaaccggagg acgccgccgt ctactactgt cagcagtgga ccttcaaccc acctactttc	780
ggacaaggga ccaagctgga gatcaagacc actacccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcggggg cctgctgctt tcaactcgtga tcaactcttta ctgtaagcgc	1020
ggtcggaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 1624

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1624
Asn Tyr Asn Leu His
1 5

<210> 1625
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1625
Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1626
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1626
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1627
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1627
Gly Tyr Thr Phe Thr Asn Tyr

1

5

<210> 1628
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1628
Tyr Pro Gly Asn Tyr Asp
1 5

<210> 1629
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1629
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1630
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1630
Gly Tyr Thr Phe Thr Asn Tyr Asn
1 5

<210> 1631
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1631
Ile Tyr Pro Gly Asn Tyr Asp Thr
1 5

<210> 1632
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1632
Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10 15

<210> 1633
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1633
Gly Tyr Thr Phe Thr Asn Tyr Asn Leu His
1 5 10

<210> 1634
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1634
Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1635
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1635
Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val
1 5 10

<210> 1636
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1636
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val Trp
 100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 1637

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1637

caagtccaac tcgtccagtc gggagcagaa gtcaagaagc ccgatcatc cgtgaaagtg 60

tcctgcaaag cctcaggcta cacctttacc aactacaact tgcactgggt cagacaggcc 120

ccgggacagg gcctggagtg gatgggcgcc atctaccccg gaaactatga cacctcgtac 180

aaccagaagt tcaagggtcg cgtgactatc acggctgaca agtcactag caccgcgtac 240

atggaacttt cctcactgcg gtccgaggat actgcggtgt actactgcgc ccgggtggac 300

ttcggacact cgagatattg gtacttcgat gtctggggac aggggaccac cgtgactgtg 360

tcctcc 366

<210> 1638

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 1638

Arg Ala Thr Ser Ser Val Ser Ser Met Asn
 1 5 10

<210> 1639

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1639
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1640
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1640
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1641
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1641
Thr Ser Ser Val Ser Ser
1 5

<210> 1642
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1642
Ala Thr Ser
1

<210> 1643
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1643
Trp Thr Phe Asn Pro Pro
1 5

<210> 1644
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1644
Ser Ser Val Ser Ser
1 5

<210> 1645
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1645
Ala Thr Ser
1

<210> 1646
<211> 9

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1646
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1647
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1647
Arg Ala Thr Ser Ser Val Ser Ser Met Asn
1 5 10

<210> 1648
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1648
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1649
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1649
Gln Gln Trp Thr Phe Asn Pro Pro Thr
1 5

<210> 1650
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1650
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 Thr Ser Ser Val Ser Ser Met
20 25 30

Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile His
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
65 70 75 80

Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1651
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1651
gaaattgtgc tgaccagtc tcccgaacc ctgtccctga gccctggaga gcgcgccacc 60
ctgtcctgcc gggccacatc ctccgtgtcg tccatgaact ggtaccagca gaagcccggc 120
caagccccga ggcctctgat tcatgctacc tcaaattctgg ccagcggaat cccggcgcgc 180
ttctccggct cgggcagcgg tactgactac actctcacca tctcgtccct cgaaccggag 240
gacgccgccg tctactactg tcagcagtgg accttcaacc cacctacttt cggacaaggg 300
accaagctgg agatcaag 318

<210> 1652
<211> 20
<212> PRT
<213> Artificial Sequence
<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1652
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1653
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1653
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asn Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Asp Phe Gly His Ser Arg Tyr Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
130 135 140

Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Thr Ser Ser Val Ser Ser Met Asn Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile His Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala
210 215 220

Ala Val Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys

<210> 1654
 <211> 744
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1654
 caagtccaac tcgtccaatc cggcgcagaa gtcaagaaac caggatcgtc cgtgaaagtg 60
 tcctgcaagg cgtccgggta caccttcact aattacaacc tccactgggt cagacaggcc 120
 ccaggacagg gcctggaatg gatgggcgcc atctaccctg gaaactacga tacctcgtac 180
 aaccagaagt tcaagggccg cgtgactatt accgccgaca agagcacctc caccgcctat 240
 atggaactgt cgtccctgcg gtccgaggac actgccgtgt actactgtgc aagggtggac 300
 ttcggtcact cccggtattg gtacttcgac gtctggggac aggggaccac tgtgaccgtg 360
 tcgtcgggag gcggtggaag cggcgggtggc ggaagcggag gcggcggatc agggggcgga 420
 ggaagcgaca ttcagcttac ccagtcaccg tccttcctga gcgcctccgt gggagatcgc 480
 gtgaccatca catgccgcgc cacttcctcg gtgtcctcca tgaactggta ccagcagaag 540
 cccggaaagg ctctaagcc tctgatccat gcgacctcca acttggcttc cgggggtgccg 600
 tcacggttca gcggcagcgg ttcaggaact gactacacc tgactattag ctctctcaa 660
 cccgaggact tcgccaccta ctactgccag cagtggacct tcaacccgcc cacgtttggg 720
 caggtacca agctggagat caag 744

<210> 1655
 <211> 492
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1655
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1	5	10	15
His	Ala	Ala	Arg
	20		
Pro	Gln	Val	Gln
		25	
Leu	Val	Gln	Ser
Gly	Ala	Glu	Val
	30		
Lys	Lys	Pro	Gly
	35		
Ser	Ser	Val	Lys
		40	
Val	Ser	Cys	Lys
			45
Ala	Ser	Gly	Tyr
Thr	Phe	Thr	Asn
	50		
Tyr	Asn	Leu	His
		55	
Trp	Val	Arg	Gln
			60
Ala	Pro	Gly	Gln
Gly	Leu	Glu	Trp
Met	Gly	Ala	Ile
	70		
Tyr	Pro	Gly	Asn
		75	
Tyr	Asp	Thr	Ser
			80
Tyr	Asn	Gln	Lys
Phe	Lys	Gly	Arg
	85		
Val	Thr	Ile	Thr
Ala	Asp	Lys	Ser
		95	
Thr	Ser	Thr	Ala
Tyr	Met	Glu	Leu
Ser	Ser	Leu	Arg
Ser	Glu	Asp	Thr
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His
Ser	Arg	Tyr	Trp
Ala	Val	Tyr	Tyr
Cys	Ala	Arg	Val
Asp	Phe	Gly	His

Ser Gly Ser Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu
 225 230 235 240

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Phe Asn
 245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr
 260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
 275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
 290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
 305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
 325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
 340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
 355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1656
 <211> 1476
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1656
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccaagtcc aactcgtcca atccggcgca gaagtcaaga aaccaggatc gtccgtgaaa 120
 gtgtcctgca aggcgtccgg gtacaccttc actaattaca acctccactg ggtcagacag 180
 gcccaggac agggcctgga atggatgggc gccatctacc ctggaaacta cgatacctcg 240
 tacaaccaga agttcaaggg ccgcgtgact attaccgccg acaagagcac ctccaccgcc 300
 tatatggaac tgtcgtccct gcggtccgag gacactgccg tgtactactg tgcaagggtg 360
 gacttcggtc actcccggta ttggtacttc gacgtctggg gacaggggac cactgtgacc 420
 gtgtcgtcgg gaggcggtgg aagcggcggt ggcggaagcg gaggcggcgg atcagggggc 480
 ggaggaagcg acattcagct taccagtc caatccttcc tgagcgcctc cgtgggagat 540
 cgctgacca tcacatgccg cgccacttcc tcggtgtcct ccatgaactg gtaccagcag 600
 aagcccggaa aggctcctaa gcctctgatc catgcgacct ccaacttggc ttccgggggtg 660
 ccgtcacggt tcagcggcag cggttcagga actgagtaca ccctgactat tagctctctc 720
 caaccgagg acttcgccac ctactactgc cagcagtgga ctttcaacc gccacgttt 780

gggcagggtgta ccaagctgga gatcaagacc actaccccag caccgaggcc acccaccgcc	840
gctcctacca tcgcctccca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgacg atatctacat ttggggccct	960
ctggctggtgta cttgcgggggt cctgctgctt tcactcgtga tcactcttta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggacccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 1657

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1657

Ser Tyr Asn Met His

1 5

<210> 1658

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1658

Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys

1 5 10 15

Gly

<210> 1659
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1659
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1660
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1660
Gly Tyr Thr Phe Thr Ser Tyr
1 5

<210> 1661
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1661
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1662

<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1662
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1663
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1663
Gly Tyr Thr Phe Thr Ser Tyr Asn
1 5

<210> 1664
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1664
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1665
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1665
Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10 15

<210> 1666
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1666
Gly Tyr Thr Phe Thr Ser Tyr Asn Met His
1 5 10

<210> 1667
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1667
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys
1 5 10 15

Gly

<210> 1668
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1668
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1669
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1669
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1670
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 1670
caagtccaac tcgtccagtc aggagcagaa gtcaagaaac ctggagcttc cgtgaaagtg 60
tcgtgcaagg cctccggcta caccttcacc tcttacaaca tgactgggt cagacaggcc 120
cctggtaag gactggaatg gatgggagcg atctaccg gcaacggaga cacttcgtac 180
aaccccaagt tcaagggacg ggtcactatg accgccgata agagcacgcg caccgcgtac 240
atggaactga gcagcctgcg ctccgaggac actgccgtgt attactgcgc gaggagctac 300
ttctacggat catcgtcgtg gtacttcgac gtctggggcc agggcaccac cgtgaccgtg 360
tcatcc 366

<210> 1671
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1671
Arg Ala Ser Ser Ser Val Ser Ser Met His
1 5 10

<210> 1672
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1672
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1673
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1673
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1674
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1674
Ser Ser Ser Val Ser Ser
1 5

<210> 1675
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1675
Ala Thr Ser
1

<210> 1676
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1676
Trp Ile Phe Asn Pro Pro
1 5

<210> 1677
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1677
Ser Ser Val Ser Ser
1 5

<210> 1678
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1678
Ala Thr Ser
1

<210> 1679
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1679
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1680
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1680
Arg Ala Ser Ser Ser Val Ser Ser Met His
1 5 10

<210> 1681
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1681
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1682
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1682
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1683
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1683
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Ser Ser Met
 20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Phe
 35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
 50 55 60

Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
 65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
 85 90 95

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 1684
 <211> 318
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1684
 gatattcagc tgaccagag cccgtcattc ctgtccgcct ccgtgggaga cagagtgacc 60
 atcacttgtc gggccagctc ctcggtgtcc tccatgcatt ggtatcagca gaagcctggg 120
 aaggctccca agcccctcat cttcgccaca tcaaattctg cctccggggg gccaaagccgg 180
 ttctccggga gcggctccgg tactgagtac actctgacca tttcctcctt gcaacccgag 240
 gactttgcca cctactactg ccagcagtgg atctttaacc cgccgacctt cggaggagga 300
 accaaagtgg agatcaag 318

<210> 1685
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1685

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1686

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1686

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Ser Ser Met His Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Phe Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1687
<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1687
caagtccaac tcgtccagtc aggagcagaa gtcaagaaac ctggagcttc cgtgaaagtg 60
tcgtgcaagg cctccggcta caccttcacc tcttacaaca tgcactgggt cagacaggcc 120
cctggtcaag gactggaatg gatgggagcg atctaccgga gcaacggaga cacttcgtac 180

aaccccaagt tcaagggacg ggtcactatg accgccgata agagcacgcg caccgcgtac 240
atggaactga gcagcctgcg ctccgaggac actgccgtgt attactgcgc gaggagctac 300
ttctacggat catcgtcgtg gtacttcgac gtctggggcc agggcaccac cgtgaccgtg 360
tcatccggtg gcggaggatc ggggggcgga ggaagcggcg gggggggctc cggcggtgga 420
ggctcggata ttcagctgac ccagagcccg tcattcctgt ccgcctccgt gggagacaga 480
gtgaccatca cttgtcgggc cagctcctcg gtgtcctcca tgcattggta tcagcagaag 540
cctgggaagg ctccaagcc cctcatcttc gccacatcaa atcttgccctc cggggtgcca 600
agccggttct ccgggagcgg ctccggtact gagtacactc tgaccatttc ctccttgcaa 660
cccgaggact ttgccaccta ctactgccag cagtggatct ttaaccgcc gaccttcgga 720
ggaggaacca aagtggagat caag 744

<210> 1688
<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1688
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
65 70 75 80

Tyr Asn Pro Lys Phe Lys Gly Arg Val Thr Met Thr Ala Asp Lys Ser
85 90 95

Thr Arg Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val
180 185 190

Ser Ser Met His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro
195 200 205

Leu Ile Phe Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val

290

295

300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
 305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
 325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
 340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
 355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1689

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1689

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca gtcaggagca gaagtcaaga aacctggagc ttccgtgaaa	120
gtgtcgtgca aggcctccgg ctacaccttc acctcttaca acatgcactg ggtcagacag	180
gcccctggtc aaggactgga atggatggga gcgatctacc cgggcaacgg agacacttcg	240
tacaaccca agttcaaggg acgggtcact atgaccgccg ataagagcac gcgcaccgcg	300
tacatggaac tgagcagcct gcgctccgag gacactgccg tgtattactg cgcgaggagc	360
tacttctacg gatcatcgtc gtggtacttc gacgtctggg gccagggcac caccgtgacc	420
gtgtcatccg gtggcggagg atcggggggc ggaggaagcg gcgggggggg ctccggcggg	480
ggaggctcgg atattcagct gaccagagc ccgtcattcc tgtccgcctc cgtgggagac	540
agagtgacca tcacttgtcg ggccagctcc tcggtgtcct ccatgcattg gtatcagcag	600
aagcctggga aggctcccaa gcccctcatc ttcgccacat caaatcttgc ctccgggggtg	660
ccaagccggg tctccgggag cggctccggg actgagtaca ctctgaccat ttctctcttg	720
caacccgagg actttgccac ctactactgc cagcagtgga tctttaacct gccgaccttc	780
ggaggaggaa ccaaagtgga gatcaagacc actacccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag accgcagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcggggg cctgctgctt tctctgtga tctctttta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgctgaaat tcagccgcag cgcatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc ccaagaggg cctgtacaac	1320

gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc 1380
 agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc 1440
 tatgacgctc ttcacatgca ggccctgccg cctcgg 1476

<210> 1690
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1690
 Ser Tyr Asn Met His
 1 5

<210> 1691
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1691
 Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys
 1 5 10 15

Gly

<210> 1692
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1692
 Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val

1 5 10

<210> 1693
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1693
Gly Tyr Thr Phe Thr Ser Tyr
1 5

<210> 1694
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1694
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1695
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1695
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1696
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1696
Gly Tyr Thr Phe Thr Ser Tyr Asn
1 5

<210> 1697
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1697
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1698
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1698
Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10 15

<210> 1699
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1699
Gly Tyr Thr Phe Thr Ser Tyr Asn Met His
1 5 10

<210> 1700
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1700
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys
1 5 10 15

Gly

<210> 1701
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1701
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1702
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1702
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
 50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
 100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 1703
 <211> 366
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1703
 caagtgaac tcgtccagtc cgggtgcagaa gtcaagaagc ctggttcacg ggtgaaagtg 60
 tcctgcaaag cgtcgggcta caccttcacc tcgtacaaca tgcactgggt ccgccaggcc 120
 cccggacaag gactggaatg gatgggtgct atctaccccg gaaacggaga taccagctac 180
 aacccaagt tcaagggacg cgtgaccatt actgccgaca agtcacaaag aaccgcctac 240
 atggaactgt ccagcctgag atccgaggac actgcggtgt actactgtgc gaggtcctac 300
 ttctacgggt cctcctcttg gtacttcgac gtctggggac agggcactac tgtgaccgtg 360
 tccagc 366

<210> 1704

<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1704
Arg Ala Ser Ser Ser Val Ser Ser Met His
1 5 10

<210> 1705
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1705
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1706
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1706
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1707
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1707
Ser Ser Ser Val Ser Ser
1 5

<210> 1708
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1708
Ala Thr Ser
1

<210> 1709
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1709
Trp Ile Phe Asn Pro Pro
1 5

<210> 1710
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1710
Ser Ser Val Ser Ser
1 5

<210> 1711
<211> 3

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1711
Ala Thr Ser
1

<210> 1712
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1712
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1713
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1713
Arg Ala Ser Ser Ser Val Ser Ser Met His
1 5 10

<210> 1714
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1714
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1715
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1715
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1716
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1716
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 Ser Ser Val Ser Ser Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile Phe
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
65 70 75 80

Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1717
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1717
gagatcgtgc tgacgcagtc gccggccacc ctgagccttt caccgggaga acgcgccact 60
ctgtcatgcc gggccagcag ctccgtgtcc tccatgcatt ggtaccagca gaagccgggg 120
caggccccgc ggcctctcat cttcgccacc tccaatctgg cctccggcat ccctgctcgg 180
tttagcggaa gcggcagcgg aactgactat accttgacca tctcctcgct ggaaccagag 240
gatgcagccg tgtactattg ccagcagtgg atcttcaacc cgccaacctt cggcggcggc 300
accaaggtcg agattaag 318

<210> 1718
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1718
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1719
<211> 248
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1719

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
130 135 140

Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Ser Ser Val Ser Ser Met His Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile Phe Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala
210 215 220

Ala Val Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1720
<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1720
caagtgaac tcgtccagtc cgggtgcagaa gtcaagaagc ctggttcacg ggtgaaagtg 60
tcctgcaaag cgtcgggcta caccttcacc tcgtacaaca tgcactgggt ccgccaggcc 120
cccggacaag gactggaatg gatgggtgct atctaccccg gaaacggaga taccagctac 180
aaccccaagt tcaagggacg cgtgaccatt actgccgaca agtccacaag aaccgcctac 240
atggaactgt ccagcctgag atccgaggac actgcggtgt actactgtgc gaggtcctac 300
ttctacgggt cctcctcttg gtacttcgac gtctggggac agggcactac tgtgaccgtg 360
tccagcgggg gaggcggtag cgggggggggt ggatcgggag gcggcggtac aggaggagga 420
gggtccgaga tcgtgctgac gcagtcgccg gccaccctga gcctttcacc gggagaacgc 480
gccactctgt catgccgggc cagcagctcc gtgtcctcca tgcattggta ccagcagaag 540
ccggggcagg ccccgcggcc tctcatcttc gccacctcca atctggcctc cggcatcctc 600
gctcgggtta gcggaagcgg cagcgggaact gactatacct tgaccatctc ctcgctggaa 660
ccagaggatg cagccgtgta ctattgccag cagtggatct tcaaccgcc aaccttcggc 720

ggcggcacca aggtcgagat taag

744

<210> 1721

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1721

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
65 70 75 80

Tyr Asn Pro Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
85 90 95

Thr Arg Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu
165 170 175

Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Ser Ser Val
180 185 190

Ser Ser Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro
195 200 205

Leu Ile Phe Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1722
 <211> 1476
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1722
 atggccctcc ctgtaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccaagtgc aactcgtcca gtccggtgca gaagtcaaga agcctggttc atcggtgaaa 120
 gtgtcctgca aagcgtcggg ctacaccttc acctcgtaca acatgcactg ggtccgccag 180
 gccccggac aaggactgga atggatgggt gctatctacc ccggaacgg agataccagc 240
 tacaaccca agttcaagg acgcgtgacc attactgccg acaagtccac aagaaccgcc 300

tacatggaac tgtccagcct gagatccgag gacactgcgg tgtactactg tgcgaggtcc	360
tactttctacg ggtcctcctc ttggtacttc gacgtctggg gacagggcac tactgtgacc	420
gtgtccagcg ggggaggcgg tagcgggggg ggtggatcgg gcggcggcgg atcaggagga	480
ggaggggtccg agatcgtgct gacgcagtcg ccggccaccc tgagcctttc accgggagaa	540
cgcgccactc tgtcatgccg ggccagcagc tccgtgtcct ccatgcattg gtaccagcag	600
aagccggggc aggccccgcg gcctctcatc ttcgccacct ccaatctggc ctccggcatc	660
cctgctcggg ttagcggaag cggcagcggg actgactata ccttgaccat ctcctcgctg	720
gaaccagagg atgcagccgt gtactattgc cagcagtgga tcttcaaccc gccaaccttc	780
ggcggcggca ccaaggtcga gattaagacc actacccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtggggccg tgcatacccg gggctctgac ttgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcggggg cctgctgctt tcactcgtga tcactcttta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggacccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 1723

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1723

Ser Tyr Asn Met His

1

5

<210> 1724
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1724
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys
1 5 10 15

Gly

<210> 1725
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1725
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1726
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1726
Gly Tyr Thr Phe Thr Ser Tyr
1 5

<210> 1727

<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1727
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1728
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1728
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1729
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1729
Gly Tyr Thr Phe Thr Ser Tyr Asn
1 5

<210> 1730
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1730
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1731
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1731
Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10 15

<210> 1732
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1732
Gly Tyr Thr Phe Thr Ser Tyr Asn Met His
1 5 10

<210> 1733
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1733
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe Lys
1 5 10 15

Gly

<210> 1734
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1734
Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val
1 5 10

<210> 1735
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1735
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp

100

105

110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 1736

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1736

caagtgcaac tcgtccagtc cgggtgcagaa gtcaagaagc caggttcctc ggtgaaagtg 60

tcctgcaaag cctcgggtta caccttcacc tcgtacaata tgcactgggt ccgccaagct 120

ccgggacaag gcctggaatg gatgggagcg atctaccccg gaaacggcga cacgtcctac 180

aacccgaagt tcaagggaag agtgaccatc accgccgaca agtccacccg caccgcgtac 240

atggagctta gcagcctgcg gagcgaggac actgccgtgt attactgcgc ccggtcctac 300

ttctatggat catcctcgtg gtacttcgat gtctggggcc aggggaccac cgtgaccgtg 360

tccagc 366

<210> 1737

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 1737

Arg Ala Ser Ser Ser Val Ser Ser Met His
 1 5 10

<210> 1738

<211> 7

<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1738
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1739
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1739
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1740
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1740
Ser Ser Ser Val Ser Ser
1 5

<210> 1741
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1741
Ala Thr Ser
1

<210> 1742
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1742
Trp Ile Phe Asn Pro Pro
1 5

<210> 1743
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1743
Ser Ser Val Ser Ser
1 5

<210> 1744
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1744
Ala Thr Ser
1

<210> 1745
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1745
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1746
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1746
Arg Ala Ser Ser Ser Val Ser Ser Met His
1 5 10

<210> 1747
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1747
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1748
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1748
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1749
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1749
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Ser Ser Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Phe
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1750
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1750
gatatccagc tgaccagag cccttccttc ctgtccgctt ccgtgggaga cagagtcact 60

attacttgtc gggcctcctc atccgtgtca tccatgcact ggtaccagca gaagccggga 120
aaggcccaaa agcccttgat ctttgccact tccaacctgg catccggcgt gccctcgagg 180
ttctccggga gcggttcagg gaccgagtag actctgacca ttagcagcct ccagcctgag 240
gactttgcca cctactactg ccagcagtgg attttcaacc cgcctacatt cggagggggc 300
actaaggtcg aaatcaag 318

<210> 1751
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1751
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1752
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1752
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Ser Ser Met His Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Phe Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gly Gly Thr Lys Val Glu Ile Lys
245

<210> 1753

<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1753
caagtgcac tcgtccagtc cgggtgcagaa gtcaagaagc caggttcctc ggtgaaagtg 60
tcctgcaaag cctcgggtta caccttcacc tcgtacaata tgcactgggt ccgccaagct 120
ccgggacaag gcctggaatg gatgggagcg atctaccccg gaaacggcga cacgtcctac 180
aaccggaagt tcaagggaag agtgaccatc accgccgaca agtccacccg caccgcgtac 240
atggagctta gcagcctgcg gagcgaggac actgccgtgt attactgcgc ccggtcctac 300
ttctatggat catcctcgtg gtacttcgat gtctggggcc aggggaccac cgtgaccgtg 360
tccagcggtg gcggaggcag cggcggagga gggctctggag gaggcggctc ggggggaggg 420
ggctcggata tccagctgac ccagagccct tccttcctgt ccgcttcctg gggagacaga 480
gtcactatta cttgtcgggc ctctcatcc gtgtcatcca tgcactggta ccagcagaag 540
ccgggaaagg ccccaaagcc cttgatcttt gccacttcca acctggcatc cggcgtgccc 600
tcgaggttct ccgggagcgg ttcagggacc gactacactc tgaccattag cagcctccag 660
cctgaggact ttgccaccta ctactgccag cagtggattt tcaaccgcc tacattcgga 720
gggggcacta aggtcgaaat caag 744

<210> 1754
<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1754
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val

20

25

30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Ser Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
 65 70 75 80

Tyr Asn Pro Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
 85 90 95

Thr Arg Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp
 115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
 130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala
 165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val
 180 185 190

Ser Ser Met His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro
 195 200 205

Leu Ile Phe Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe
 210 215 220

Ser Gly Ser Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu
 225 230 235 240

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1755
 <211> 1476
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1755
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccaagtgc aactcgtcca gtccgggtgca gaagtcaaga agccaggttc ctcggtgaaa 120
 gtgtcctgca aagcctcggg ttacaccttc acctcgtaca atatgcactg ggtccgccaa 180
 gctccgggac aaggcctgga atggatggga gcatctacc ccggaacgg cgacacgtcc 240
 tacaaccga agttcaaggg aagagtgacc atcaccgccg acaagtccac ccgcaccgcg 300
 tacatggagc ttagcagcct gcggagcgag gacactgccg tgtattactg cgcccgttcc 360
 tacttctatg gatcatcctc gtggtacttc gatgtctggg gccaggggac caccgtgacc 420
 gtgtccagcg gtggcggagg cagcggcgga ggagggtctg gaggaggcgg ctcgggggga 480
 gggggctcgg atatccagct gaccagagc ccttccttcc tgtccgcttc cgtgggagac 540
 agagtcacta ttacttgtcg ggcctcctca tccgtgtcat ccatgcactg gtaccagcag 600
 aagccgggaa agggcccaaa gcccttgatc tttgccactt ccaacctggc atccggcgtg 660
 ccctcgaggt tctccgggag cggttcaggg accgagtaca ctctgaccat tagcagcctc 720
 cagcctgagg actttgccac ctactactgc cagcagtgga ttttcaacc gcctacattc 780
 ggagggggca ctaaggtcga aatcaagacc actacccag caccgaggcc acccaccgcg 840
 gtcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag accgcagct 900

ggtggggccg tgcatacccg gggctcttgac ttcgcctgcg atatctacat ttggggcccct 960
 ctggctggta cttgcgggggt cctgctgctt tcactcgtga tcactcttta ctgtaagcgc 1020
 ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact 1080
 caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg 1140
 cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc 1200
 tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga 1260
 cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac 1320
 gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc 1380
 agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc 1440
 tatgacgctc ttcacatgca ggccctgccg cctcgg 1476

<210> 1756
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1756
 Arg Tyr Asn Met His
 1 5

<210> 1757
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1757
 Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys
 1 5 10 15

Gly

<210> 1758
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1758
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1759
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1759
Gly Tyr Thr Phe Thr Arg Tyr
1 5

<210> 1760
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1760
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1761
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1761
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1762
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1762
Gly Tyr Thr Phe Thr Arg Tyr Asn
1 5

<210> 1763
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1763
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1764
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1764
Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10 15

<210> 1765
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1765
Gly Tyr Thr Phe Thr Arg Tyr Asn Met His
1 5 10

<210> 1766
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1766
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1767
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1767
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1768
<211> 122

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1768
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1769
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1769
caagtccaac tcgtccagtc aggagcagaa gtcaagaaac caggagcatc cgtgaaagtg

60

tcgtgcaaag cctctggcta caccttcacc cggtacaaca tgcactgggt cagacaggcc	120
ccgggacagc ggctcgagt gatgggtgcc atctaccccg gcaacgggga cacctcctac	180
tcccaaaagt tcaagggtcg cgtgaccatc acggcggata agtcggccag cactgcgtac	240
atggaattgt catccctgcg ctccgaggat accgccgtgt attactgcgc gcggtccttc	300
ttctacggct cctccgattg gtacttcgac gtctggggac agggaactac cgtgaccgtg	360
tcctcc	366

<210> 1770
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1770
 Arg Ala Ser Ser Val Asn Asn Met His
 1 5 10

<210> 1771
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1771
 Ala Thr Ser Asn Leu Ala Ser
 1 5

<210> 1772
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1772
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1773
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1773
Ser Ser Ser Val Asn Asn
1 5

<210> 1774
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1774
Ala Thr Ser
1

<210> 1775
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1775
Trp Ile Phe Asn Pro Pro
1 5

<210> 1776
<211> 5

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1776
Ser Ser Val Asn Asn
1 5

<210> 1777
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1777
Ala Thr Ser
1

<210> 1778
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1778
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1779
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1779
Arg Ala Ser Ser Ser Val Asn Asn Met His
1 5 10

<210> 1780
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1780
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1781
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1781
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1782
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1782
Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Pro Leu Ile Tyr
35 40 45

Ala Thr Ser Asn 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 Asn Ser Leu Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1783
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1783
gaaatcgtgc tgactcagtc gccggacttc caaagcgtga ccccaaagga gaaggtcacc 60
atcacctgta gagcctcatc gtccgtgaac aatatgcact ggtaccagca gaagccggac 120
cagtccccta agcccctgat ctacgccact tccaacctgg cctccggcgt gccgtcgagg 180
ttcagcggct cgggcagcgg gaccgactac accctgacca tcaacagcct tgaagctgag 240
gacgccgcta cctactactg ccagcagtgg attttcaacc ctcccacatt tggacagggc 300
actaagctgg agattaag 318

<210> 1784
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1784

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1785

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1785

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
130 135 140

Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys Glu Lys
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met His Trp
165 170 175

Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Pro Leu Ile Tyr Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Tyr Thr Leu Thr Ile Asn Ser Leu Glu Ala Glu Asp Ala
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 1786
<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1786
caagtccaac tcgtccagtc aggagcagaa gtcaagaaac caggagcatc cgtgaaagtg 60
tcgtgcaaag cctctggcta caccttcacc cggtacaaca tgcactgggt cagacaggcc 120
ccgggacagc ggctcgagt gatgggtgcc atctaccccg gcaacgggga cacctcctac 180
tcccaaaagt tcaagggtcg cgtgaccatc acggcggata agtcggccag cactgcgtac 240
atggaattgt catccctgcg ctccgaggat accgccgtgt attactgcgc gcggtccttc 300

ttctacggct cctccgattg gtacttcgac gtctggggac agggaactac cgtgaccgtg	360
tcctccgggg gtggcgggag cggagggggc ggaagcgggg gtggaggatc aggaggcgga	420
ggctccgaaa tcgtgctgac tcagtcgccg gacttcctaaa gcgtgacccc aaaggagaag	480
gtcaccatca cctgtagagc ctcatcgtcc gtgaacaata tgactggta ccagcagaag	540
ccggaccagt cccctaagcc cctgatctac gccacttcca acctggcctc cggcgtgccg	600
tcgaggttca gcggctcggg cagcgggacc gactacaccc tgaccatcaa cagccttgaa	660
gctgaggacg ccgctaccta ctactgccag cagtggattt tcaaccctcc cacatttgga	720
cagggcacta agctggagat taag	744

<210> 1787
 <211> 492
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1787
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Arg Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Arg Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
 65 70 75 80

Tyr Ser Gln Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
 85 90 95

Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val
165 170 175

Thr Pro Lys Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val
180 185 190

Asn Asn Met His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Pro
195 200 205

Leu Ile Tyr Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Asn Ser Leu
225 230 235 240

Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro

305		310		315		320									
Leu	Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu
				325					330					335	
Tyr	Cys	Lys	Arg	Gly	Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro
			340					345					350		
Phe	Met	Arg	Pro	Val	Gln	Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys
		355						360				365			
Arg	Phe	Pro	Glu	Glu	Glu	Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe
	370					375					380				
Ser	Arg	Ser	Ala	Asp	Ala	Pro	Ala	Tyr	Gln	Gln	Gly	Gln	Asn	Gln	Leu
385					390					395					400
Tyr	Asn	Glu	Leu	Asn	Leu	Gly	Arg	Arg	Glu	Glu	Tyr	Asp	Val	Leu	Asp
				405					410					415	
Lys	Arg	Arg	Gly	Arg	Asp	Pro	Glu	Met	Gly	Gly	Lys	Pro	Arg	Arg	Lys
			420					425					430		
Asn	Pro	Gln	Glu	Gly	Leu	Tyr	Asn	Glu	Leu	Gln	Lys	Asp	Lys	Met	Ala
		435						440				445			
Glu	Ala	Tyr	Ser	Glu	Ile	Gly	Met	Lys	Gly	Glu	Arg	Arg	Arg	Gly	Lys
	450					455					460				
Gly	His	Asp	Gly	Leu	Tyr	Gln	Gly	Leu	Ser	Thr	Ala	Thr	Lys	Asp	Thr
465					470					475				480	
Tyr	Asp	Ala	Leu	His	Met	Gln	Ala	Leu	Pro	Pro	Arg				
				485				490							

<210> 1788
 <211> 1476
 <212> DNA
 <213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1788

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca gtcaggagca gaagtcaaga aaccaggagc atccgtgaaa	120
gtgtcgtgca aagcctctgg ctacaccttc acccggtaca acatgcactg ggtcagacag	180
gccccgggac agcgggctcg gtggatgggt gccatctacc ccggcaacgg ggacacctcc	240
tactcccaaa agttcaaggg tcgcgtgacc atcacggcgg ataagtcggc cagcactgcg	300
tacatggaat tgtcatccct gcgctccgag gataccgccg tgtattactg cgcgcgggtcc	360
ttcttctacg gtcctccga ttggtacttc gacgtctggg gacagggaac taccgtgacc	420
gtgtcctccg ggggtggcgg gagcggaggg ggcggaagcg ggggtggagg atcaggaggc	480
ggaggctccg aaatcgtgct gactcagtcg ccggacttcc aaagcgtgac cccaaaggag	540
aaggtcacca tcacctgtag agcctcatcg tccgtgaaca atatgcactg gtaccagcag	600
aagccggacc agtcccctaa gcccctgac tacgccactt ccaacctggc ctccggcgtg	660
ccgtcgaggt tcagcggctc gggcagcggg accgactaca ccctgaccat caacagcctt	720
gaagctgagg acgccgctac ctactactgc cagcagtgga ttttcaaccc tcccacattt	780
ggacagggca ctaagctgga gattaagacc actacccag caccagggcc acccaccgcc	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtaggggccc tgcataccgc gggctctgac ttgcctgcg atatctacat ttgggcccct	960
ctggctggta cttgcggggt cctgctgctt tctctctga tctctcttta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccagc aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440

tatgacgctc ttcacatgca ggccctgccg cctcgg

1476

<210> 1789

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1789

Arg Tyr Asn Met His

1 5

<210> 1790

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1790

Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys

1 5 10 15

Gly

<210> 1791

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1791

Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val

1 5 10

<210> 1792

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1792
Gly Tyr Thr Phe Thr Arg Tyr
1 5

<210> 1793
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1793
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1794
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1794
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1795
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1795
Gly Tyr Thr Phe Thr Arg Tyr Asn
1 5

<210> 1796
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1796
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1797
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1797
Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10 15

<210> 1798
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1798
Gly Tyr Thr Phe Thr Arg Tyr Asn Met His
1 5 10

<210> 1799
<211> 17

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1799
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1800
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1800
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1801
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1801
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1802
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1802
caagtgcaac tcgtccaatc cggcgcggaa gtcaaaaagc ctggagcctc cgtcaaagtg 60
tcctgcaagg cctccggtta cactttcact cgctacaaca tgcattgggt gcggcaggcc 120
ccgggacagc gcctggaatg gatgggcgca atctaccccg gcaacggaga cacctcctat 180
tcccaaaagt tcaaggaag ggtcacaatc acggccgaca agagcgcctc aactgcctac 240
atggagctga gcagcctcag atccgaagat accgcggtgt actactgcgc ccggagcttc 300
ttctacggtt cgtctgattg gtactttgac gtctggggcc aggaaccac cgtgaccgtg 360
tcgtcc 366

<210> 1803
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1803
Arg Ala Ser Ser Ser Val Asn Asn Met His
1 5 10

<210> 1804
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1804
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1805
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1805
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1806
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1806
Ser Ser Ser Val Asn Asn
1 5

<210> 1807
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1807
Ala Thr Ser
1

<210> 1808
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1808
Trp Ile Phe Asn Pro Pro
1 5

<210> 1809
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1809
Ser Ser Val Asn Asn
1 5

<210> 1810
<211> 3
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1810
Ala Thr Ser
1

<210> 1811
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1811
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1812
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1812
Arg Ala Ser Ser Ser Val Asn Asn Met His
1 5 10

<210> 1813
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1813
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1814
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1814
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1815
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1815
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Tyr
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1816
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1816
gacatccagc ttaccagtc gccatcattc ctgtccgcat cagtgggtga tcgcgtgacc 60
attacctgtc gggcgtcctc ctccgtgaac aacatgcact ggtaccagca gaagccgggg 120
aaggctccca agcctctgat ctacgccact agcaatttgg ccagcggcgt gccttcgaga 180
ttctcgggggt cgggctcagg aaccgagtat accctgacca tttcctccct ccaaccggag 240
gactttgcta ctactactg ccagcagtgg attttcaacc ccccgacttt cggacagggc 300
accaagctgg aaatcaag 318

<210> 1817
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1817
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1818
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1818

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met His Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Tyr Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
 225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys
 245

<210> 1819

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1819

caagtgcac	tcgtccaatc	cggcgcgga	gtcaaaaagc	ctggagcctc	cgtcaaagtg	60
tcctgcaagg	cctccggtta	cactttcact	cgctacaaca	tgcatagggt	gcggcaggcc	120
ccgggacagc	gcctggaatg	gatgggcgca	atctaccccg	gcaacggaga	cacctcctat	180
tcccaaaagt	tcaagggaag	ggtcacaatc	acggccgaca	agagcgctc	aactgcctac	240
atggagctga	gcagcctcag	atccgaagat	accgcggtgt	actactgcgc	ccggagcttc	300
ttctacggtt	cgtctgattg	gtactttgac	gtctggggcc	agggaaccac	cgtgaccgtg	360
tcgtccggtg	gcggagggag	cgggtggagga	ggctccgggg	gaggaggcag	cggcggggga	420
ggcagcgaca	tccagcttac	ccagtcgcca	tcattcctgt	ccgcatcagt	gggtgatcgc	480
gtgaccatta	cctgtcgggc	gtcctcctcc	gtgaacaaca	tgactggta	ccagcagaag	540
ccggggaagg	ctccaagcc	tctgatctac	gccactagca	atttgccag	cggcgtgcct	600
tcgagattct	cggggtcggg	ctcaggaacc	gagtataccc	tgaccatttc	ctccctccaa	660
ccggaggact	ttgctactta	ctactgccag	cagtggattt	tcaaccccc	gactttcgga	720
cagggcacca	agctggaaat	caag				744

<210> 1820

<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1820
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Arg Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Arg Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
65 70 75 80

Tyr Ser Gln Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
85 90 95

Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val
180 185 190

Asn Asn Met His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro
195 200 205

Leu Ile Tyr Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1821
 <211> 1476
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1821
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccaagtgc aactcgtcca atccggcgcg gaagtcaaaa agcctggagc ctccgtcaaa 120
 gtgtcctgca aggcctccgg ttacactttc actcgtaca acatgcattg ggtgcggcag 180
 gccccgggac agcgcctgga atggatgggc gcaatctacc ccggcaacgg agacacctcc 240
 tattcccaaa agttcaaggg aagggtcaca atcacggccg acaagagcgc ctcaactgcc 300
 tacatggagc tgagcagcct cagatccgaa gataccgcgg tgtactactg cgcccggagc 360
 ttcttctacg gttcgtctga ttggtacttt gacgtctggg gccaggaac caccgtgacc 420

gtgtcgtccg gtggcggagg gagcgggtgga ggaggctccg ggggaggagg cagcggcggg	480
ggaggcagcg acatccagct taccagtcg ccatcattcc tgtccgcatc agtgggtgat	540
cgcgtgacca ttacctgtcg ggcgtcctcc tccgtgaaca acatgcactg gtaccagcag	600
aagccgggga aggctcccaa gcctctgata tacgccacta gcaatttggc cagcggcgtg	660
ccttcgagat tctcggggtc gggctcagga accgagtata ccctgaccat ttcctccctc	720
caaccggagg actttgctac ttactactgc cagcagtgga ttttcaacct cccgactttc	780
ggacagggca ccaagctgga aatcaagacc actacccag caccgaggcc acccaccctg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgag acccgagct	900
ggtggggccg tgcatacccg gggctctgac ttcgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcgggggt cctgctgctt tcaactcgtga tcaactctta ctgtaagcgc	1020
ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 1822

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1822

Arg Tyr Asn Met His

1 5

<210> 1823

<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1823
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1824
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1824
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1825
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1825
Gly Tyr Thr Phe Thr Arg Tyr
1 5

<210> 1826
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1826
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1827
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1827
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1828
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1828
Gly Tyr Thr Phe Thr Arg Tyr Asn
1 5

<210> 1829
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1829
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1830
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1830
Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10 15

<210> 1831
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1831
Gly Tyr Thr Phe Thr Arg Tyr Asn Met His
1 5 10

<210> 1832
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1832
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1833
<211> 13

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1833
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1834
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1834
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser

<210> 1835
 <211> 366
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1835
 caagtgaac tcgtccagtc cggtgcagaa gtcaagaagc ctggttcctc cgtgaaagtg 60
 tcctgcaaag cgtctggcta caccttcacc cggtacaata tgcactgggt cagacaggcg 120
 cccggacagg gcctggagtg gatggggggc atctaccctg ggaacggcga cactagctac 180
 tcccaaaagt tcaagggccg cgtgacgatt accgccgaca agtcaaccag cactgcctat 240
 atggagctga gctcgcttcg gagcgaagat accgccgtgt actactgcgc tcggagcttc 300
 ttctacgggt cctcggattg gtacttcgac gtctggggcc aggggactac tgtgaccgtg 360
 tcctcc 366

<210> 1836
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1836
 Arg Ala Ser Ser Ser Val Asn Asn Met His
 1 5 10

<210> 1837
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1837
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1838
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1838
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1839
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1839
Ser Ser Ser Val Asn Asn
1 5

<210> 1840
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1840
Ala Thr Ser
1

<210> 1841
<211> 6

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1841
Trp Ile Phe Asn Pro Pro
1 5

<210> 1842
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1842
Ser Ser Val Asn Asn
1 5

<210> 1843
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1843
Ala Thr Ser
1

<210> 1844
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1844
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1845
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1845
Arg Ala Ser Ser Ser Val Asn Asn Met His
1 5 10

<210> 1846
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1846
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1847
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1847
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1848
<211> 106
<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1848

Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Pro Leu Ile Tyr
35 40 45

Ala Thr Ser Asn 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 Asn Ser Leu Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1849

<211> 318

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1849

gaaatcgtgc tgaccagtc cccggacttt cagtcagtga ctccaagga gaaggtcacc 60

attacttgtc ggcctcctc ctcggtgaac aacatgcact ggtaccagca gaagccggac 120

cagtccccga agcccctgat ctatgctacc tccaacttgg cgtccggcgt gccgtcaagg 180

ttcagcggat cgggttccgg gacagactac accctgacta ttaactcact cgaggccgag 240
 gatgccgcca cctactactg ccagcagtgg atcttcaacc ctccaacctt cggacaagga 300
 accaagctgg aaatcaag 318

<210> 1850
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1850
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 1 5 10 15

Gly Gly Gly Ser
 20

<210> 1851
 <211> 248
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1851
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
 20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
 50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
130 135 140

Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys Glu Lys
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met His Trp
165 170 175

Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Pro Leu Ile Tyr Ala Thr
180 185 190

Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Tyr Thr Leu Thr Ile Asn Ser Leu Glu Ala Glu Asp Ala
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 1852

<211> 744

<212> DNA

<213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1852
 caagtgaac tcgtccagtc cgggtgcagaa gtcaagaagc ctggttcctc cgtgaaagtg 60
 tcctgcaaag cgtctggcta caccttcacc cggtacaata tgcactgggt cagacaggcg 120
 cccggacagg gcctggagtg gatggggggcc atctaccctg ggaacggcga cactagctac 180
 tcccaaaagt tcaagggccg cgtgacgatt accgccgaca agtcaaccag cactgcctat 240
 atggagctga gctcgcttcg gagcgaagat accgccgtgt actactgcgc tcggagcttc 300
 ttctacgggt cctcggattg gtacttcgac gtctggggcc aggggactac tgtgaccgtg 360
 tcctccgggg gaggaggatc gggcggaggc ggttcgggag gcggcggaag cggaggcgga 420
 ggttcagaaa tcgtgctgac ccagtccccg gactttcagt cagtgactcc caaggagaag 480
 gtcaccatta cttgtcgcg ctcctcctcg gtgaacaaca tgcactggta ccagcagaag 540
 ccggaccagt ccccgaagcc cctgatctat gctacctcca acttggcgtc cggcgtgccg 600
 tcaaggttca gcggatcggg ttccgggaca gactacaccc tgactattaa ctactcgag 660
 gccgaggatg ccgccaccta ctactgccag cagtggatct tcaaccctcc aaccttcgga 720
 caaggaacca agctggaaat caag 744

<210> 1853
 <211> 492
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1853
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15
 His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30
 Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr

35

40

45

Thr Phe Thr Arg Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
 65 70 75 80

Tyr Ser Gln Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
 85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp
 115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
 130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val
 165 170 175

Thr Pro Lys Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val
 180 185 190

Asn Asn Met His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Pro
 195 200 205

Leu Ile Tyr Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe
 210 215 220

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Asn Ser Leu
 225 230 235 240

Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
 245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1854
 <211> 1476
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1854
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccaagtgc aactcgtcca gtccggtgca gaagtcaaga agcctggttc ctccgtgaaa 120
 gtgtcctgca aagcgtctgg ctacaccttc acccggtaca atatgcactg ggtcagacag 180
 gcgcccggac agggcctgga gtggatgggg gccatctacc ctgggaacgg cgacactagc 240
 tactcccaa agttcaaggg ccgcgtgacg attaccgccg acaagtcaac cagcactgcc 300
 tatatggagc tgagctcgct tcggagcgaa gataccgccg tgtactactg cgctcggagc 360
 ttcttctacg ggtcctcggg ttggtacttc gacgtctggg gccaggggac tactgtgacc 420
 gtgtcctccg ggggaggagg atcgggcgga ggcggttcgg gaggcggcgg aagcggaggc 480
 ggagggtcag aaatcgtgct gaccagtc ccggactttc agtcagtga tccaaggag 540
 aaggtcacca ttacttgtcg cgcctcctcc tcggtgaaca acatgcactg gtaccagcag 600
 aagccggacc agtccccgaa gccctgatc tatgctacct ccaacttggc gtccggcgtg 660
 ccgtcaaggt tcagcggatc gggttccggg acagactaca ccctgactat taactcactc 720
 gaggccgagg atgccgccac ctactactgc cagcagtgga tcttcaacct tccaaccttc 780
 ggacaaggaa ccaagctgga aatcaagacc actacccag caccgaggcc acccaccgcc 840
 gtcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct 900
 ggtggggccg tgcatacccg gggctctgac ttgcctgacg atatctacat ttgggcccct 960
 ctggctggtg cttgcggggg cctgctgctt tcactcgtga tcactcttta ctgtaagcgc 1020

ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact 1080
 caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg 1140
 cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc 1200
 tacaacgaac tcaatcttgg tcggagagag gagtacgacg tgctggacaa gcggagagga 1260
 cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac 1320
 gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc 1380
 agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc 1440
 tatgacgctc ttcacatgca ggccctgccg cctcgg 1476

<210> 1855
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1855
 Arg Tyr Asn Met His
 1 5

<210> 1856
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1856
 Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys
 1 5 10 15

Gly

<210> 1857

<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1857
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1858
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1858
Gly Tyr Thr Phe Thr Arg Tyr
1 5

<210> 1859
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1859
Tyr Pro Gly Asn Gly Asp
1 5

<210> 1860
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1860
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1861
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1861
Gly Tyr Thr Phe Thr Arg Tyr Asn
1 5

<210> 1862
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1862
Ile Tyr Pro Gly Asn Gly Asp Thr
1 5

<210> 1863
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1863
Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10 15

<210> 1864
<211> 10

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1864
Gly Thr Thr Phe Thr Arg Tyr Asn Met His
1 5 10

<210> 1865
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1865
Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe Lys
1 5 10 15

Gly

<210> 1866
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1866
Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val
1 5 10

<210> 1867
<211> 122
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1867

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1868

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1868

caagtccaac tcgtccagtc tggcgcagaa gtcaagaagc ccggaagctc cgtgaaagtg 60

tcctgcaaag cgtcgggtta cactttcacc cggtacaaca tgcactgggt cagacaggcc 120

cctggacaag gactggagtg gatgggtgcc atctaccctg gaaacggaga tacctcctac 180

tcccaaaagt tcaaggggag agtgaccatt accgccgaca agtcaacttc caccgcttac 240
atggagctca gtcctctgcg gtccgaagat actgcggtgt actattgcgc tcgctcattt 300
ttctacggct catcggattg gtacttcgac gtctggggac agggaactac cgtgaccgtg 360
tcctcg 366

<210> 1869
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1869
Arg Ala Ser Ser Ser Val Asn Asn Met His
1 5 10

<210> 1870
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1870
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1871
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1871
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1872
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1872
Ser Ser Ser Val Asn Asn
1 5

<210> 1873
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1873
Ala Thr Ser
1

<210> 1874
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1874
Trp Ile Phe Asn Pro Pro
1 5

<210> 1875
<211> 5
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1875
Ser Ser Val Asn Asn
1 5

<210> 1876
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1876
Ala Thr Ser
1

<210> 1877
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1877
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1878
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1878
Arg Ala Ser Ser Ser Val Asn Asn Met His
1 5 10

<210> 1879
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1879
Ala Thr Ser Asn Leu Ala Ser
1 5

<210> 1880
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1880
Gln Gln Trp Ile Phe Asn Pro Pro Thr
1 5

<210> 1881
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1881
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Tyr
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
 50 55 60

Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
 65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
 85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 1882
 <211> 318
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1882
 gacatccagc tgactcagtc cccgtccttc ctgtccgcct ccgtggggga ccgcgtgacg 60
 attacttgtc gggcctcctc atccgtgaac aacatgcatt ggtaccagca gaagccagga 120
 aaggcaccga agccgcttat ctatgccacc tcgaatctgg ccagcggagt gccttcgagg 180
 tttagcggct ccggctccgg caccgagtac actttgacca ttagcagcct ccagccggag 240
 gacttcgcca catactactg ccagcagtgg atcttcaacc cccccacctt cggccaagga 300
 accaagctgg aaatcaag 318

<210> 1883
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 1883
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly

1 5 10 15

Gly Gly Gly Ser
20

<210> 1884
<211> 248
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1884
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30

Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg
 145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met His Trp
 165 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Tyr Ala Thr
 180 185 190

Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 195 200 205

Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr Phe Gly
 225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys
 245

<210> 1885

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1885

caagtccaac tcgtccagtc tggcgcagaa gtcaagaagc ccggaagctc cgtgaaagtg 60

tcctgcaaag cgtcgggtta cactttcacc cggtacaaca tgcactgggt cagacaggcc 120

cctggacaag gactggagtg gatgggtgcc atctaccctg gaaacggaga tacctctac 180

tcccaaaagt tcaaggggag agtgaccatt accgccgaca agtcaacttc caccgcttac 240

atggagctca gtcacctgcg gtccgaagat actgcggtgt actattgcgc tcgctcattt 300

ttctacggct catcggattg gtacttcgac gtctggggac agggaactac cgtgaccgtg 360

tcctcggggg gaggaggatc gggcggaggc ggttcgggag gcggcggaag cggaggcgga 420

gggttcagaca tccagctgac tcagtccccg tccttcctgt ccgcctccgt gggggaccgc 480
 gtgacgatta cttgtcgggc ctctcatcc gtgaacaaca tgcattggta ccagcagaag 540
 ccaggaaagg caccgaagcc gcttatctat gccacctcga atctggccag cggagtcct 600
 tcgaggttta gcggctccgg ctccggcacc gactacactt tgaccattag cagcctccag 660
 ccggaggact tcgccacata ctactgccag cagtggatct tcaaccccc caccttcggc 720
 caaggaacca agctggaaat caag 744

<210> 1886
 <211> 492
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1886
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Arg Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser
 65 70 75 80

Tyr Ser Gln Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser
 85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp
115 120 125

Tyr Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val
180 185 190

Asn Asn Met His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro
195 200 205

Leu Ile Tyr Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn
245 250 255

Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu

325

330

335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
 340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
 355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
 370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 1887

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1887

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca gtctggcgca gaagtcaaga agcccggaag ctccgtgaaa	120
gtgtcctgca aagcgtcggg ttacactttc acccggtaca acatgcactg ggtcagacag	180
gcccctggac aaggactgga gtggatgggt gccatctacc ctggaaacgg agatacctcc	240
tactcccaaa agttcaaggg gagagtgacc attaccgccg acaagtcaac ttccaccgct	300
tacatggagc tcagctccct gcggtccgaa gatactgcgg tgtactattg cgctcgtca	360
tttttctacg gctcatcgga ttggtacttc gacgtctggg gacagggaac taccgtgacc	420
gtgtcctcgg ggggaggggg gagcggcgga gggggctcgg gcggtggagg aagcggaggc	480
ggcggttcgg acatccagct gactcagtcc ccgtccttcc tgtccgcctc cgtgggggac	540
cgcgtgacga ttacttgtcg ggcctcctca tccgtgaaca acatgcattg gtaccagcag	600
aagccaggaa aggcaccgaa gccgcttata tatgccacct cgaatctggc cagcggagtg	660
ccttcgaggt ttagcggctc cggctccggc accgagtaca ctttgaccat tagcagcctc	720
cagccggagg acttcgccac atactactgc cagcagtgga tcttcaacct cccaccttc	780
ggccaaggaa ccaagctgga aatcaagacc actacccag caccgaggcc acccaccctc	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcattgtag acccgagct	900
ggtggggccg tgcatacccg gggctcttgac ttgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcgggggt cctgctgctt tctctgtga tctctctta ctgtaagcgc	1020
ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctacc agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 1888

<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1888
Gln Val His Leu Gln Gln Ser Gly Ala Glu Leu Ala Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Trp Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Phe Ile Thr Pro Thr Thr Gly Tyr Pro Glu Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Lys Val Gly Lys Gly Val Tyr Tyr Ala Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1889
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1889

caagtgcattc tgcagcagtc gggggccgaa ctggcaaagc caggcgccag cgtgaagatg 60
 agctgcaagg cctccgggta caccttcacc aactactgga tgcactgggt caagcagcgc 120
 ccgggcccagg gactcgagtg gatcgggttc atcacgccga ctaccggcta cccggagtat 180
 aaccagaagt tcaaggacaa ggccactctg actgccgaca agtcctcgtc taccgcgtac 240
 atgcaactgt cctcactgac ttcggaggat tccgctgtgt actactgcgc gcggaggaaa 300
 gtcggaaagg gagtgtacta tgccctggac tactggggcc aggtaccag cgtcactgtg 360
 tcctcc 366

<210> 1890
 <211> 107
 <212> PRT
 <213> Artificial Sequence

 <220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1890
 Asp Ile Leu Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Glu Thr Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Gln Gly Asn Ser Pro Gln Leu Leu Val
 35 40 45

Tyr Asn Thr Lys Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Thr
 65 70 75 80

Glu Asp Phe Gly Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Trp
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 1891
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1891
gacattctga tgaccagtc ccctgcatca ctctccgct ccgtgggaga aaccgtgacc 60
atcacgtgta gaggctccgg caacatccac aactacctgg cctggtacca gcagaagcag 120
ggaaactcgc cccaactgct tgtgtacaac accaagacct tggctgacgg agtgccttcc 180
cggttctcgg gttcgggatc aggcacacag tactccctga aaatcaatag cctccagacc 240
gaagattttg gaacctacta ctgccaacac ttctggagct cccctggac tttcggaggc 300
ggtaccaagc tcgagattaa g 321

<210> 1892
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1892
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
20 25 30

Asn Leu His Trp Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Tyr Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr

65		70		75		80
Met	Leu	Leu	Ser	Ser	Leu	Thr
			85			
				Glu	Asp	Ser
				90		
					Ala	Val
						Tyr
						Phe
						Cys
						95
Ala	Arg	Val	Asp	Phe	Gly	His
			100			
				Ser	Arg	Tyr
				105		
					Trp	Tyr
						Phe
						Asp
						Val
						Trp
						110
Gly	Ala	Gly	Thr	Thr	Val	Thr
			115			
				Val	Ser	Ser
				120		

<210> 1893
 <211> 366
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1893
 caagtgcagc tgcagcagcc tgggtgccgag ctctgaagc cgggagcgtc cgtgaagatg 60
 agctgcaaag cctcgggcta caccttcacc aattacaact tgcattgggt caagcagacc 120
 ccgggccagg gcctcgaatg gatcggagcg atctaccccg ggaactacga tactagctac 180
 aaccagaagt tcaagggaaa ggccaccctg accgccgata agtcctcatc caccgcctac 240
 atgctgtgtt cctcgctgac ttccgaggac tccgctgtgt acttctgcgc ccgcgtggac 300
 ttccggacaca gcagatattg gtattttgac gtctggggcg ccgggactac cgtgactgtg 360
 tcgtcc 366

<210> 1894
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1894
 Gln Ile Val Leu Ser Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly

1	5	10	15												
Glu	Lys	Val	Thr	Met	Thr	Cys	Arg	Ala	Thr	Ser	Ser	Val	Ser	Ser	Met
		20						25				30			
Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Ser	Phe	Pro	Arg	Pro	Trp	Ile	His
		35					40					45			
Ala	Thr	Ser	Asn	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	Arg	Val	Glu	Ala	Glu
65					70					75					80
Asp	Ala	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Trp	Thr	Phe	Asn	Pro	Pro	Thr
				85					90					95	
Phe	Gly	Ala	Gly	Ala	Lys	Leu	Glu	Leu	Lys						
			100					105							

<210> 1895
 <211> 318
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1895	
caaattgtcc tgagccagag cccggctatc ctgtccgcct caccgggcga aaaggtcacc	60
atgacttgtc gggccacttc ctccgtgtca tccatgaact ggtaccagca gaagcctggc	120
agcttccttc ggccatggat tcacgccacg tcaaacctgg catcgggagt gcccgaagg	180
ttctccgggt ccggcagcgg aacatcctac tccctcacca tctcgcgcgt ggaagcggag	240
gacgctgcca cctactactg ccaacagtgg accttcaacc cccccacctt tggagcggga	300
gccaagctgg aacttaag	318

<210> 1896
 <211> 122

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1896
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Pro Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Arg Thr Ala Tyr
65 70 75 80

Ile His Leu Ser Ser Leu Thr Ser Glu Asp Ser Val Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Ala Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1897
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1897
caagtgcagc tgcagcagcc gggagcagag ctcgtgaagc ctggagcctc agtgaagatg

60

agctgcaagg cctccggtta caccttcacc tcctacaaca tgcactgggt caagcagacc 120
cccggacaag gcctggaatg gatcggcgcc atctaccgga gaaacgggga cacctcctat 180
aaccccaagt tcaagggaaa agcaaccctg accgcggaca agtccagcag aactgcctac 240
atccatcttt cctcgctgac gtccgaggat tccgtggtgt actactgtgc ccgctcctac 300
ttctacgggt catcctcgtg gtacttcgat gtctggggcg ctggaaccac cgtgactgtg 360
tcctcc 366

<210> 1898
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1898
Gln Ile Ile Leu Ser Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Leu Thr Cys Arg Ala Ser Ser Ser Val Ser Ser Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Phe
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Thr Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gly Gly Thr Ser Leu Glu Ile Lys
100 105

<210> 1899
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1899
cagatcattc tgagccagag cccggccatt ctgtctgcct cgcctggaga aaaagtcacc 60
ctcacttgcc gggccagctc ctccgtgtcc tcaatgcact ggtaccagca gaagcctggc 120
tcaagcccga agccctggat cttcgccacc tccaatctgg cgtcaggagt gcccgcgagg 180
ttcactggat cgggggtccgg cacatcgtat tcgctcacca tttcccgggt ggaggccgag 240
gacgccgcta ctactactg ccaacagtgg atcttcaacc caccgacctt tggcggaggg 300
acttccttgg aaatcaag 318

<210> 1900
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1900
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15
Thr Val Lys Ile Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Ser His
20 25 30
Gly Ile Asn Trp Val Lys Gln Ala Pro Arg Lys Gly Leu Lys Trp Met
35 40 45
Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Gly Asp Asp Phe
50 55 60
Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Arg Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Tyr Gly Asn Tyr Glu Glu Pro Tyr Ala Met Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1901
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1901
caaattcagc tgggtgcagtc gggacctgag ctcaagaagc ccggagaaac cgtgaagatc 60
tcctgcaaga cttccgggta cacttttact tcccacggca tcaactgggt caagcaggca 120
ccaaggaagg ggcttaagt gatgggctgg attaacacct acaccggcga acccacctat 180
ggcgatgact tcaaaggacg gttcgcgttc tccctcgaaa cctcagcaag aaccgcgtat 240
ttgcaaataca acaacctgaa gaacgaggac accgccacct acttctgcgc ccgctacgga 300
aattacgagg aaccttacgc tatggactac tggggccagg gcacttccgt gactgtgtcg 360
tcc 363

<210> 1902
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1902
Gln Ile Val Leu Ser Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Arg Ala Thr Ser Ser Val Ser Ser Met
 20 25 30

Asn Trp Tyr Gln Gln Lys Pro Gly Ser Phe Pro Arg Pro Trp Ile His
 35 40 45

Ala Thr Ser Asn 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 Arg Val Glu Ala Glu
 65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Thr Phe Asn Pro Pro Thr
 85 90 95

Phe Gly Ala Gly Ala Lys Leu Glu Leu Lys
 100 105

<210> 1903
 <211> 318
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1903
 cagatcgtgc tgagccagag ccccgccatc ctgagcgctt ccccgggaga aaaggtcacc 60
 atgacttgcc gggccactag cagcgtgtcc tccatgaact ggtaccagca gaagccgggc 120
 tccttcctc gccctggat tcatgccacc tcaaacctgg ccagcggagt gccagccaga 180
 ttctcgggat ctggatcggg gacgtcctac tccctcacca tctcgcgggt ggaggccgaa 240
 gatgccgcca catactactg tcaacagtgg accttcaacc cgccgacctt tggagcgggg 300
 gccaagctgg agctgaaa 318

<210> 1904
 <211> 122
 <212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1904

Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Ile His Trp Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Thr Thr Ala Phe
65 70 75 80

Ile His Phe Ser Ser Leu Thr Ser Glu Asp Ser Val Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Tyr Phe Tyr Gly Ser Asp Ser Trp Tyr Phe Asp Val Trp
100 105 110

Gly Ala Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1905

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1905

caagtgcagc ttcagcagcc tggggccgaa ctcgtgaagc caggagcctc cgtgaagatg

60

tcatgcaaag cctccggcta cacttttacc tcctacaaca ttcattgggt caagcagaca	120
cctggccagg gcctggaatg gattggtgca atctaccgg gcaacggaga cacctcgta	180
aaccagaagt ttaaggggaa ggccaccctg accgcggaca agtcaagcac taccgcgttc	240
attcacttct cgtccttgac ctccgaggat agcgtggtgt actactgcgc ccgctcctat	300
ttctacggct ccgattcgtg gtacttcgac gtctggggag ccggaactac cgtgaccgtg	360
tcctcc	366

<210> 1906
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1906
 Gln Ile Ile Leu Ser Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
 1 5 10 15

Glu Lys Val Thr Leu Thr Cys Arg Ala Ser Ser Gly Val Pro Ser Leu
 20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Phe
 35 40 45

Ala Thr Ser Asn 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 Arg Val Glu Ala Glu
 65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
 85 90 95

Phe Gly Gly Gly Thr Ser Leu Glu Ile Lys
 100 105

<210> 1907

<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1907
caaatcatcc tgagccagag cccggccatc ctgtcggctt caccgggga aaaggtcacg 60
ctgacttgcc gggcctcctc cggcgtgcc aagcctccact ggtaccagca aaagcctggc 120
tcgtcccca aaccctggat tttgccacc tccaacctgg ctagcggagt gccggccaga 180
ttctcgggtt ccgggtccgg caccagctat tctctcacca tctccgggt cgaggcggag 240
gacgcagcga cttactactg tcaacagtgg atcttcaatc cgcccacctt cggcggagga 300
acttccctgg aaatcaag 318

<210> 1908
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1908
Gln Val Gln Leu Leu Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Arg Tyr
20 25 30
Asn Met His Trp Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45
Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Ser Gln Lys Phe
50 55 60
Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Phe Phe Tyr Gly Ser Ser Asp Trp Tyr Phe Asp Val Trp
100 105 110

Gly Ala Gly Thr Thr Val Ser Val Ser Ser
115 120

<210> 1909
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1909
caagtgcagc tgctgcagcc cggagccgaa ctctgaagc cgggcgcac cgtgaaaatg 60
agctgcaagg cgtccgggta caccttcact cgctacaaca tgcactgggt caagcagacc 120
cctggacaag gcctggagtg gattggtgct atctaccgga gaaacggaga cactagctac 180
tcgcagaaat tcaagggaaa ggccacgctg accgccgata agtcctcctc cactgcctac 240
atgcaactca gtcactgac ctgagaggac tcggccgtgt actactgcgc gaggtccttc 300
ttctacgggt cctcggattg gtacttcgac gtctggggcg ccggtaccac cgtgtccgtg 360
tcatcc 366

<210> 1910
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1910
Gln Ile Val Leu Ser Gln Ser Pro Ala Ile Leu Ser Thr Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Leu Thr Cys Arg Ala Ser Ser Ser Val Asn Asn Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ile Phe Asn Pro Pro Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 1911
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1911
cagatcgtgc tgagccagtc cccggcgatt ctgtccacct cgcctgggga aaaggtcacc 60
ctgacatgta gaggctctc ctccgtgaac aatatgcatt ggtatcagca gaagccagga 120
tcaagcccca agccctggat ctatgccact tcgaaccttg cctctggagt gccctcacgg 180
ttctccggct cgggatcggg gaccagctac agcttgacta tctcccgggt ggaggctgag 240
gacgccgcaa cctactactg ccagcaatgg atcttcaacc ctccgacttt tggggccgga 300
accaagctgg aactcaag 318

<210> 1912
<211> 117
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1912

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asp Tyr
20 25 30

Tyr Met Ala Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Thr Leu Tyr Leu
65 70 75 80

Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val
115

<210> 1913

<211> 357

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1913

caagtgcagt tgggtggaatc aggaggaggt gtcgtgcaac caggaagatc attgaggctc 60

tcatgcgccg ccagcggatt cacctttcgg gattactaca tggcctgggt ccgccaggcc 120

ccggggaagg gactggaatg ggtggcatcc atctcgtacg aagggaaccc ctactatggg 180
gactccgtga agggacgggt caccatctcc cgggacaacg ccaagtccac cctgtacctt 240
caaatgtcct cgctgagggc ggaggatact gctgtctact actgtgcccg ccacgaccat 300
aacaacgtgg actggttcgc ctactggggc cagggaaccc tcgtcaccgt gtcctcg 357

<210> 1914
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1914
Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
1 5 10 15

Gln Pro Val Ser Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

Glu Asn Lys Lys Asn Tyr Leu Ala Trp Tyr Leu Gln Lys Pro Gly Gln
35 40 45

Ser Pro Gln Leu Leu Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys
65 70 75 80

Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Asn Phe Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1915
<211> 336
<212> DNA
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1915

```
gacattgtga tgacgcagac tcccctgtcg ctctccgtga cccctggcca gcccggtcg      60
atgtcgtgca agagctccca gtccctgctg tattccgaga acaagaagaa ttaccttgcg      120
tggtacctcc agaagccggg gcagagcccg cagctgctga ttttctgggc gtccactaga      180
gagtctggag tgcctgaccg gtttagcgga agcggctccg gtactgattt caccctgaaa      240
atctcgcgcg tggaagctga ggacgtgggc gtgtactact gccagcagta ctacaacttc      300
cctactttcg gacaaggaac caagctggaa atcaag                                336
```

<210> 1916

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1916

```
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1           5           10          15
```

```
Gly Gly Gly Ser
                20
```

<210> 1917

<211> 251

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1917

```
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1           5           10          15
```

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asp Tyr
 20 25 30
 Tyr Met Ala Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Thr Leu Tyr Leu
 65 70 75 80
 Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr
 130 135 140
 Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly Gln Pro Val Ser Met
 145 150 155 160
 Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Glu Asn Lys Lys Asn
 165 170 175
 Tyr Leu Ala Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu
 180 185 190
 Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val Pro Asp Arg Phe Ser
 195 200 205
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu
 210 215 220

Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln Tyr Tyr Asn Phe Pro
 225 230 235 240

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 245 250

<210> 1918
 <211> 119
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1918
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Arg Asp Tyr
 20 25 30

Tyr Met Ala Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
 35 40 45

Gly Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
 50 55 60

Gly Arg Val Thr Ile Thr Arg Asp Asn Ser Ala Ser Thr Leu Tyr Met
 65 70 75 80

Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
 100 105 110

Thr Leu Val Thr Val Ser Ser
 115

<210> 1919
 <211> 357

<212> DNA
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1919

```
caagtccaac tcgtccagtc cgggtgcagaa gtcaagaaac caggagcttc cgtgaaagtg      60
tcgtgcaaag cttcaggctt caccttccgc gactattaca tggcctgggt ccgccaagcg      120
cccgacagc ggctggagtg gatgggggtcc atttcctacg aggggaaccc ctactatgga      180
gattccgtga agggcagagt gacgatcact cgggataact ccgcctccac tctctacatg      240
gaactgtcct cgcttcggag cgaagatacc gcggtgtact actgcgcccg ccacgaccat      300
aacaacgtgg actggttcgc ctactgggga caggggaccc tcgtgaccgt gtcctct      357
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<210> 1920

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1920

```
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 Ser Ser Gln Ser Leu Leu Tyr Ser
20          25          30
```

```
Glu Asn Lys Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys
35          40          45
```

```
Val Pro Lys Leu Leu Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val
50          55          60
```

```
Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65          70          75          80
```

Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Asn Phe Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1921
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1921
gacattcaga tgaccagtc cccgagctcg ctgtccgcct ccgtgggaga cagagtgaca 60
atcacttgca agagcagcca gtcactgttg tactccgaga acaagaagaa ctacctgcc 120
tggtaccagc agaagccggg aaaggtccct aagctgctga tcttctgggc cagcactagg 180
gagtcgggag tgccgtcacg gttcagcgga tcgggatcgg gtaccgactt caccctgact 240
atctcctccc tgcaacctga ggacgtggcc acctactact gtcagcagta ctacaatttt 300
cccaccttcg gccagggtac caagctggaa atcaag 336

<210> 1922
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1922
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1923
<211> 251

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1923

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Arg Asp Tyr
20 25 30

Tyr Met Ala Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Arg Val Thr Ile Thr Arg Asp Asn Ser Ala Ser Thr Leu Tyr Met
65 70 75 80

Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr
130 135 140

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
145 150 155 160

Thr Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Glu Asn Lys Lys Asn
165 170 175

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu
180 185 190

Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val Pro Ser Arg Phe Ser
195 200 205

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
210 215 220

Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Asn Phe Pro
225 230 235 240

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
245 250

<210> 1924
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1924
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Phe Thr Phe Arg Asp Tyr
20 25 30

Tyr Met Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Gln Val Thr Ile Ser Arg Asp Asn Ser Ile Ser Thr Leu Tyr Leu
65 70 75 80

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
 100 105 110

Thr Leu Val Thr Val Ser Ser
 115

<210> 1925
 <211> 357
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1925
 gaagtccaac tgggtgcagtc aggagcagaa gtcaaaaaac caggagaaaag cctcaagatc 60
 agctgcaagg gctcgggttt caccttccgg gactactata tggcctgggt cagacagatg 120
 ccgggaaagg gactggaatg gatgggggtca atcagctacg agggcaaccc ctactacgga 180
 gactccgtga agggacaggt cacaatctcc cgggacaact cgatttccac tctgtatctg 240
 caatggagct ccctcaaggc ctccgacact gcgatgtact actgtgcgcg gcatgaccac 300
 aacaatgtgg attggttcgc ctactgggga cagggaaccc tcgtgaccgt gtccagc 357

<210> 1926
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1926
 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 Ser Ser Gln Ser Leu Leu Tyr Ser
 20 25 30

Glu Asn Lys Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys
 35 40 45

Val Pro Lys Leu Leu Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val
 50 55 60

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80

Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Asn Phe Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105 110

<210> 1927
 <211> 336
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1927
 gatatccaaa tgaccagtc gccctcctca ctctccgcct ccgtgggaga tcgcgtgacc 60
 attacttgca agagctcgca gtccctgctg tactccgaga acaagaagaa ctacttggcc 120
 tggtagcagc agaagcccgg caaagtgccg aagctgctta tcttttgggc ctcgaccagg 180
 gaaagcggag tgccgtcacg cttctccggc tccgggtctg gcaccgactt cactctgact 240
 atttcctccc tgcaacctga ggacgtggct acctactact gccagcagta ctacaacttc 300
 cctaccttcg gccaaaggac gaagctggag atcaag 336

<210> 1928
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 1928

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1929

<211> 251

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1929

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Phe Thr Phe Arg Asp Tyr
20 25 30

Tyr Met Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Gln Val Thr Ile Ser Arg Asp Asn Ser Ile Ser Thr Leu Tyr Leu
65 70 75 80

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr
 130 135 140

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 145 150 155 160

Thr Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Glu Asn Lys Lys Asn
 165 170 175

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu
 180 185 190

Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val Pro Ser Arg Phe Ser
 195 200 205

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 210 215 220

Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Asn Phe Pro
 225 230 235 240

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 245 250

<210> 1930
 <211> 119
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1930
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Phe Thr Phe Arg Asp Tyr
 20 25 30

Tyr Met Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45

Gly Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Gln Val Thr Ile Ser Arg Asp Asn Ser Ile Ser Thr Leu Tyr Leu
65 70 75 80

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 1931
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1931
gaagtgcagt tggccaatc aggcgcagaa gtgaagaaac ccggagaatc attgaagatt 60
tcgtgcaaag gaagcgggtt cacattccgc gattactaca tggcgtgggt cagacagatg 120
ccgggaaagg gactcgagt gatgggtcc atcagctacg aaggaaacc ttactacggg 180
gactccgtga agggccaggt caccatctcc cgcgacaact caatctccac tctgtatctg 240
caatggtcga gcctcaaggc ctctgatact gcgatgtact actgcgctcg gcatgaccac 300
aacaacgtgg actggttcgc ttactgggga cagggtaccc ttgtgaccgt gtcctcc 357

<210> 1932
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1932

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

Glu Asn Lys Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Ala Pro Arg Leu Leu Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Ile
50 55 60

Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Leu Gln Pro Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Asn Phe Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1933

<211> 336

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1933

gagatcgtga tgactcagtc ccctgccacc ctctcgtgt cccccgggga gagggccacg 60

ctgtcctgca agagctccca gtcactgctg tattccgaaa acaagaagaa ctacctgcc 120

tggtaccaac agaagccggg acaggcccg cggttctga tcttctgggc ctccactcgg 180

gagtccggca ttccggcccg cttctccggc tcggggagcg gaactgactt caccctgacc 240

atcagcagcc tgcagccaga ggacctcgca gtgtactact gtcaacagta ctacaatttc 300

cccacctttg gccagggtac caagctggag attaag

336

<210> 1934

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1934

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1935

<211> 251

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1935

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Phe Thr Phe Arg Asp Tyr
20 25 30

Tyr Met Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Gln Val Thr Ile Ser Arg Asp Asn Ser Ile Ser Thr Leu Tyr Leu
65 70 75 80

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr
130 135 140

Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu
145 150 155 160

Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Glu Asn Lys Lys Asn
165 170 175

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
180 185 190

Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Ile Pro Ala Arg Phe Ser
195 200 205

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
210 215 220

Pro Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Asn Phe Pro
225 230 235 240

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
245 250

<210> 1936

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1936
Asp Tyr Ala Met His
1 5

<210> 1937
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1937
Thr Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 1938
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1938
Asp Ile Gln Tyr Gly Asn Tyr Tyr Tyr Gly Met Asp Val
1 5 10

<210> 1939
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1939
Gly Phe Thr Phe Asn Asp Tyr
1 5

<210> 1940
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1940
Ser Trp Asn Ser Gly Ser
1 5

<210> 1941
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1941
Asp Ile Gln Tyr Gly Asn Tyr Tyr Tyr Gly Met Asp Val
1 5 10

<210> 1942
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1942
Gly Phe Thr Phe Asn Asp Tyr Ala
1 5

<210> 1943
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1943
Ile Ser Trp Asn Ser Gly Ser Ile
1 5

<210> 1944
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1944
Ala Lys Asp Ile Gln Tyr Gly Asn Tyr Tyr Tyr Gly Met Asp Val
1 5 10 15

<210> 1945
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1945
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Asp Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Thr Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Ile Gln Tyr Gly Asn Tyr Tyr Tyr Gly Met Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1946
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1946
gaggtgcagc tggctcgagtc ggggggagga ttggtgcagc cgggcagaag cctgcggctc 60
tcatgtgccg cctccggctt cacctttaac gactacgcaa tgcactgggt cagacaggct 120
cctgggaagg gcctggaatg ggtgtccacc atttcctgga actccgggag catcggctac 180
gctgactccg tgaagggccg cttcacgatt agccgcgata acgcgaaaaa gaggcctgtac 240
ctccaaatga actccctgcg ggccgaagat accgcccttt actactgcmc gaaggacatt 300
cagtatggaa actactacta cggaatggac gtctggggac aggggaccac agtgaccgtg 360
tcaagc 366

<210> 1947
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1947
Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Ala
1 5 10

<210> 1948
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1948
Asp Ala Ser Asn Arg Ala Thr
1 5

<210> 1949
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1949
Gln Gln Arg Ser Asn Trp Pro Ile Thr
1 5

<210> 1950
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1950
Ser Gln Ser Val Ser Ser Tyr
1 5

<210> 1951
<211> 3
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1951
Asp Ala Ser
1

<210> 1952
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1952
Arg Ser Asn Trp Pro Ile
1 5

<210> 1953
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1953
Gln Ser Val Ser Ser Tyr
1 5

<210> 1954
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1954
Asp Ala Ser
1

<210> 1955
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1955
Gln Gln Arg Ser Asn Trp Pro Ile Thr
1 5

<210> 1956
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1956
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 Gln Ser Val Ser Ser Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Ile
85 90 95

Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 1957
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1957
gaaatcgtgc tgaccagag cccagccact ttgtcactgt ccccggcga aagagccact 60
ctgtcctgcc gggcatcgca gtccgtgtcg tcctacctgg cctggtacca gcaaaagccc 120
ggacaagccc ctgccttct catctacgac gcctccaatc gcgcgaccgg aatcccggcc 180
aggttctccg ggagcggttc aggcactgac ttcaccctga ccatctcgtc cctggagccg 240
gaggatttcg ccgtgtatta ctgccagcag cggtccaact ggcccatcac cttcggccaa 300
gggactcggc tcgaaatcaa g 321

<210> 1958
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1958
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1959
<211> 249
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1959

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Asp Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Thr Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Ile Gln Tyr Gly Asn Tyr Tyr Tyr Gly Met Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
130 135 140

Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp
180 185 190

Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Ile Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys
 245

<210> 1960
 <211> 747
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1960
 gaggtgcagc tggctcagtc ggggggagga ttggtgcagc cgggcagaag cctgcggctc 60
 tcatgtgccg cctccggctt cacctttaac gactacgcaa tgactgggt cagacaggct 120
 cctgggaagg gcctggaatg ggtgtccacc atttcctgga actccgggag catcggctac 180
 gctgactccg tgaagggccg cttcacgatt agccgcgata acgcgaaaaa gagcctgtac 240
 ctccaaatga actccctgcg ggccgaagat accgcccttt actactgcgc gaaggacatt 300
 cagtatggaa actactacta cggaatggac gtctggggac aggggaccac agtgaccgtg 360
 tcaagcggcg gtggaggatc tggcggagga ggttccggtg gcggtggatc gggaggggga 420
 ggatcggaat tcgtgctgac ccagagccca gccactttgt cactgtcccc cggcgaaaga 480
 gccactctgt cctgccgggc atcgcagtcc gtgtcgtcct acctggcctg gtaccagcaa 540
 aagcccggac aagcccctcg ctttctcatc tacgacgcct ccaatcgcgc gaccggaatc 600
 ccggccaggt tctccgggag cggttcaggc actgacttca ccctgaccat ctcgtccctg 660
 gagccggagg atttcgccgt gtattactgc cagcagcggc ccaactggcc catcaccttc 720
 ggccaaggga ctcggctcga aatcaag 747

<210> 1961

<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1961
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asp Tyr
20 25 30

Tyr Met Ala Trp Val Arg Gln Ala Pro Lys Lys Gly Leu Glu Trp Val
35 40 45

Ala Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asn Asn Ala Lys Ser Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 1962
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1962

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Gln Ala Val Ser Ala Gly
1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

Glu Asn Lys Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Ser Pro Lys Leu Leu Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Asn Phe Pro Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1963
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1963
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 1964
<211> 251
<212> PRT
<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1964

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Asp Tyr
20 25 30

Tyr Met Ala Trp Val Arg Gln Ala Pro Lys Lys Gly Leu Glu Trp Val
35 40 45

Ala Ser Ile Ser Tyr Glu Gly Asn Pro Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asn Asn Ala Lys Ser Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Arg His Asp His Asn Asn Val Asp Trp Phe Ala Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr
130 135 140

Gln Thr Pro Ser Ser Gln Ala Val Ser Ala Gly Glu Lys Val Thr Met
145 150 155 160

Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Glu Asn Lys Lys Asn
165 170 175

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu
180 185 190

Ile Phe Trp Ala Ser Thr Arg Glu Ser Gly Val Pro Asp Arg Phe Ile
195 200 205

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Val Gln
210 215 220

Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Asn Phe Pro
225 230 235 240

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
245 250

<210> 1965

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1965

Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Asp Tyr Tyr Cys
85 90 95

Ala Arg Ser Asn Tyr Tyr Gly Ser Ser Tyr Trp Phe Phe Asp Val Trp
100 105 110

Gly Ala Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1966
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1966
gaggtgcaac tgcagcagtc aggagcagaa ctggtcaagc cgggcgcacg cgtcaagatg 60
agctgcaagg cctcaggata caccttcact tcatacaaca tgcactgggt caagcagacg 120
cctgggcagg ggctggagtg gatcggtgcc atctaccccg gaaacggcga cacctcctac 180
aaccagaagt tcaagggaaa ggccaccctc accgctgata agtccagcag caccgcctac 240
atgcaactgt cgtccctgac ttcggaggac agcgtgact actattgcgc ccgctctaata 300
tactacgggt cctcctactg gttcttcgac gtgtggggcg cgggtaccac tgtgactgtc 360
tccagc 366

<210> 1967
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1967
Asp Ile Val Leu Thr Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ser Ser Val Asn Tyr Met
20 25 30

Asp Trp Tyr Gln Lys Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

Ala Thr Ser Asn 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 Arg Val Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Phe Asn Pro Pro Thr
85 90 95

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1968
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1968
gacatcgtgc tcactcagtc gcccgccatt ctgagcgcta gcccggcgga aaaggtcacc 60
atgacctgta gagcgtcatc ctcggtgaac tacatggact ggtaccagaa gaagccggga 120
tcgagcccta agccatggat ctacgccaca tccaatctgg cgtccggcgt gccggcccgg 180
ttcagcggga gcggctcagg cacctcctat tccctcacca tctcgagagt ggaggctgag 240
gatgcagcca cgtactactg tcagcagtgg tcgttcaacc cccaacctt tggtggtgga 300
accaagctgg aaatcaag 318

<210> 1969
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1969

Gly Ser Thr Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly
 1 5 10 15

Ser Ser

<210> 1970
 <211> 246
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1970
 Asp Ile Val Leu Thr Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
 1 5 10 15

Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ser Ser Val Asn Tyr Met
 20 25 30

Asp Trp Tyr Gln Lys Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
 35 40 45

Ala Thr Ser Asn 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 Arg Val Glu Ala Glu
 65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Phe Asn Pro Pro Thr
 85 90 95

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Gly Ser Thr Ser Gly Gly
 100 105 110

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Val Gln Leu
 115 120 125

Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala Ser Val Lys Met
 130 135 140

Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Asn Met His Trp
 145 150 155 160

Val Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Ile Gly Ala Ile Tyr
 165 170 175

Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe Lys Gly Lys Ala
 180 185 190

Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr Met Gln Leu Ser
 195 200 205

Ser Leu Thr Ser Glu Asp Ser Ala Asp Tyr Tyr Cys Ala Arg Ser Asn
 210 215 220

Tyr Tyr Gly Ser Ser Tyr Trp Phe Phe Asp Val Trp Gly Ala Gly Thr
 225 230 235 240

Thr Val Thr Val Ser Ser
 245

<210> 1971
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 1971
 gacatcgtgc tcactcagtc gcccgccatt ctgagcgcta gcccgcgcga aaaggtcacc 60
 atgacctgta gagcgtcatc ctcggtgaac tacatggact ggtaccagaa gaagccggga 120
 tcgagcccta agccatggat ctacgccaca tccaatctgg cgtccggcgt gccggcccgg 180
 ttcagcggga gcggtcagg cacctcctat tccctcacca tctcgagagt ggaggctgag 240
 gatgcagcca cgtactactg tcagcagtgg tcgttcaacc ccccaacctt tggtggtgga 300
 accaagctgg aaatcaaggg aagcacctcc ggcggagggt ccggaggagg gtccggaggc 360

ggaggcagct ccgaggtgca actgcagcag tcaggagcag aactggtcaa gccgggcgca 420
 tccgtcaaga tgagctgcaa ggcctcagga tacaccttca cttcatacaa catgcactgg 480
 gtcaagcaga cgcctgggca ggggctggag tggatcggtg ccatctaccc cggaacggc 540
 gacacctcct acaaccagaa gttcaaggga aaggccaccc tcaccgctga taagtccagc 600
 agcaccgcct acatgcaact gtcgtccctg acttcggagg acagcgctga ctactattgc 660
 gcccgtctta attactacgg ttcctcctac tggttcttcg acgtgtgggg cgcggttacc 720
 actgtgactg tctccagc 738

<210> 1972

<211> 253

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1972

Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Met Leu Ser Asn
 20 25 30

Ser Asp Thr Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
 35 40 45

Trp Leu Gly Arg Thr Tyr His Arg Ser Thr Trp Tyr Asp Asp Tyr Ala
 50 55 60

Ser Ser Val Arg Gly Arg Val Ser Ile Asn Val Asp Thr Ser Lys Asn
 65 70 75 80

Gln Tyr Ser Leu Gln Leu Asn Ala Val Thr Pro Glu Asp Thr Gly Val
 85 90 95

Tyr Tyr Cys Ala Arg Val Arg Leu Gln Asp Gly Asn Ser Trp Ser Asp
 100 105 110

Ala Phe Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser
130 135 140

Ala Leu Thr Gln Pro Ala Ser Ala Ser Gly Ser Pro Gly Gln Ser Val
145 150 155 160

Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr
165 170 175

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile
180 185 190

Tyr Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly
195 200 205

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala
210 215 220

Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser Ser Thr
225 230 235 240

Leu Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu
245 250

<210> 1973
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1973
Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Met Leu Ser Asn

20

25

30

Ser Asp Thr Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
 35 40 45

Trp Leu Gly Arg Thr Tyr His Arg Ser Thr Trp Tyr Asp Asp Tyr Ala
 50 55 60

Ser Ser Val Arg Gly Arg Val Ser Ile Asn Val Asp Thr Ser Lys Asn
 65 70 75 80

Gln Tyr Ser Leu Gln Leu Asn Ala Val Thr Pro Glu Asp Thr Gly Val
 85 90 95

Tyr Tyr Cys Ala Arg Val Arg Leu Gln Asp Gly Asn Ser Trp Ser Asp
 100 105 110

Ala Phe Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gln
 115 120 125

Ser Ala Leu Thr Gln Pro Ala Ser Ala Ser Gly Ser Pro Gly Gln Ser
 130 135 140

Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn
 145 150 155 160

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met
 165 170 175

Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe Ser
 180 185 190

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln
 195 200 205

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser Ser
 210 215 220

Thr Leu Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu
 225 230 235

<210> 1974
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1974
Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Met Leu Ser Asn
20 25 30

Ser Asp Thr Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
35 40 45

Trp Leu Gly Arg Thr Tyr His Arg Ser Thr Trp Tyr Asp Asp Tyr Ala
50 55 60

Ser Ser Val Arg Gly Arg Val Ser Ile Asn Val Asp Thr Ser Lys Asn
65 70 75 80

Gln Tyr Ser Leu Gln Leu Asn Ala Val Thr Pro Glu Asp Thr Gly Val
85 90 95

Tyr Tyr Cys Ala Arg Val Arg Leu Gln Asp Gly Asn Ser Trp Ser Asp
100 105 110

Ala Phe Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
115 120 125

<210> 1975
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1975

Gln Ser Ala Leu Thr Gln Pro Ala Ser Ala Ser Gly Ser Pro Gly Gln
1 5 10 15

Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
35 40 45

Met Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
85 90 95

Ser Thr Leu Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu
100 105 110

<210> 1976

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1976

Gly Asp Ser Met Leu Ser Asn Ser Asp Thr Trp Asn
1 5 10

<210> 1977

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1977

Ser Asn Ser Asp Thr Trp Asn
1 5

<210> 1978

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1978

Arg Thr Tyr His Arg Ser Thr Trp Tyr Asp Asp Tyr Ala Ser Ser Val
1 5 10 15

Arg Gly

<210> 1979

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1979

Arg Thr Tyr His Arg Ser Thr Trp Tyr Asp Asp Tyr Ala Ser Ser Val
1 5 10 15

Arg Gly

<210> 1980

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1980

Val Arg Leu Gln Asp Gly Asn Ser Trp Ser Asp Ala Phe Asp Val
1 5 10 15

<210> 1981

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1981

Val Arg Leu Gln Asp Gly Asn Ser Trp Ser Asp Ala Phe Asp Val
1 5 10 15

<210> 1982

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1982

Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser
1 5 10

<210> 1983

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1983

Asp Val Ser Asn Arg Pro Ser
1 5

<210> 1984
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1984
Ser Ser Tyr Thr Ser Ser Ser Thr Leu Tyr Val
1 5 10

<210> 1985
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1985
Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
1 5 10 15

Lys Gly

<210> 1986
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1986
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Leu Trp Glu Val Arg Ala Leu Pro Ser Val Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 1987

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1987

Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
1 5 10 15

Thr Ala Arg Ile Thr Cys Gly Ala Asn Asp Ile Gly Ser Lys Ser Val
20 25 30

His Trp Tyr Gln Gln Lys Ala Gly Gln Ala Pro Val Leu Val Val Ser
35 40 45

Glu Asp Ile Ile Arg Pro Ser Gly Ile Pro Glu Arg Ile Ser Gly Ser
50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Arg Asp Ser Asp Gln
85 90 95

Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly
100 105

<210> 1988

<211> 447

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1988

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser Asn
20 25 30

Val Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Val Ile Pro Ile Val Asp Ile Ala Asn Tyr Ala Gln Arg Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Thr Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ser Thr Leu Gly Leu Val Leu Asp Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
115 120 125

Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
180 185 190

Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys
195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro
210 215 220

Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val
225 230 235 240

Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
245 250 255

Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu
260 265 270

Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
275 280 285

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser
290 295 300

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
305 310 315 320

Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile
325 330 335

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro

340

345

350

Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
 355 360 365

Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
 370 375 380

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
 385 390 395 400

Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg
 405 410 415

Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
 420 425 430

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 435 440 445

<210> 1989

<211> 215

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 1989

Glu Thr Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Leu Gly Ser Ser
 20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
 35 40 45

Ile Tyr Gly Ala Ser Ser Arg Ala Pro Gly Ile Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Asp Ser Pro
85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg Thr Val Ala
100 105 110

Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser
115 120 125

Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu
130 135 140

Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser
145 150 155 160

Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu
165 170 175

Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val
180 185 190

Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys
195 200 205

Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 1990

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1990

Glu Val Gln Leu Leu 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	
Ala	Tyr	Ser	Trp
	35		
Val	Arg	Gln	Ala
		40	
Pro	Gly	Lys	Gly
			45
Leu	Glu	Trp	Val
Ser	Ala	Ile	Ser
	50		
Gly	Ser	Gly	Gly
		55	
Arg	Thr	Tyr	Tyr
			60
Ala	Asp	Ser	Val
Lys	Gly	Arg	Phe
	65		
Thr	Ile	Ser	Arg
	70		
Asp	Asn	Ser	Lys
		75	
Asn	Thr	Leu	Tyr
			80
Leu	Gln	Met	Asn
			85
Ser	Leu	Arg	Ala
Glu	Asp	Thr	Ala
	90		
Val	Tyr	Tyr	Cys
			95
Ala	Arg	Leu	Gly
		100	
Tyr	Gly	Arg	Val
Asp	Glu	Trp	Gly
			105
Arg	Gly	Thr	Leu
			110
Val	Thr	Val	Ser
			115

<210> 1991
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1991
 Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Leu Ser Asn Ile Gly Arg Asn
 20 25 30

Pro Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45

Ile Tyr Leu Asp Asn Leu Arg Leu Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Ser His
85 90 95

Pro Gly Trp Thr Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 1992

<211> 447

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1992

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Leu Tyr Asp Gly Ser Asn Lys Tyr Tyr Pro 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 Gly Gly Ser Ser Trp Tyr Pro Asp Ser Phe Asp Ile Trp Gly

100

105

110

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 115 120 125

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
 130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 180 185 190

Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His
 195 200 205

Lys Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys
 210 215 220

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
 225 230 235 240

Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
 245 250 255

Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
 260 265 270

Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
 275 280 285

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
 290 295 300

Val Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
 305 310 315 320

Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile
325 330 335

Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
340 345 350

Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
355 360 365

Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
370 375 380

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
385 390 395 400

Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
405 410 415

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
420 425 430

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440 445

<210> 1993
<211> 214
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1993
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 Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Lys Ser 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 Asn Ser Tyr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 1994

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1994

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Leu Tyr Asp Gly Ser Asn Lys Tyr Tyr Pro 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 Gly Gly Ser Ser Trp Tyr Pro Asp Ser Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 1995

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1995

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 Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Lys Ser 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 Asn Ser Tyr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1996

<211> 447

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1996

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Leu Tyr Asp Gly Ser Asn Lys Tyr Tyr Pro 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 Gly Gly Ser Ser Trp Tyr Pro Asp Ser Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His
195 200 205

Lys Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys
210 215 220

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
225 230 235 240

Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
245 250 255

Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
260 265 270

Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
275 280 285

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
290 295 300

Val Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
305 310 315 320

Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile
325 330 335

Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
340 345 350

Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
355 360 365

Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
370 375 380

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
385 390 395 400

Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
405 410 415

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
420 425 430

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440 445

<210> 1997

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1997

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 Gln Gly Val Ser Ser Tyr	20	25	30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile	35	40	45
Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly	50	55	60
Ser Gly Pro Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro	65	70	75
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp His Leu	85	90	95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala	100	105	110
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly	115	120	125
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala	130	135	140
Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln	145	150	155
Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser	165	170	175
Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr	180	185	190
Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser	195	200	205
Phe Asn Arg Gly Glu Cys	210		

<210> 1998
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1998
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Leu Tyr Asp Gly Ser Asn Lys Tyr Tyr Pro 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 Gly Gly Ser Ser Trp Tyr Pro Asp Ser Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 1999
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1999

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 Gln Gly Val Ser Ser Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Pro Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp His Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 2000

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2000

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Leu Tyr Asp Gly Ser Asn Lys Tyr Tyr Pro 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 Gly Gly Ser Ser Trp Tyr Pro Asp Ser Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 2001

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2001

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 Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Lys Ser 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 Asn Ser Tyr Pro Leu

85

90

95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 2002

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2002

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Trp Tyr Asp Glu Ser Asn Lys Tyr Tyr Pro 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 Gly Gly Ser Ser Trp Tyr Pro Asp Ser Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 2003

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2003

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 Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Lys Ser 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 Asn Ser Tyr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 2004

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2004

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala 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 Leu Tyr Tyr Cys
85 90 95

Val Arg Ser Gly Ser Tyr Asn Tyr Tyr Tyr Tyr Gly Met Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Arg
115 120

<210> 2005

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2005

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
20 25 30

Thr Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
85 90 95

Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
100 105 110

<210> 2006
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2006
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 Asn Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Ala Ile Asn Gln Asp Gly Ser Glu Lys Tyr Tyr Val Gly 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 Val Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Val Arg Asp Tyr Tyr Asp Ile Leu Thr Asp Tyr Tyr Ile His Tyr Trp
100 105 110

Tyr Phe Asp Leu Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 2007
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2007
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
85 90 95

Cys Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
100 105

<210> 2008
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2008
Asn Tyr Trp Met Asn

<210> 2009
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2009
Ala Ile Asn Gln Asp Gly Ser Glu Lys Tyr Tyr Val Gly Ser Val Lys
1 5 10 15

Gly

<210> 2010
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2010
Asp Tyr Tyr Asp Ile Leu Thr Asp Tyr Tyr Ile His Tyr Trp Tyr Phe
1 5 10 15

Asp Leu

<210> 2011
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2011
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala

1 5 10

<210> 2012
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2012
Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 2013
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2013
Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 2014
<211> 446
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2014
Glu Val Gln Leu Val Glu Ser Gly Gly Asp 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

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35

40

45

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val 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 Asp Arg Gly Ser Leu Tyr Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
 115 120 125

Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu
 130 135 140

Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly
 145 150 155 160

Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser
 165 170 175

Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu
 180 185 190

Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr
 195 200 205

Lys Val Asp Lys Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
 210 215 220

Cys Pro Pro Cys Pro Ala Pro Glu Leu 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 His Glu Asp Pro Glu Val
260 265 270

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275 280 285

Lys Pro Arg Glu Glu Gln Tyr 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 Ala Leu Pro Ala Pro 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 Arg 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 Lys Leu Thr Val Asp Lys Ser Arg Trp
405 410 415

Gln Gln 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 Pro Gly Lys
435 440 445

<210> 2015

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2015

Ala 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 Arg Pro Ser Gln Gly Ile Asn Trp Glu
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Ser Leu Glu Gln Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Phe Asn Ser Tyr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr

180

185

190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

<210> 2016

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 2016

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Asp Tyr
 20 25 30

His Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Val Ile Asn Pro Met Tyr Gly Thr Thr Asp Tyr Asn Gln Arg Phe
 50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Tyr Asp Tyr Phe Thr Gly Thr Gly Val Tyr Trp Gly Gln Gly
 100 105 110

Thr Leu Val Thr Val Ser Ser
 115

<210> 2017
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2017
Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Arg Ser Leu Val His Ser
20 25 30

Arg Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ile Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Ser Gln Ser
85 90 95

Thr His Leu Pro Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 2018
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2018
Arg Tyr Gly Ile Ser
1 5

<210> 2019
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2019
Trp Ile Ser Thr Tyr Ser Gly Asn Thr Asn Tyr Ala Gln Lys Leu Gln
1 5 10 15

Gly

<210> 2020
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2020
Arg Gln Leu Tyr Phe Asp Tyr
1 5

<210> 2021
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2021
Arg Ala Ser Gln Ser Val Ser Ser Asn Leu Ala
1 5 10

<210> 2022
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2022
Asp Ala Ser Thr Arg Ala Thr
1 5

<210> 2023
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2023
Gln Gln Tyr Asp Asn Trp Pro Leu Thr
1 5

<210> 2024
<211> 400
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<220>
<221> misc_feature
<222> (1)..(400)
<223> /note="This sequence may encompass 100-400 nucleotides"

<220>
<221> source
<223> /note="See specification as filed for detailed description of substitutions and preferred embodiments"

<400> 2024
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	360
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	400

<210> 2025
 <211> 2000
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<220>
 <221> misc_feature
 <222> (1)..(2000)
 <223> /note="This sequence may encompass 50-2000 nucleotides"

<400> 2025 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	360
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	420
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	480
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	720

aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	780
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	840
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	900
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	960
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1020
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1080
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1140
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1200
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1260
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1320
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1380
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1440
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1500
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1560
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1620
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1680
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1740
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1800
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1860
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1920
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1980
aaaaaaaaaa	aaaaaaaaaa					2000

<210> 2026

<211> 100

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 2026

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60

tttttttttt tttttttttt tttttttttt tttttttttt 100

<210> 2027

<211> 5000

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<220>

<221> misc_feature

<222> (1)..(5000)

<223> /note="This sequence may encompass 50-5000 nucleotides"

<400> 2027

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 120

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 180

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 240

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 300

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 360

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 420

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 480

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 540

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 600

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 660

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 720

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 780

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 840

[illegible]

[illegible]

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4080
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4140
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4200
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4260
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4320
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4380
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4440
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4500
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4560
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4620
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4680
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4740
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4800
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4860
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4920
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4980
tttttttttt tttttttttt	5000

<210> 2028
 <211> 5000
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<220>
 <221> misc_feature
 <222> (1)..(5000)
 <223> /note="This sequence may encompass 100-5000 nucleotides"

<400> 2028 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	60
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aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	120
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	180
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	240
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	300
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	360
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	420
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	480
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	540
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	600
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	660
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	720
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	780
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	840
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	900
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	960
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1020
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1080
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1140
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1200
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1260
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1320
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1380
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1440
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1500
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1560
aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	aaaaaaaa	1620

[illegible]

[illegible]

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4980
aaaaaaaaaa aaaaaaaaaa	5000

<210> 2029
 <211> 486
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<220>
 <221> VARIANT
 <222> (1)..(21)
 <223> /replace=" "

<220>
 <221> SITE
 <222> (1)..(486)
 <223> /note="Variant residues given in the sequence have no preference with respect to those in the annotations for variant positions"

<400> 2029
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu
 20 25 30

Ser Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln
 35 40 45

Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr
 50 55 60

Val Lys Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Val Pro
 65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
85 90 95

Ser Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
130 135 140

Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser
145 150 155 160

Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser
195 200 205

Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys
210 215 220

Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys
225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Ser Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp

290

295

300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 2030

<211> 465

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2030

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Lys Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser Val Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu Thr Ile Ile
180 185 190

Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln
195 200 205

Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val
225 230 235 240

Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
245 250 255

Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala
260 265 270

Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile
275 280 285

Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
290 295 300

Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr
305 310 315 320

Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu
325 330 335

Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu
340 345 350

Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln
355 360 365

Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu
370 375 380

Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly

385 390 395 400

Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln
 405 410 415

Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu
 420 425 430

Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr
 435 440 445

Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
 450 455 460

Arg
465

<210> 2031
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
 peptide"

<400> 2031
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro
 20

<210> 2032
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
 oligonucleotide"

<400> 2032

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccc 63

<210> 2033
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2033
Leu Ala Glu Ala Ala Ala Lys
1 5

<210> 2034
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<220>
<221> SITE
<222> (1)..(30)
<223> /note="This sequence may encompass 1-6 'Gly Gly Gly Gly Ser' repeating units"

<220>
<221> source
<223> /note="See specification as filed for detailed description of substitutions and preferred embodiments"

<400> 2034
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
20 25 30

<210> 2035
<211> 4

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2035
Arg Gly Asp Ser
1

<210> 2036
<211> 243
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2036
Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Met Leu Ser Asn
20 25 30

Ser Asp Thr Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
35 40 45

Trp Leu Gly Arg Thr Tyr His Arg Ser Thr Trp Tyr Asp Asp Tyr Ala
50 55 60

Ser Ser Val Arg Gly Arg Val Ser Ile Asn Val Asp Thr Ser Lys Asn
65 70 75 80

Gln Tyr Ser Leu Gln Leu Asn Ala Val Thr Pro Glu Asp Thr Gly Val
85 90 95

Tyr Tyr Cys Ala Arg Val Arg Leu Gln Asp Gly Asn Ser Trp Ser Asp
100 105 110

Ala Phe Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly

115

120

125

Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Ala Ser Ala Ser Gly
 130 135 140

Ser Pro Gly Gln Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp
 145 150 155 160

Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys
 165 170 175

Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Val
 180 185 190

Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr
 195 200 205

Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser
 210 215 220

Tyr Thr Ser Ser Ser Thr Leu Tyr Val Phe Gly Thr Gly Thr Gln Leu
 225 230 235 240

Thr Val Leu