

SEQUENCE LISTING

<110> AbbVie, Inc.
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<120> Anti-CD71 Activatable Antibody Drug Conjugates and Methods of Use
 Thereof

<130> CYTM-056/001US 322001-2522

<150> US 62/572,467

<151> 2017-10-14

<160> 208

<170> PatentIn version 3.5

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			20					25					30		

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

Gly	Ala	Ile	Tyr	Pro	Gly	Asn	Ser	Glu	Thr	Gly	Tyr	Asn	Gln	Asn	Phe
	50					55					60				

Lys	Gly	Lys	Ala	Lys	Leu	Thr	Ala	Val	Thr	Ser	Ala	Ser	Thr	Ala	Tyr
65					70					75					80

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

Thr Arg Glu Asn Trp Asp Pro Gly Phe Ala Phe Trp Gly Gln Gly Thr
100 105 110

Leu Ile Thr Val Ser Ala
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Asp Ile Val Met Thr Gln Thr Pro Ala Ile Met Ser Ala Ser Pro Gly
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Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met
20 25 30

Tyr Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
35 40 45

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

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

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr
85 90 95

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Ala
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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr 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 Glu Asn Trp Asp Pro Gly Phe Ala Phe Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
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Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

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

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

Gln Gly Arg Ala Thr Leu Thr Ala Asp Thr 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 Glu Asn Trp Asp Pro Gly Phe Ala Phe Trp Gly Gln Gly Thr
100 105 110

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

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

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

Gln Gly Arg Ala Thr Leu Thr Ala Asp Thr 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 Glu Asn Trp Asp Pro Gly Phe Ala Phe Trp Gly Gln Gly Thr
100 105 110

Leu Ile Thr Val Ser Ser
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met
20 25 30

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

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

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

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr
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Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met
20 25 30

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

Ser 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 Ser Ser Met Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Tyr Tyr Met
20 25 30

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

Ser 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 Ser Ser Met Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr
85 90 95

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

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

Ser 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 Ser Ser Met Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr
85 90 95

Phe Gly Gln 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
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Asn Arg Gly Glu Cys
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Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

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

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

Gln Gly Arg Ala Thr Leu Thr Ala Asp Thr 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 Glu Asn Trp Asp Pro Gly Phe Ala Phe Trp Gly Gln Gly Thr
100 105 110

Leu Ile 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 Asn 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
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ccaggccagg gcctcgaatg gatcggcgcc atctaccccg gcaactccga gacaggctac 180
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taccgggtgg tgtccgtgct gaccgtgctg caccaggact ggctgaacgg caaagagtac	960
aagtgcaagg tgtccaacaa ggccctgcct gccccatcg aaaagaccat ctccaaggcc	1020
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gaatgggaga gcaacggcca gcccgagaac aactacaaga ccaccccacc tgtgctggac	1200
tccgacggct cattcttctt gtactccaag ctgaccgtgg acaagtcccg gtggcagcag	1260
ggcaacgtgt tctcctgcag cgtgatgcac gaggccctgc acaaccacta caccagaag	1320
tccctgtccc tgagccccgg caag	1344

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		20						25					30		

Ser	Gly	Leu	Leu	Ser	Gly	Arg	Ser	Asp	Asn	His	Gly	Gly	Gly	Ser	Asp
		35					40					45			

Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	Asp
	50					55					60				

Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr
65 70 75 80

Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser
85 90 95

Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
100 105 110

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp
115 120 125

Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe
130 135 140

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

Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala
165 170 175

Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val
180 185 190

Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser
195 200 205

Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr
210 215 220

Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys
225 230 235 240

Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn
245 250 255

Arg Gly Glu Cys
260

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Gln Gly Gln Ser Gly Gln Gly Asn Leu Cys Thr Glu His Ser Ala Ala
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Leu Asp Cys Arg Ser Tyr Gly Gly Gly Ser Ser Gly Gly Ser Ile Ser
20 25 30

Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Gly Ser Asp
35 40 45

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
50 55 60

Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr
65 70 75 80

Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser
85 90 95

Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
100 105 110

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp
115 120 125

Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe
130 135 140

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

Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala
165 170 175

Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val
180 185 190

Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser
195 200 205

Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr
210 215 220

Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys
225 230 235 240

Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn
245 250 255

Arg Gly Glu Cys
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Gly Ser Gly Gly Ser
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Gly Gly Gly Ser
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Gly Gly Ser Gly

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Gly Gly Ser Gly Gly

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Gly Ser Gly Ser Gly

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Gly Ser Gly Gly Gly

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Gly Gly Gly Ser Gly
1 5

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Gly Ser Ser Ser Gly
1 5

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

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<400> 37

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

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Gly Gly Gly Ser
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Gly Ser Ser Gly Thr
1 5

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Gly Ser Ser Gly
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Thr Gly Arg Gly Pro Ser Trp Val
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Ser Ala Arg Gly Pro Ser Arg Trp
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Thr Ala Arg Gly Pro Ser Phe Lys
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Leu Ser Gly Arg Ser Asp Asn His
1 5

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Gly Gly Trp His Thr Gly Arg Asn
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His Thr Gly Arg Ser Gly Ala Leu
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Pro Leu Thr Gly Arg Ser Gly Gly
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Ala Ala Arg Gly Pro Ala Ile His
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Arg Gly Pro Ala Phe Asn Pro Met
1 5

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Ser Ser Arg Gly Pro Ala Tyr Leu
1 5

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Arg Gly Pro Ala Thr Pro Ile Met
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Arg Gly Pro Ala
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Gly	Gly	Gln	Pro	Ser	Gly	Met	Trp	Gly	Trp
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Phe	Pro	Arg	Pro	Leu	Gly	Ile	Thr	Gly	Leu
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Val	His	Met	Pro	Leu	Gly	Phe	Leu	Gly	Pro
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Ser	Pro	Leu	Thr	Gly	Arg	Ser	Gly
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Ser Ala Gly Phe Ser Leu Pro Ala
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Leu Ala Pro Leu Gly Leu Gln Arg Arg
1 5

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Ser Gly Gly Pro Leu Gly Val Arg
1 5

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<400> 60

Pro Leu Gly Leu
1

<210> 61
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<400> 61

Ile Ser Ser Gly Leu Ser Ser
1 5

<210> 62
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<220>
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<400> 62

Gln Asn Gln Ala Leu Arg Met Ala
1 5

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<400> 63

Ala Gln Asn Leu Leu Gly Met Val
1 5

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<400> 64

Ser Thr Phe Pro Phe Gly Met Phe
1 5

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<400> 65

Pro Val Gly Tyr Thr Ser Ser Leu
1 5

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<400> 66

Asp Trp Leu Tyr Trp Pro Gly Ile
1 5

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<400> 67

Ile Ser Ser Gly Leu Leu Ser Ser
1 5

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<400> 68

Leu Lys Ala Ala Pro Arg Trp Ala
1 5

<210> 69
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<400> 69

Gly Pro Ser His Leu Val Leu Thr
1 5

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<400> 70

Leu Pro Gly Gly Leu Ser Pro Trp
1 5

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<400> 71

Met Gly Leu Phe Ser Glu Ala Gly
1 5

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<400> 72

Ser Pro Leu Pro Leu Arg Val Pro
1 5

<210> 73

<211> 8

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<400> 73

Arg Met His Leu Arg Ser Leu Gly
1 5

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<211> 8

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<400> 74

Leu Ala Ala Pro Leu Gly Leu Leu
1 5

<210> 75

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<400> 75

Ala Val Gly Leu Leu Ala Pro Pro
1 5

<210> 76

<211> 8

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Leu Leu Ala Pro Ser His Arg Ala
1 5

<210> 77

<211> 8

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<400> 77

Pro Ala Gly Leu Trp Leu Asp Pro
1 5

<210> 78

<211> 7

<212> PRT

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<400> 78

Gly Pro Arg Ser Phe Gly Leu
1 5

<210> 79

<211> 6

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<400> 79

Gly Pro Arg Ser Phe Gly
1 5

<210> 80

<211> 12

<212> PRT

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<220>

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<400> 80

Asn	Thr	Leu	Ser	Gly	Arg	Ser	Glu	Asn	His	Ser	Gly
1				5					10		

<210> 81

<211> 12

<212> PRT

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<220>

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<400> 81

Asn	Thr	Leu	Ser	Gly	Arg	Ser	Gly	Asn	His	Gly	Ser
1				5					10		

<210> 82

<211> 12

<212> PRT

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<220>

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<400> 82

Thr	Ser	Thr	Ser	Gly	Arg	Ser	Ala	Asn	Pro	Arg	Gly
1				5					10		

<210> 83

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

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<400> 83

Thr	Ser	Gly	Arg	Ser	Ala	Asn	Pro
1				5			

<210> 84

<211> 8

<212> PRT
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<220>
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<400> 84

Val Ala Gly Arg Ser Met Arg Pro
1 5

<210> 85
<211> 8
<212> PRT
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<220>
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<400> 85

Val Val Pro Glu Gly Arg Arg Ser
1 5

<210> 86
<211> 8
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<220>
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<400> 86

Ile Leu Pro Arg Ser Pro Ala Phe
1 5

<210> 87
<211> 8
<212> PRT
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<220>
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<400> 87

Met Val Leu Gly Arg Ser Leu Leu
1 5

<210> 88
<211> 8
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<220>
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<400> 88

Gln Gly Arg Ala Ile Thr Phe Ile
1 5

<210> 89
<211> 8
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<220>
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<400> 89

Ser Pro Arg Ser Ile Met Leu Ala
1 5

<210> 90
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<400> 90

Ser Met Leu Arg Ser Met Pro Leu
1 5

<210> 91
<211> 13
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<400> 91

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His
1 5 10

<210> 92
<211> 22
<212> PRT
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<220>
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<400> 92

Ile Ser Ser Gly Leu Leu Ser Ser Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Asp Asn His
20

<210> 93
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 93

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

Ser Ala Asn Pro Arg Gly
20

<210> 94
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 94

Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ala Val
1 5 10 15

Gly Leu Leu Ala Pro Pro
20

<210> 95
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 95

Val His Met Pro Leu Gly Phe Leu Gly Pro Gly Gly Thr Ser Thr Ser
1 5 10 15

Gly Arg Ser Ala Asn Pro Arg Gly
20

<210> 96
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 96

Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Val His
1 5 10 15

Met Pro Leu Gly Phe Leu Gly Pro
20

<210> 97
<211> 18
<212> PRT
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<220>
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<400> 97

Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp
1 5 10 15

Asn His

<210> 98
<211> 18
<212> PRT
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<220>
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<400> 98

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ala Val Gly Leu Leu Ala
1 5 10 15

Pro Pro

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<211> 20
<212> PRT
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<220>
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<400> 99

Val His Met Pro Leu Gly Phe Leu Gly Pro Gly Gly Leu Ser Gly Arg
1 5 10 15

Ser Asp Asn His
20

<210> 100
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<400> 100

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Val His Met Pro Leu Gly
1 5 10 15

Phe Leu Gly Pro
20

<210> 101
<211> 22
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<220>
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<400> 101

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Gly Gly Ser Ile Ser
1 5 10 15

Ser Gly Leu Leu Ser Ser
20

<210> 102
<211> 22
<212> PRT
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<220>
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<400> 102

Leu Ser Gly Arg Ser Gly Asn His Gly Gly Ser Gly Gly Ser Ile Ser
1 5 10 15

Ser Gly Leu Leu Ser Ser
20

<210> 103
<211> 22
<212> PRT
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<220>
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<400> 103

Ile Ser Ser Gly Leu Leu Ser Ser Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Gly Asn His
20

<210> 104
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
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<400> 104

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Gly Gly Ser Gln Asn
1 5 10 15

Gln Ala Leu Arg Met Ala
20

<210> 105
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
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<400> 105

Gln Asn Gln Ala Leu Arg Met Ala Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Asp Asn His
20

<210> 106
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
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<400> 106

Leu Ser Gly Arg Ser Gly Asn His Gly Gly Ser Gly Gly Ser Gln Asn
1 5 10 15

Gln Ala Leu Arg Met Ala
20

<210> 107
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
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<400> 107

Gln Asn Gln Ala Leu Arg Met Ala Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Gly Asn His
20

<210> 108
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
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<400> 108

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Gly Asn His
1 5 10

<210> 109
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<220>
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<400> 109

Gln Gly Gln Ser Gly Gln
1 5

<210> 110
<211> 8
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<220>

<223> Synthetic

<400> 110

Pro Arg Phe Lys Ile Ile Gly Gly
1 5

<210> 111

<211> 8

<212> PRT

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<220>

<223> Synthetic

<400> 111

Pro Arg Phe Arg Ile Ile Gly Gly
1 5

<210> 112

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 112

Ser Ser Arg His Arg Arg Ala Leu Asp
1 5

<210> 113

<211> 14

<212> PRT

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<223> Synthetic

<400> 113

Arg Lys Ser Ser Ile Ile Ile Arg Met Arg Asp Val Val Leu
1 5 10

<210> 114

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 114

Ser	Ser	Ser	Phe	Asp	Lys	Gly	Lys	Tyr	Lys	Lys	Gly	Asp	Asp	Ala
1				5					10					15

<210> 115

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 115

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

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<212> PRT

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<220>

<223> Synthetic

<400> 116

Ile	Glu	Gly	Arg
1			

<210> 117

<211> 4

<212> PRT

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<220>

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<400> 117

Ile	Asp	Gly	Arg
1			

<210> 118

<211> 7

<212> PRT
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<220>
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<400> 118

Gly Gly Ser Ile Asp Gly Arg
1 5

<210> 119
<211> 6
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<220>
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<400> 119

Pro Leu Gly Leu Trp Ala
1 5

<210> 120
<211> 8
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<220>
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<400> 120

Gly Pro Gln Gly Ile Ala Gly Gln
1 5

<210> 121
<211> 8
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<220>
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<400> 121

Gly Pro Gln Gly Leu Leu Gly Ala
1 5

<210> 122
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<400> 122

Gly Ile Ala Gly Gln
1 5

<210> 123
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<220>
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<400> 123

Gly Pro Leu Gly Ile Ala Gly Ile
1 5

<210> 124
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<400> 124

Gly Pro Glu Gly Leu Arg Val Gly
1 5

<210> 125
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<400> 125

Tyr Gly Ala Gly Leu Gly Val Val
1 5

<210> 126
<211> 8
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<400> 126

Ala Gly Leu Gly Val Val Glu Arg
1 5

<210> 127
<211> 8
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<223> Synthetic

<400> 127

Ala Gly Leu Gly Ile Ser Ser Thr
1 5

<210> 128
<211> 8
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<400> 128

Glu Pro Gln Ala Leu Ala Met Ser
1 5

<210> 129
<211> 8
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<220>
<223> Synthetic

<400> 129

Gln Ala Leu Ala Met Ser Ala Ile
1 5

<210> 130
<211> 8
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<400> 130

Ala Ala Tyr His Leu Val Ser Gln
1 5

<210> 131
<211> 8
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<220>
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<400> 131

Met Asp Ala Phe Leu Glu Ser Ser
1 5

<210> 132
<211> 8
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<220>
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<400> 132

Glu Ser Leu Pro Val Val Ala Val
1 5

<210> 133
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<220>
<223> Synthetic

<400> 133

Ser Ala Pro Ala Val Glu Ser Glu
1 5

<210> 134

<211> 8

<212> PRT

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<220>

<223> Synthetic

<400> 134

Asp Val Ala Gln Phe Val Leu Thr
1 5

<210> 135

<211> 8

<212> PRT

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<220>

<223> Synthetic

<400> 135

Val Ala Gln Phe Val Leu Thr Glu
1 5

<210> 136

<211> 8

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<223> Synthetic

<400> 136

Ala Gln Phe Val Leu Thr Glu Gly
1 5

<210> 137

<211> 8

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<220>

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<400> 137

Pro Val Gln Pro Ile Gly Pro Gln
1 5

<210> 138

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

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<400> 138

Gln Gly Gln Ser Gly Gln Gly
1 5

<210> 139

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 139

Gln Gly Gln Ser Gly
1 5

<210> 140

<211> 4

<212> PRT

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<220>

<223> Synthetic

<400> 140

Gln Gly Gln Ser
1

<210> 141

<211> 253

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 141

Gln Phe Cys Pro Trp Ser Tyr Tyr Leu Ile Gly Asp Cys Asp Ile Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ile Ser Ser Gly Leu Leu Ser Gly Arg
20 25 30

Ser Asp Asn His Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
35 40 45

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser
50 55 60

Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
100 105 110

Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
130 135 140

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
145 150 155 160

Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
165 170 175

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
180 185 190

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
195 200 205

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
210 215 220

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
225 230 235 240

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
245 250

<210> 142
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 142

Asn Leu Cys Thr Glu His Ser Ala Ala Leu Asp Cys Arg Ser Tyr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ile Ser Ser Gly Leu Leu Ser Gly Arg
20 25 30

Ser Asp Asn His Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
35 40 45

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser
50 55 60

Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
100 105 110

Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
130 135 140

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
145 150 155 160

Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
165 170 175

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
180 185 190

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
195 200 205

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
210 215 220

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
225 230 235 240

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
245 250

<210> 143
<211> 6
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<220>
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<400> 143

Gly Gln Ser Gly Gln Gly
1 5

<210> 144
<211> 5
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 144

Gln Ser Gly Gln Gly
1 5

<210> 145

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 145

Ser Gly Gln Gly
1

<210> 146

<211> 257

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 146

Asn Leu Cys Thr Glu His Ser Ala Ala Leu Asp Cys Arg Ser Tyr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ala Val Gly Leu Leu Ala Pro Pro Gly
20 25 30

Gly Leu Ser Gly Arg Ser Asp Asn Pro Gly Gly Ser Asp Ile Gln Met
35 40 45

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

Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn
85 90 95

Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr
115 120 125

Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly
130 135 140

Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile
145 150 155 160

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

Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys
180 185 190

Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu
195 200 205

Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu
210 215 220

Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr
225 230 235 240

His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu
245 250 255

Cys

<210> 147

<211> 264

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 147

Gln Gly Gln Ser Gly Gln Gly Asn Leu Cys Thr Glu His Ser Ala Ala
1 5 10 15

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

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn Pro
35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val
65 70 75 80

Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

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

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr
130 135 140

Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val
145 150 155 160

Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys
165 170 175

Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg
180 185 190

Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn
195 200 205

Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser
210 215 220

Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys
225 230 235 240

Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr
245 250 255

Lys Ser Phe Asn Arg Gly Glu Cys
260

<210> 148
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<220>
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<400> 148

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Pro Arg Gly
1 5 10 15

<210> 149
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<220>
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<400> 149

Ala Val Gly Leu Leu Ala Pro Pro Thr Ser Gly Arg Ser Ala Asn Pro
1 5 10 15

Arg Gly

<210> 150
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<223> Synthetic

<400> 150

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

Gly

<210> 151

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 151

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asp His
1 5 10

<210> 152

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 152

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Ile His
1 5 10

<210> 153

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 153

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Gln His
1 5 10

<210> 154
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<212> PRT
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<220>
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<400> 154

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Thr His
1 5 10

<210> 155
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 155

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Tyr His
1 5 10

<210> 156
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 156

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Pro
1 5 10

<210> 157
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 157

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Pro
1 5 10

<210> 158
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 158

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Ile
1 5 10

<210> 159
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 159

Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp
1 5 10 15

Asp His

<210> 160
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 160

Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp
1 5 10 15

Ile His

<210> 161
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 161

Ala	Val	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Gly	Leu	Ser	Gly	Arg	Ser	Asp
1				5					10					15	

Gln His

<210> 162
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 162

Ala	Val	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Gly	Leu	Ser	Gly	Arg	Ser	Asp
1				5					10					15	

Thr His

<210> 163
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 163

Ala	Val	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Gly	Leu	Ser	Gly	Arg	Ser	Asp
1				5					10					15	

Tyr His

<210> 164
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 164

Ala	Val	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Gly	Leu	Ser	Gly	Arg	Ser	Asp
1				5					10					15	

Asn Pro

<210> 165
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 165

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

Asn Pro

<210> 166
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 166

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

Asn Ile

<210> 167
<211> 447
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 167

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

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

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

Gln Gly Arg Ala Thr Leu Thr Ala Asp Thr 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 Glu Asn Trp Asp Pro Gly Phe Ala Phe Trp Gly Gln Gly Thr
100 105 110

Leu Ile 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 Asn 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
435 440 445

<210> 168
<211> 1341
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 168
caggtgcagc tgggtgcagtc tggcgccgaa gtgaagaaac ctggcgcctc cgtgaagatg 60
tcctgcaagg cctccggcta caccttcacc agctactgga tgcactgggt gcgacaggct 120
ccaggccagg gcctcgaatg gatcggcgcc atctaccccg gcaactccga gacaggctac 180
gcccagaagt tccagggcag agccaccctg accgccgaca cctccacctc caccgcctac 240
atggaactgt ccagcctgcg gagcgaggac accgccgtgt actactgcac cagagagaac 300
tgggaccccg gcttcgcctt ctggggccag ggcaccctga tcaccgtgtc ctccgccagc 360
accaagggcc cctccgtggt ccctctggcc ctttcagca agtccacctc tggcggcaca 420
gctgccctgg gctgcctggt gaaagactac ttccccgagc ccgtgaccgt gtcctggaac 480
tctggcgccc tgaccagcg agtgcacacc ttccctgccg tgctgcagtc ctccggcctg 540
tactccctgt cctccgtggt gacagtgtccc tcctccagcc tgggcaccca gacctacatc 600
tgcaacgtga accacaagcc ctccaacacc aaggtggaca agaaggtgga acccaagtcc 660
tgcgacaaga cccacacctg tcctccctgc cctgcccctg aactgctggg cggaccttcc 720
gtgtttctgt tcccccaaa gcccaaggac accctgatga tctcccgga ccccgaagtg 780
acctgcgtgg tgggtggacgt gtcccacgag gaccctgaag tgaagttcaa ttggtacgtg 840
gacggcgtgg aagtgcacaa cgccaagacc aagcccagag aggaacagta caactccacc 900
taccgggtgg tgtccgtgct gaccgtgctg caccaggact ggctgaacgg caaagagtac 960

aagtgaagg tgtccaacaa ggccctgcct gccccatcg aaaagaccat ctccaaggcc 1020
aagggccagc cccgcgagcc ccaggtgtac acactgccac ctagccggga agagatgacc 1080
aagaaccagg tgtccctgac ctgtctggtg aaaggcttct acccctccga tatcgccgtg 1140
gaatgggaga gcaacggcca gcccgagaac aactacaaga ccaccccacc tgtgctggac 1200
tccgacggct cattcttcct gtactccaag ctgaccgtgg acaagtcccg gtggcagcag 1260
ggcaacgtgt tctcctgcag cgtgatgcac gaggccctgc acaaccacta caccagaag 1320
tccctgtccc tgagccccgg c 1341

<210> 169
<211> 253
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 169

Asn Leu Cys Thr Glu His Ser Ala Ala Leu Asp Cys Arg Ser Tyr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ile Ser Ser Gly Leu Leu Ser Gly Arg
20 25 30

Ser Asp Asn Pro Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
35 40 45

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser
50 55 60

Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
100 105 110

Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
130 135 140

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
145 150 155 160

Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
165 170 175

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
180 185 190

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
195 200 205

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
210 215 220

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
225 230 235 240

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
245 250

<210> 170
<211> 260
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 170

Gln Gly Gln Ser Gly Gln Gly Asn Leu Cys Thr Glu His Ser Ala Ala
1 5 10 15

Leu Asp Cys Arg Ser Tyr Gly Gly Gly Ser Ser Gly Gly Ser Ile Ser
20 25 30

Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Pro Gly Gly Gly Ser Asp
35 40 45

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
50 55 60

Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr
65 70 75 80

Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser
85 90 95

Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
100 105 110

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp
115 120 125

Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe
130 135 140

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

Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala
165 170 175

Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val
180 185 190

Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser
195 200 205

Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr
210 215 220

Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys
225 230 235 240

Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn
245 250 255

Arg Gly Glu Cys
260

<210> 171
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 171

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Ile
1 5 10

<210> 172
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 172

Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp
1 5 10 15

Asn Ile

<210> 173
<211> 257
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 173

Gln Phe Cys Pro Trp Ser Tyr Tyr Leu Ile Gly Asp Cys Asp Ile Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ala Val Gly Leu Leu Ala Pro Pro Gly
20 25 30

Gly Leu Ser Gly Arg Ser Asp Asn Pro Gly Gly Ser Asp Ile Gln Met
35 40 45

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

Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn
85 90 95

Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr
115 120 125

Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly
130 135 140

Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile
145 150 155 160

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

Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys
180 185 190

Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu
195 200 205

Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu
210 215 220

Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr
225 230 235 240

His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu
245 250 255

Cys

<210> 174
<211> 264
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 174

Gln Gly Gln Ser Gly Gln Gly Gln Phe Cys Pro Trp Ser Tyr Tyr Leu
1 5 10 15

Ile Gly Asp Cys Asp Ile Gly Gly Gly Ser Ser Gly Gly Ser Ala Val
20 25 30

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn Pro
35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val
65 70 75 80

Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

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

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr
130 135 140

Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val
145 150 155 160

Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys
165 170 175

Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg
180 185 190

Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn
195 200 205

Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser
210 215 220

Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys
225 230 235 240

Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr
245 250 255

Lys Ser Phe Asn Arg Gly Glu Cys
260

<210> 175
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 175

Leu Ser Gly Arg Ser Gly Asn His
1 5

<210> 176
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 176

Ser Gly Arg Ser Ala Asn Pro Arg Gly
1 5

<210> 177

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 177

Leu Ser Gly Arg Ser Asp Asp His
1 5

<210> 178

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 178

Leu Ser Gly Arg Ser Asp Ile His
1 5

<210> 179

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 179

Leu Ser Gly Arg Ser Asp Gln His
1 5

<210> 180

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 180

Leu Ser Gly Arg Ser Asp Thr His
1 5

<210> 181

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 181

Leu Ser Gly Arg Ser Asp Tyr His
1 5

<210> 182

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 182

Leu Ser Gly Arg Ser Asp Asn Pro
1 5

<210> 183

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 183

Leu Ser Gly Arg Ser Ala Asn Pro
1 5

<210> 184

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 184

Leu Ser Gly Arg Ser Ala Asn Ile
1 5

<210> 185

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 185

Leu Ser Gly Arg Ser Asp Asn Ile
1 5

<210> 186

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 186

Met Ile Ala Pro Val Ala Tyr Arg
1 5

<210> 187

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 187

Arg Pro Ser Pro Met Trp Ala Tyr
1 5

<210> 188

<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 188

Trp Ala Thr Pro Arg Pro Met Arg
1 5

<210> 189
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 189

Phe Arg Leu Leu Asp Trp Gln Trp
1 5

<210> 190
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 190

Ile Ser Ser Gly Leu
1 5

<210> 191
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 191

Ile Ser Ser Gly Leu Leu Ser
1 5

<210> 192
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 192

Ile Ser Ser Gly Leu Leu
1 5

<210> 193
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 193

Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ala Val Gly Leu Leu
1 5 10 15

Ala Pro Pro

<210> 194
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 194

Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Val His Met Pro Leu
1 5 10 15

Gly Phe Leu Gly Pro
20

<210> 195
<211> 146
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 195

Gln Phe Cys Pro Trp Ser Tyr Tyr Leu Ile Gly Asp Cys Asp Ile Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ile Ser Ser Gly Leu Leu Ser Gly Arg
20 25 30

Ser Asp Asn His Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
35 40 45

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser
50 55 60

Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
100 105 110

Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
130 135 140

Ile Lys
145

<210> 196

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 196

Gln Gly Gln Ser Gly Gln Gly Gln Phe Cys Pro Trp Ser Tyr Tyr Leu
1 5 10 15

Ile Gly Asp Cys Asp Ile Gly Gly Gly Ser Ser Gly Gly Ser Ile Ser
20 25 30

Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Gly Ser Asp
35 40 45

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
50 55 60

Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr
65 70 75 80

Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser
85 90 95

Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
100 105 110

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp
115 120 125

Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe
130 135 140

Gly Gln Gly Thr Lys Leu Glu Ile Lys
145 150

<210> 197

<211> 146

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 197

Asn Leu Cys Thr Glu His Ser Ala Ala Leu Asp Cys Arg Ser Tyr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ile Ser Ser Gly Leu Leu Ser Gly Arg
20 25 30

Ser Asp Asn His Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
35 40 45

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser
50 55 60

Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
100 105 110

Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
130 135 140

Ile Lys
145

<210> 198
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 198

Gln Gly Gln Ser Gly Gln Gly Asn Leu Cys Thr Glu His Ser Ala Ala
1 5 10 15

Leu Asp Cys Arg Ser Tyr Gly Gly Gly Ser Ser Gly Gly Ser Ile Ser
20 25 30

Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Gly Ser Asp
35 40 45

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
50 55 60

Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr
65 70 75 80

Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser
85 90 95

Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
100 105 110

Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp
115 120 125

Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe
130 135 140

Gly Gln Gly Thr Lys Leu Glu Ile Lys
145 150

<210> 199
<211> 150
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 199

Asn Leu Cys Thr Glu His Ser Ala Ala Leu Asp Cys Arg Ser Tyr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ala Val Gly Leu Leu Ala Pro Pro Gly
20 25 30

Gly Leu Ser Gly Arg Ser Asp Asn Pro Gly Gly Ser Asp Ile Gln Met
35 40 45

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

Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn
85 90 95

Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr
115 120 125

Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly
130 135 140

Thr Lys Leu Glu Ile Lys
145 150

<210> 200
<211> 157
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 200

Gln Gly Gln Ser Gly Gln Gly Asn Leu Cys Thr Glu His Ser Ala Ala
1 5 10 15

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

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn Pro
35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val
65 70 75 80

Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

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

Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr
130 135 140

Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
145 150 155

<210> 201
<211> 146
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 201

Asn Leu Cys Thr Glu His Ser Ala Ala Leu Asp Cys Arg Ser Tyr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Ile Ser Ser Gly Leu Leu Ser Gly Arg
20 25 30

Ser Asp Asn Pro Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
35 40 45

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser
50 55 60

Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
100 105 110

Thr Ile Ser Ser Met Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Arg Arg Asn Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
130 135 140

Ile Lys
145

<210> 202
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 202

Gln Gly Gln Ser Gly Gln Gly Asn Leu Cys Thr Glu His Ser Ala Ala
1 5 10 15

Leu Asp Cys Arg Ser Tyr Gly Gly Gly Ser Ser Gly Gly Ser Ile Ser
20 25 30

Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Pro Gly Gly Gly Ser Asp
35 40 45

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
50 55 60

Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr
65 70 75 80

Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser
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Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
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Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Gln Pro Glu Asp
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Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Arg Asn Tyr Pro Tyr Thr Phe
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Gly Gln Gly Thr Lys Leu Glu Ile Lys
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Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
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Ile Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met Tyr Trp Phe Gln
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Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn
85 90 95

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

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
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Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val
65 70 75 80

Tyr Tyr Met Tyr Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

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

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