

LISTADO DE SECUENCIAS

<110> Pfizer Inc.

<120> ANTICUERPOS ANTI-E-SELECTINA, COMPOSICIONES Y MÉTODOS DE USO

<130> PC072498A

<150> US 62/965.688

<151> 24-01-2020

<150> US 63/104.213

<151> 22-10-2020

<150> US 63/121.467

<151> 04-12-2020

<160> 206

<170> PatentIn versión 3.5

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<211> 214

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

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

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

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

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

100

105

110

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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
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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
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Arg Ile Asp Pro Ala Asn Gly Asn Thr Ile Tyr Val Asp Ser Val Thr
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Gly

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

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

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

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

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

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

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

Thr Gly Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr

65		70		75		80									
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
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Ala	Met	Asp	Leu	Tyr	Ser	Thr	Ser	Glu	Tyr	Trp	Gly	Gln	Gly	Thr	Leu
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Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys
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Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser
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Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser
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Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn
		195					200					205			
Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His
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Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Ala	Ala	Gly	Ala	Pro	Ser	Val
225					230					235					240
Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr
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Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu
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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
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Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
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Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
20 25 30

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
35 40 45

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
50 55 60

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

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Ala Ala Gly Ala Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
130 135 140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
180 185 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
195 200 205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
210 215 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
225 230 235 240

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

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
275 280 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Ala Ala Gly Ala Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys

130

135

140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240

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

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285

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

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

Tyr Asn Ala Asn Ser 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 Ser Ser Leu Gln Pro
65 70 75 80

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

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

Tyr Asn Ala Asn Ser 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 Ser Ser Leu Gln Pro
65 70 75 80

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

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

Tyr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35

40

45

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

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

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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
435 440 445

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Gly Tyr Asn Ile Arg Ser Ser Tyr Met His
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Arg Ile Asp Pro Ala Asn Gly Asn Thr Ile Tyr Ala Glu Lys Phe Lys
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Ile

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

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

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

Lys Ile Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser 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	Met	Asp	Leu	Tyr	Ser	Thr	Ser	Glu	Tyr	Trp	Gly	Gln	Gly	Thr	Leu
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Val	Thr	Val	Ser	Ser											
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			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
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Glu	Asp	Phe	Ala	Thr	Tyr	Phe	Cys	Leu	Gln	Asp	Asn	Ser	Trp	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
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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 Lys Thr Ser Gln Asn Ile Asn Arg 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	Phe	Cys	Leu	Gln	Asp	Asn	Ser	Trp	Pro	Leu
			85						90					95	
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
			100					105							
<210> 28															
<211> 446															
<212> PRT															
<213> Secuencia Artificial															
<220>															
<223> Constructo Sintético															
<400> 28															
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	Tyr	Asn	Ile	Arg	Ser	Ser
			20					25					30		
Tyr	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ala	Arg	Ile	Asp	Pro	Ala	Asn	Gly	Asn	Thr	Ile	Tyr	Val	Asp	Ser	Val
	50					55					60				
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Ala	Asp	Asn	Ala	Lys	Asn	Ser	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	Met	Asp	Leu	Tyr	Ser	Thr	Ser	Glu	Tyr	Trp	Gly	Gln	Gly	Thr	Leu
			100					105					110		
Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu
		115					120					125			
Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys

130

135

140

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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
435 440 445

<210> 29
<211> 17
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 29

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

Gly

<210> 30
<211> 117
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 30

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

[illegible]

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

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

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

Tyr Asn Ala Asn Ser Leu Gln Thr Gly Ile Pro Ser Arg Phe Ser Ala

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

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
210

<210> 32

<211> 107

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 32

Asp Ile Gln Met Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly

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

<210> 33
 <211> 10
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 33

Phe	Gly	Ser	Gly	Thr	Lys	Leu	Glu	Ile	Lys
1				5					10

<210> 34
 <211> 447
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 34

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

Ser Val Lys Leu Ser Cys Lys Val Ser Gly Tyr Asn Ile Arg Ser Ser
20 25 30

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

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

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

Met Gln Leu Ser Gln Leu Lys Ser Asp Asp Thr Ala Ile Tyr Phe Cys
85 90 95

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

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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> 35
<211> 117
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 35

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

Ser Val Lys Leu Ser Cys Lys Val Ser Gly Tyr Asn Ile Arg Ser Ser
20 25 30

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

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

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

Met Gln Leu Ser Gln Leu Lys Ser Asp Asp Thr Ala Ile Tyr Phe Cys
85 90 95

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

Val Thr Val Ser Ser
115

<210> 36
<211> 11
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 36

Trp Gly Gln Gly Val Met Val Thr Val Ser Ser

1 5 10

<210> 37
<211> 446
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 37

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 Tyr Ala Ile Arg Ser Ala
20 25 30

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

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

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

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

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

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

Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser

165

170

175

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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
435 440 445

<210> 38
<211> 17
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 38

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

Glu

<210> 39
<211> 117
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 39

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 Tyr Ala Ile Arg Ser Ala
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35

40

45

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

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

Val Thr Val Ser Ser
 115

<210> 40

<211> 446

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 40

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 Tyr Ala Ile Arg Ser Ala
 20 25 30

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

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

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

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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
435 440 445

<210> 41
<211> 17
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 41

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

Gly

<210> 42
<211> 117
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 42

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 Tyr Ala Ile Arg Ser Ala
20 25 30

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

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

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

Val Thr Val Ser Ser
115

<210> 43
<211> 446
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 43

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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

435

440

445

<210> 44
 <211> 17
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 44

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

Gly

<210> 45
 <211> 117
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 45

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 Tyr Ala Ile Arg Ser Ala
 20 25 30

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

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

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

Val Thr Val Ser Ser
115

<210> 46
<211> 214
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 46

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

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

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

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

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

Glu Asp Phe Ala Thr Tyr Cys Cys Leu Gln Tyr Gly Ser Ile Pro His
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> 47
<211> 11
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 47

Lys Ala Ser Gln Thr Val Gly Ile Asn Val Asp
1 5 10

<210> 48
<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 48

Gly Ala Ser Asn Arg His Thr
1 5

<210> 49
<211> 9
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<220>

<223> Constructo Sintético

<400> 49

Leu Gln Tyr Gly Ser Ile Pro His Thr
1 5

<210> 50

<211> 107

<212> PRT

<213> Secuencia Artificial

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<223> Constructo Sintético

<400> 50

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

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

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

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

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

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

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

<210> 51

<211> 453

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 51

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

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

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

Gly Phe Ile Arg Ser Ser Gly Ser Thr Glu Tyr Asn Ser Glu Phe Lys
50 55 60

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

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

Arg Cys Pro Tyr Lys Tyr Ser Ser Phe Val Tyr Val Gly Val Met Asp
100 105 110

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

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

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

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

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
180 185 190

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys

420

425

430

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

Ser Leu Ser Pro Gly
 450

<210> 52
 <211> 10
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 52

Gly Phe Ser Leu Thr Gly Tyr Tyr Met Gln
 1 5 10

<210> 53
 <211> 16
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 53

Phe Ile Arg Ser Ser Gly Ser Thr Glu Tyr Asn Ser Glu Phe Lys Ser
 1 5 10 15

<210> 54
 <211> 16
 <212> PRT
 <213> Secuencia Artificial

<220>
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<400> 54

Cys Pro Tyr Lys Tyr Ser Ser Phe Val Tyr Val Gly Val Met Asp Ala
 1 5 10 15

<210> 55

<211> 124
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 55

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 Ser Leu Thr Gly Tyr
20 25 30

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

Gly Phe Ile Arg Ser Ser Gly Ser Thr Glu Tyr Asn Ser Glu Phe Lys
50 55 60

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

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

Arg Cys Pro Tyr Lys Tyr Ser Ser Phe Val Tyr Val Gly Val Met Asp
100 105 110

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

<210> 56
<211> 214
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 56

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

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

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

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

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

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

Thr Phe Gly Pro Gly Thr Lys Leu Glu Leu 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> 57

<211> 107
<212> PRT
<213> Secuencia Artificial

<220>
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<400> 57

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

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

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

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

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

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

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

<210> 58
<211> 10
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 58

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

<210> 59
<211> 454
<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 59

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

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

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

Gly Phe Ile Arg Ser Ser Gly Ser Thr Glu Tyr Asn Ser Glu Phe Lys
50 55 60

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

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

Arg Cys Pro Tyr Lys Tyr Ser Ser Phe Val Tyr Val Gly Val Met Asp
100 105 110

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

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

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

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

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
180 185 190

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

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

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

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

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

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

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

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

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

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

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

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

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

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys

405

410

415

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

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

Ser Leu Ser Pro Gly Lys
 450

<210> 60

<211> 124

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 60

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

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

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

Gly Phe Ile Arg Ser Ser Gly Ser Thr Glu Tyr Asn Ser Glu Phe Lys
 50 55 60

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

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

Arg Cys Pro Tyr Lys Tyr Ser Ser Phe Val Tyr Val Gly Val Met Asp
 100 105 110

Ala Trp Gly Gln Gly Ala Pro Val Thr Val Ser Ser

115

120

<210> 61
 <211> 11
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 61

Trp Gly Gln Gly Ala Pro Val Thr Val Ser Ser
 1 5 10

<210> 62
 <211> 444
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 62

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 Ser Ile Ser Thr Tyr
 20 25 30

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

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

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

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

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

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

Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val
130 135 140

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
145 150 155 160

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

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

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

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

Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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 His Glu Asp Pro Glu Val Lys
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 Tyr 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 Ala Leu Pro Ala Pro 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

Arg 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 Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
 405 410 415

Gln 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 Pro Gly
 435 440

<210> 63

<211> 10

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 63

Gly Phe Ser Ile Ser Thr Tyr Asn Val His
 1 5 10

<210> 64

<211> 16

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 64

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

<210> 65
<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 65

Trp Gly Gly Gly Phe Asp Tyr
1 5

<210> 66
<211> 115
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 66

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 Ser Ile Ser Thr Tyr
20 25 30

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

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

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

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

Arg Trp Gly Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr

100

105

110

Val Ser Ser
115

<210> 67
<211> 214
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 67

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 His Ser Ile Gly Thr Asn
20 25 30

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

Tyr Phe Thr Ser Gln Ser Ile 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 Thr Gln Ser Trp 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> 68
<211> 11
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 68

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

<210> 69
<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 69

Phe Thr Ser Gln Ser Ile Ser
1 5

<210> 70
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
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<400> 70

Gln Gln Thr Gln Ser Trp Pro Leu Thr
1 5

<210> 71

<211> 107

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 71

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 His Ser Ile Gly Thr Asn
20 25 30

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

Tyr Phe Thr Ser Gln Ser Ile 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 Thr Gln Ser Trp Pro Leu
85 90 95

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

<210> 72

<211> 214

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 72

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

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

Leu His Trp Tyr Gln Gln Lys Thr Asn Glu Ser Pro Arg Leu Leu Ile
35 40 45

Lys Phe Thr Ser Gln Ser Ile Ser Gly Ile Pro Ser Arg Phe Ser Ala
50 55 60

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

Asp Asp Val Ser Ser Tyr Phe Cys Gln Gln Thr Gln Ser Trp Pro Leu
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys

210

<210> 73
<211> 107
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 73

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

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

Leu His Trp Tyr Gln Gln Lys Thr Asn Glu Ser Pro Arg Leu Leu Ile
35 40 45

Lys Phe Thr Ser Gln Ser Ile Ser Gly Ile Pro Ser Arg Phe Ser Ala
50 55 60

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

Asp Asp Val Ser Ser Tyr Phe Cys Gln Gln Thr Gln Ser Trp Pro Leu
85 90 95

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

<210> 74
<211> 445
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 74

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

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

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

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

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

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

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

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

Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val
130 135 140

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
145 150 155 160

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

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

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

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

Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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	His	Glu	Asp	Pro	Glu	Val	Lys
			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	Tyr	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	Ala	Leu	Pro	Ala	Pro	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		
Arg	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	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
			405						410					415	
Gln	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	Pro	Gly	Lys			
	435						440					445			

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

<220>
<223> Constructo Sintético

<400> 75

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

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

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

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

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

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

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

Val Ser Ser
115

<210> 76
<211> 446
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 76

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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

435

440

445

<210> 77
<211> 10
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 77

Gly Tyr Asn Ile Arg Ser Thr Tyr Met His
1 5 10

<210> 78
<211> 17
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 78

Arg Ile Asp Pro Ala Asn Gly Asn Thr Ile Tyr Ala Glu Lys Phe Lys
1 5 10 15

Arg

<210> 79
<211> 8
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 79

Glu Val Arg Val Ser Phe Glu Tyr
1 5

<210> 80
<211> 117
<212> PRT
<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 80

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 Val Ser Gly Tyr Asn Ile Arg Ser Thr
20 25 30

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

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

Lys Arg Arg Val Thr Leu Thr Arg 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

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

Val Thr Val Ser Ser
115

<210> 81

<211> 213

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 81

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

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

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

Tyr Tyr Thr Asn Asn Leu 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 Gln Pro
65 70 75 80

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

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

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

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

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

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

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

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

Asn Arg Gly Glu Cys
210

<210> 82

<211> 11

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 82

Lys Ala Ser Gln Asn Ile Asn Lys Tyr Leu Asp
1 5 10

<210> 83

<211> 7

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 83

Tyr Thr Asn Asn Leu His Thr
1 5

<210> 84

<211> 8

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 84

Leu Gln His Asp Ser Gly Tyr Thr
1 5

<210> 85

<211> 106

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 85

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

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

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

Tyr Tyr Thr Asn Asn Leu 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 Gln Pro
65 70 75 80

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

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

<210> 86
<211> 213
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 86

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

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

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

Tyr Tyr Thr Asn Asn Leu His Thr Gly Ile 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 Val Ala Thr Tyr Phe Cys Leu Gln His Asp Ser Gly Tyr Thr
85 90 95

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

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

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

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

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

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

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

Asn Arg Gly Glu Cys
210

<210> 87
<211> 106
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 87

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

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

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

Tyr Tyr Thr Asn Asn Leu His Thr Gly Ile 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 Val Ala Thr Tyr Phe Cys Leu Gln His Asp Ser Gly Tyr Thr
85 90 95

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

<210> 88
<211> 10
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 88

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

<210> 89
<211> 447
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 89

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

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

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

Gly Arg Ile Asp Pro Ala Asn Gly Asn Thr Ile Tyr Ala Glu Lys Phe

50

55

60

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

Met Gln Leu Ser Gln Leu Lys Ser Asp Asp Arg Ala Ile Tyr Phe Cys
 85 90 95

Ala Met Glu Val Arg Val Ser Phe Glu Tyr Trp Gly Gln Gly Val Met
 100 105 110

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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> 90

<211> 117

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 90

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

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

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

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

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

Met Gln Leu Ser Gln Leu Lys Ser Asp Asp Arg Ala Ile Tyr Phe Cys
85 90 95

Ala Met Glu Val Arg Val Ser Phe Glu Tyr Trp Gly Gln Gly Val Met
100 105 110

Val Thr Val Ser Ser
115

<210> 91
<211> 446
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 91

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 Val Ser Gly Tyr Ser Ile Arg Ser Thr
20 25 30

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

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

Lys Asn Arg Val 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

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

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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
 435 440 445

<210> 92

<211> 10

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 92

Gly Tyr Ser Ile Arg Ser Thr Tyr Met His
1 5 10

<210> 93

<211> 17

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 93

Arg Ile Asp Pro Ala Asn Gly Asn Thr Ile Tyr Ala Glu Arg Phe Lys
1 5 10 15

Asn

<210> 94

<211> 8

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 94

Glu Ile Leu Gly Ile Phe Asp Tyr
1 5

<210> 95

<211> 117

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 95

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 Val Ser Gly Tyr Ser Ile Arg Ser Thr

20

25

30

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

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

Lys Asn Arg Val 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

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

Val Thr Val Ser Ser
 115

<210> 96

<211> 213

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 96

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

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

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

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

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

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

<210> 97
 <211> 11
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 97

Lys Ala Ser Gln Asn Ile Asp Lys Tyr Leu Asp
1 5 10

<210> 98

<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 98

Asn Thr Asn Ser Leu His Thr
1 5

<210> 99
<211> 8
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 99

Leu Gln His Asn Ser Gly Tyr Thr
1 5

<210> 100
<211> 106
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 100

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

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

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

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

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

65		70		75		80									
Glu	Asp	Phe	Ala	Thr	Tyr	Phe	Cys	Leu	Gln	His	Asn	Ser	Gly	Tyr	Thr
				85					90					95	
Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys						
			100					105							
<210> 101															
<211> 213															
<212> PRT															
<213> Secuencia Artificial															
<220>															
<223> Constructo Sintético															
<400> 101															
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Phe	Leu	Ser	Ala	Ser	Val	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Ile	Asn	Cys	Lys	Ala	Ser	Gln	Asn	Ile	Asp	Lys	Tyr
			20					25					30		
Leu	Asp	Trp	Tyr	Gln	Gln	Lys	Leu	Gly	Glu	Ala	Pro	Lys	Leu	Leu	Met
		35					40					45			
Tyr	Asn	Thr	Asn	Ser	Leu	His	Thr	Gly	Ile	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	Val	Ala	Thr	Tyr	Phe	Cys	Leu	Gln	His	Asn	Ser	Gly	Tyr	Thr
				85					90					95	
Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Arg	Thr	Val	Ala	Ala	Pro
			100					105					110		
Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	Thr
		115					120					125			
Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	Lys

130

135

140

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

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

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

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

Asn Arg Gly Glu Cys
 210

<210> 102

<211> 106

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 102

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

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

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

Tyr Asn Thr Asn Ser Leu His Thr Gly Ile 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 Val Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Gly Tyr Thr

85

90

95

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

<210> 103

<211> 447

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 103

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

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

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

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

Lys Asn Lys Ala Thr Leu Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
 65 70 75 80

Met Gln Leu Ser Gln Leu Lys Ser Asp Asp Thr Ala Ile Tyr Phe Cys
 85 90 95

Ala Val Glu Ile Leu Gly Ile Phe Asp Tyr Trp Gly Gln Gly Val Met
 100 105 110

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

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

Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser

145		150		155		160									
Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser
				165					170					175	
Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser
			180					185					190		
Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn
		195					200					205			
Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His
	210					215					220				
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Ala	Ala	Gly	Ala	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> 104
<211> 117
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 104

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

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

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

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

Lys Asn Lys Ala Thr Leu Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Gln Leu Lys Ser Asp Asp Thr Ala Ile Tyr Phe Cys
85 90 95

Ala Val Glu Ile Leu Gly Ile Phe Asp Tyr Trp Gly Gln Gly Val Met
100 105 110

Val Thr Val Ser Ser
115

<210> 105
<211> 214
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 105

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

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

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

Tyr Asp Ala Asn Asn 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 Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Trp Pro Asn
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> 106
<211> 11
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 106

Lys Ala Ser Gln His Ile Asn Arg Tyr Leu Asn
1 5 10

<210> 107
<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 107

Asp Ala Asn Asn Leu Gln Thr
1 5

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

<220>

<223> Constructo Sintético

<400> 108

Leu Gln His Asn Ser Trp Pro Asn Thr
1 5

<210> 109

<211> 107

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 109

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

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

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

Tyr Asp Ala Asn Asn 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 Ser Ser Leu Gln Pro
65 70 75 80

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

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

<210> 110

<211> 446

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 110

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 Tyr Lys Ile Arg Ser Ser
20 25 30

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

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

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

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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
 435 440 445

<210> 111
 <211> 10
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 111

Gly Tyr Lys Ile Arg Ser Ser Tyr Met His
 1 5 10

<210> 112
 <211> 17
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 112

Arg Ile Asp Pro Ala Asn Gly Asn Thr Ile Tyr Gly Asp Lys Phe Lys
 1 5 10 15

Ser

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

<220>
 <223> Constructo Sintético

<400> 113

Asp Ile Gly Thr Thr Phe Asp Tyr
 1 5

<210> 114

<211> 117
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 114

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 Tyr Lys Ile Arg Ser Ser
20 25 30

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

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

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

Val Thr Val Ser Ser
115

<210> 115
<211> 214
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 115

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

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

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

Tyr Asp Ala Asn Asn Leu Gln Thr Gly Ile 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 Val Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Trp Pro Asn
85 90 95

Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu 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> 116

<211> 107
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 116

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

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

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

Tyr Asp Ala Asn Asn Leu Gln Thr Gly Ile 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 Val Ala Thr Tyr Phe Cys Leu Gln His Asn Ser Trp Pro Asn
85 90 95

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

<210> 117
<211> 447
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 117

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

Ser Val Lys Leu Ser Cys Lys Val Ser Gly Tyr Lys Ile Arg Ser Ser
20 25 30

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

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

Lys Ser Lys Ala Thr Leu Thr Ser Asp Thr Ser Ser Asn Thr Ala Tyr
65 70 75 80

Ile Gln Leu Ser Gln Leu Lys Ser Asp Asp Thr Ala Ile Tyr Phe Cys
85 90 95

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

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

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

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

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

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

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

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

Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Ala 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> 118

<211> 117

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 118

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

Ser Val Lys Leu Ser Cys Lys Val Ser Gly Tyr Lys Ile Arg Ser Ser
20 25 30

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

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

Lys Ser Lys Ala Thr Leu Thr Ser Asp Thr Ser Ser Asn Thr Ala Tyr
65 70 75 80

Ile Gln Leu Ser Gln Leu Lys Ser Asp Asp Thr Ala Ile Tyr Phe Cys
85 90 95

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

Val Thr Val Ser Ser
115

<210> 119

<211> 214

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 119

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

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

20

25

30

Leu Asn Trp Phe Gln Gln Lys Leu Gly Glu Pro Pro Lys Leu Leu Ile
 35 40 45

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

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

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

Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Arg 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> 120

<211> 7

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 120

Asn Ala Asn Ser Leu Gln Ala
1 5

<210> 121

<211> 9

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 121

Leu Gln His His Phe Trp Pro Tyr Thr
1 5

<210> 122

<211> 107

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 122

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

Asp Arg Ile Thr Ile Asn Cys Lys Thr Ser Gln Asn Ile Asn Arg Tyr
20 25 30

Leu Asn Trp Phe Gln Gln Lys Leu Gly Glu Pro Pro Lys Leu Leu Ile
35 40 45

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

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

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

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

<210> 123
<211> 10
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 123

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

<210> 124
<211> 449
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 124

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

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

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

Gly Trp Ile Asn Pro Glu Asp Tyr Ser Phe Asp Ser Gly Glu Lys Phe
50 55 60

Leu Glu Arg Ala Thr Leu Thr Ala Ala Thr Ser Ser Asn Thr Val Tyr
65 70 75 80

Ile Gln Leu Ser Gly Leu Thr Ser Asp Asp Thr Ala Thr Tyr Phe Cys

85

90

95

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Lys

<210> 125
<211> 10
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 125

Gly Tyr Thr Phe Thr Asp Tyr Val Met Asn
1 5 10

<210> 126
<211> 17
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 126

Trp Ile Asn Pro Glu Asp Tyr Ser Phe Asp Ser Gly Glu Lys Phe Leu
1 5 10 15

Glu

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

<220>
<223> Constructo Sintético

<400> 127

Gly Gly Leu Pro Gly Asp Trp Phe Ala Tyr
1 5 10

<210> 128
<211> 119
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 128

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

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

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

Gly Trp Ile Asn Pro Glu Asp Tyr Ser Phe Asp Ser Gly Glu Lys Phe
50 55 60

Leu Glu Arg Ala Thr Leu Thr Ala Ala Thr Ser Ser Asn Thr Val Tyr
65 70 75 80

Ile Gln Leu Ser Gly Leu Thr Ser Asp Asp Thr Ala Thr Tyr Phe Cys
85 90 95

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

Thr Leu Val Thr Val Ser Ser
115

<210> 129
<211> 19
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 129

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

Val His Ser

<210> 130
<211> 19
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 130

Met Glu Trp Ser Trp Val Phe Leu Phe Phe Leu Ser Val Thr Thr Gly
1 5 10 15

Val His Ser

<210> 131
<211> 19
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 131

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

Ala His Ser

<210> 132
<211> 589
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 132

Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr Tyr Asp Glu Ala Ser
1 5 10 15

Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val Ala Ile Gln Asn Lys
20 25 30

Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser Tyr Ser Pro Ser Tyr
35 40 45

Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Val Trp Val Gly
50 55 60

Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn Trp Ala Pro Gly Glu
65 70 75 80

Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val Glu Ile Tyr Ile Lys
85 90 95

Arg Glu Lys Asp Val Gly Met Trp Asn Asp Glu Arg Cys Ser Lys Lys
100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr Asn Thr Ser Cys Ser
115 120 125

Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn Tyr Thr Cys Lys Cys
130 135 140

Asp Pro Gly Phe Ser Gly Leu Lys Cys Glu Gln Ile Val Asn Cys Thr
145 150 155 160

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

Gly Asn Phe Ser Tyr Asn Ser Ser Cys Ser Ile Ser Cys Asp Arg Gly
180 185 190

Tyr Leu Pro Ser Ser Met Glu Thr Met Gln Cys Met Ser Ser Gly Glu
195 200 205

Trp Ser Ala Pro Ile Pro Ala Cys Asn Val Val Glu Cys Asp Ala Val
210 215 220

Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe Gln Asn Pro Gly Ser
225 230 235 240

Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys Glu Glu Gly Phe Glu
245 250 255

Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser Ser Gly Asn Trp Asp
260 265 270

Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys Arg Ala Val Arg Gln
275 280 285

Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser Pro Ala Gly Glu Phe
290 295 300

Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu Glu Gly Phe Met Leu

305		310		315		320
Gln Gly Pro Ala	Gln Val Glu Cys Thr Thr	Gln Gly Gln Trp Thr Gln				
	325		330			335
Gln Ile Pro Val	Cys Glu Ala Phe Gln Cys Thr Ala Leu Ser Asn Pro					
	340		345			350
Glu Arg Gly Tyr Met Asn Cys	Leu Pro Ser Ala Ser Gly Ser Phe Arg					
	355		360			365
Tyr Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln Gly Phe Val Leu Lys						
	370		375			380
Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly Glu Trp Asp Asn Glu						
385		390		395		400
Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala Val His Gln Pro Pro						
	405		410			415
Lys Gly Leu Val Arg Cys Ala His Ser Pro Ile Gly Glu Phe Thr Tyr						
	420		425			430
Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly Phe Glu Leu His Gly						
	435		440			445
Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln Trp Thr Glu Glu Val						
	450		455			460
Pro Ser Cys Gln Val Val Lys Cys Ser Ser Leu Ala Val Pro Gly Lys						
465		470		475		480
Ile Asn Met Ser Cys Ser Gly Glu Pro Val Phe Gly Thr Val Cys Lys						
	485		490			495
Phe Ala Cys Pro Glu Gly Trp Thr Leu Asn Gly Ser Ala Ala Arg Thr						
	500		505			510
Cys Gly Ala Thr Gly His Trp Ser Gly Leu Leu Pro Thr Cys Glu Ala						
	515		520			525

Pro Thr Glu Ser Asn Ile Pro Leu Val Ala Gly Leu Ser Ala Ala Gly
530 535 540

Leu Ser Leu Leu Thr Leu Ala Pro Phe Leu Leu Trp Leu Arg Lys Cys
545 550 555 560

Leu Arg Lys Ala Lys Lys Phe Val Pro Ala Ser Ser Cys Gln Ser Leu
565 570 575

Glu Ser Asp Gly Ser Tyr Gln Lys Pro Ser Tyr Ile Leu
580 585

<210> 133
<211> 535
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 133

Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr Tyr Asp Glu Ala Ser
1 5 10 15

Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val Ala Ile Gln Asn Lys
20 25 30

Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser Tyr Ser Pro Ser Tyr
35 40 45

Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Val Trp Val Gly
50 55 60

Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn Trp Ala Pro Gly Glu
65 70 75 80

Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val Glu Ile Tyr Ile Lys
85 90 95

Arg Glu Lys Asp Val Gly Met Trp Asn Asp Glu Arg Cys Ser Lys Lys
100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr Asn Thr Ser Cys Ser
115 120 125

Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn Tyr Thr Cys Lys Cys
130 135 140

Asp Pro Gly Phe Ser Gly Leu Lys Cys Glu Gln Ile Val Asn Cys Thr
145 150 155 160

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

Gly Asn Phe Ser Tyr Asn Ser Ser Cys Ser Ile Ser Cys Asp Arg Gly
180 185 190

Tyr Leu Pro Ser Ser Met Glu Thr Met Gln Cys Met Ser Ser Gly Glu
195 200 205

Trp Ser Ala Pro Ile Pro Ala Cys Asn Val Val Glu Cys Asp Ala Val
210 215 220

Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe Gln Asn Pro Gly Ser
225 230 235 240

Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys Glu Glu Gly Phe Glu
245 250 255

Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser Ser Gly Asn Trp Asp
260 265 270

Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys Arg Ala Val Arg Gln
275 280 285

Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser Pro Ala Gly Glu Phe
290 295 300

Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu Glu Gly Phe Met Leu
305 310 315 320

Gln Gly Pro Ala Gln Val Glu Cys Thr Thr Gln Gly Gln Trp Thr Gln

325

330

335

Gln Ile Pro Val Cys Glu Ala Phe Gln Cys Thr Ala Leu Ser Asn Pro
 340 345 350

Glu Arg Gly Tyr Met Asn Cys Leu Pro Ser Ala Ser Gly Ser Phe Arg
 355 360 365

Tyr Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln Gly Phe Val Leu Lys
 370 375 380

Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly Glu Trp Asp Asn Glu
 385 390 395 400

Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala Val His Gln Pro Pro
 405 410 415

Lys Gly Leu Val Arg Cys Ala His Ser Pro Ile Gly Glu Phe Thr Tyr
 420 425 430

Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly Phe Glu Leu His Gly
 435 440 445

Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln Trp Thr Glu Glu Val
 450 455 460

Pro Ser Cys Gln Val Val Lys Cys Ser Ser Leu Ala Val Pro Gly Lys
 465 470 475 480

Ile Asn Met Ser Cys Ser Gly Glu Pro Val Phe Gly Thr Val Cys Lys
 485 490 495

Phe Ala Cys Pro Glu Gly Trp Thr Leu Asn Gly Ser Ala Ala Arg Thr
 500 505 510

Cys Gly Ala Thr Gly His Trp Ser Gly Leu Leu Pro Thr Cys Glu Ala
 515 520 525

Pro Thr Glu Ser Asn Ile Pro
 530 535

<210> 134
<211> 591
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 134

Trp Tyr Tyr Asn Ala Ser Ser Glu Leu Met Thr Tyr Asp Glu Ala Ser
1 5 10 15

Ala Tyr Cys Gln Arg Asp Tyr Thr His Leu Val Ala Ile Gln Asn Lys
20 25 30

Glu Glu Ile Asn Tyr Leu Asn Ser Asn Leu Lys His Ser Pro Ser Tyr
35 40 45

Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Ile Trp Val Gly
50 55 60

Thr Gly Lys Pro Leu Thr Glu Glu Ala Gln Asn Trp Ala Pro Gly Glu
65 70 75 80

Pro Asn Asn Lys Gln Arg Asn Glu Asp Cys Val Glu Ile Tyr Ile Gln
85 90 95

Arg Thr Lys Asp Ser Gly Met Trp Asn Asp Glu Arg Cys Asn Lys Lys
100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ser Cys Thr Asn Ala Ser Cys Ser
115 120 125

Gly His Gly Glu Cys Ile Glu Thr Ile Asn Ser Tyr Thr Cys Lys Cys
130 135 140

His Pro Gly Phe Leu Gly Pro Asn Cys Glu Gln Ala Val Thr Cys Lys
145 150 155 160

Pro Gln Glu His Pro Asp Tyr Gly Ser Leu Asn Cys Ser His Pro Phe
165 170 175

Gly Pro Phe Ser Tyr Asn Ser Ser Cys Ser Phe Gly Cys Lys Arg Gly
180 185 190

Tyr Leu Pro Ser Ser Met Glu Thr Thr Val Arg Cys Thr Ser Ser Gly
195 200 205

Glu Trp Ser Ala Pro Ala Pro Ala Cys His Val Val Glu Cys Glu Ala
210 215 220

Leu Thr His Pro Ala His Gly Ile Arg Lys Cys Ser Ser Asn Pro Gly
225 230 235 240

Ser Tyr Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys Val Glu Gly Tyr
245 250 255

Arg Arg Val Gly Ala Gln Asn Leu Gln Cys Thr Ser Ser Gly Ile Trp
260 265 270

Asp Asn Glu Thr Pro Ser Cys Lys Ala Val Thr Cys Asp Ala Ile Pro
275 280 285

Gln Pro Gln Asn Gly Phe Val Ser Cys Ser His Ser Thr Ala Gly Glu
290 295 300

Leu Ala Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu Gln Ser Phe Thr
305 310 315 320

Leu Gln Gly Pro Ala Gln Val Glu Cys Ser Ala Gln Gly Gln Trp Thr
325 330 335

Pro Gln Ile Pro Val Cys Lys Ala Val Gln Cys Glu Ala Leu Ser Ala
340 345 350

Pro Gln Gln Gly Asn Met Lys Cys Leu Pro Ser Ala Ser Gly Pro Phe
355 360 365

Gln Asn Gly Ser Ser Cys Glu Phe Ser Cys Glu Glu Gly Phe Glu Leu
370 375 380

Lys Gly Ser Arg Arg Leu Gln Cys Gly Pro Arg Gly Glu Trp Asp Ser

385		390		395		400									
Lys	Lys	Pro	Thr	Cys	Ser	Ala	Val	Lys	Cys	Asp	Asp	Val	Pro	Arg	Pro
				405					410					415	
Gln	Asn	Gly	Val	Met	Glu	Cys	Ala	His	Ala	Thr	Thr	Gly	Glu	Phe	Thr
			420					425					430		
Tyr	Lys	Ser	Ser	Cys	Ala	Phe	Gln	Cys	Asn	Glu	Gly	Phe	Ser	Leu	His
		435					440					445			
Gly	Ser	Ala	Gln	Leu	Glu	Cys	Thr	Ser	Gln	Gly	Lys	Trp	Thr	Gln	Glu
	450					455					460				
Val	Pro	Ser	Cys	Gln	Val	Val	Gln	Cys	Pro	Ser	Leu	Asp	Val	Pro	Gly
465					470					475					480
Lys	Met	Asn	Met	Ser	Cys	Ser	Gly	Thr	Ala	Val	Phe	Gly	Thr	Val	Cys
				485					490					495	
Glu	Phe	Thr	Cys	Pro	Asp	Asp	Trp	Thr	Leu	Asn	Gly	Ser	Ala	Val	Leu
			500					505					510		
Thr	Cys	Gly	Ala	Thr	Gly	Arg	Trp	Ser	Gly	Met	Pro	Pro	Thr	Cys	Glu
		515					520					525			
Ala	Pro	Val	Ser	Pro	Thr	Arg	Pro	Leu	Val	Val	Ala	Leu	Ser	Ala	Ala
	530					535					540				
Gly	Thr	Ser	Leu	Leu	Thr	Ser	Ser	Ser	Leu	Leu	Tyr	Leu	Leu	Met	Arg
545					550					555					560
Tyr	Phe	Arg	Lys	Lys	Ala	Lys	Lys	Phe	Val	Pro	Ala	Ser	Ser	Cys	Gln
				565					570					575	
Ser	Leu	Gln	Ser	Phe	Glu	Asn	Tyr	His	Val	Pro	Ser	Tyr	Asn	Val	
			580					585					590		

<210> 135
 <211> 536
 <212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 135

Trp Tyr Tyr Asn Ala Ser Ser Glu Leu Met Thr Tyr Asp Glu Ala Ser
1 5 10 15

Ala Tyr Cys Gln Arg Asp Tyr Thr His Leu Val Ala Ile Gln Asn Lys
20 25 30

Glu Glu Ile Asn Tyr Leu Asn Ser Asn Leu Lys His Ser Pro Ser Tyr
35 40 45

Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Ile Trp Val Gly
50 55 60

Thr Gly Lys Pro Leu Thr Glu Glu Ala Gln Asn Trp Ala Pro Gly Glu
65 70 75 80

Pro Asn Asn Lys Gln Arg Asn Glu Asp Cys Val Glu Ile Tyr Ile Gln
85 90 95

Arg Thr Lys Asp Ser Gly Met Trp Asn Asp Glu Arg Cys Asn Lys Lys
100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ser Cys Thr Asn Ala Ser Cys Ser
115 120 125

Gly His Gly Glu Cys Ile Glu Thr Ile Asn Ser Tyr Thr Cys Lys Cys
130 135 140

His Pro Gly Phe Leu Gly Pro Asn Cys Glu Gln Ala Val Thr Cys Lys
145 150 155 160

Pro Gln Glu His Pro Asp Tyr Gly Ser Leu Asn Cys Ser His Pro Phe
165 170 175

Gly Pro Phe Ser Tyr Asn Ser Ser Cys Ser Phe Gly Cys Lys Arg Gly
180 185 190

Tyr Leu Pro Ser Ser Met Glu Thr Thr Val Arg Cys Thr Ser Ser Gly
195 200 205

Glu Trp Ser Ala Pro Ala Pro Ala Cys His Val Val Glu Cys Glu Ala
210 215 220

Leu Thr His Pro Ala His Gly Ile Arg Lys Cys Ser Ser Asn Pro Gly
225 230 235 240

Ser Tyr Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys Val Glu Gly Tyr
245 250 255

Arg Arg Val Gly Ala Gln Asn Leu Gln Cys Thr Ser Ser Gly Ile Trp
260 265 270

Asp Asn Glu Thr Pro Ser Cys Lys Ala Val Thr Cys Asp Ala Ile Pro
275 280 285

Gln Pro Gln Asn Gly Phe Val Ser Cys Ser His Ser Thr Ala Gly Glu
290 295 300

Leu Ala Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu Gln Ser Phe Thr
305 310 315 320

Leu Gln Gly Pro Ala Gln Val Glu Cys Ser Ala Gln Gly Gln Trp Thr
325 330 335

Pro Gln Ile Pro Val Cys Lys Ala Val Gln Cys Glu Ala Leu Ser Ala
340 345 350

Pro Gln Gln Gly Asn Met Lys Cys Leu Pro Ser Ala Ser Gly Pro Phe
355 360 365

Gln Asn Gly Ser Ser Cys Glu Phe Ser Cys Glu Glu Gly Phe Glu Leu
370 375 380

Lys Gly Ser Arg Arg Leu Gln Cys Gly Pro Arg Gly Glu Trp Asp Ser
385 390 395 400

Lys Lys Pro Thr Cys Ser Ala Val Lys Cys Asp Asp Val Pro Arg Pro

405

410

415

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

Tyr Lys Ser Ser Cys Ala Phe Gln Cys Asn Glu Gly Phe Ser Leu His
 435 440 445

Gly Ser Ala Gln Leu Glu Cys Thr Ser Gln Gly Lys Trp Thr Gln Glu
 450 455 460

Val Pro Ser Cys Gln Val Val Gln Cys Pro Ser Leu Asp Val Pro Gly
 465 470 475 480

Lys Met Asn Met Ser Cys Ser Gly Thr Ala Val Phe Gly Thr Val Cys
 485 490 495

Glu Phe Thr Cys Pro Asp Asp Trp Thr Leu Asn Gly Ser Ala Val Leu
 500 505 510

Thr Cys Gly Ala Thr Gly Arg Trp Ser Gly Met Pro Pro Thr Cys Glu
 515 520 525

Ala Pro Val Ser Pro Thr Arg Pro
 530 535

<210> 136
 <211> 351
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 136
 gaagtgcagc ttgtggaatc cgggggcggc ttggtccaac cgggtggcag cctccgtctg 60
 tcgtgcgcgg cttcgggcta tgccatccgt tctgcctaca tgcactgggt tcgccaggcg 120
 cctgggaagg gcctggaatg ggtggccagg attgatactg caaacggaaa tactatatat 180
 gtggactccg tgaccggccg ctttacaatc agcgccgaca acgctaagaa ttccgcctac 240
 ctgcaaatga atagcctgcg ggcagaggat accgcggtgt actattgtgc catggattta 300

tattccacgt ctgaatattg gggccaagga accctggtaa cggtgtcgtc g 351

<210> 137
<211> 321
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 137
gatattcaga tgacgcagtc cccatcttcc ctttcagcat ctgtgggtga ccgggttaca 60
atcacttgta aaacatccca gaacattgag cgttatttaa attggtatca gcagaaaccg 120
ggtaaagccc cgaaactatt gatttatgcc gcgtcctcgc tgcaatccgg cgtgccgagt 180
cgtttttagcg gctccgggag cggcaccgat tttactctta ccatttcgag tctgcagccg 240
gaagactttg ccacttattt ctgtctccag gataacgcct ggccattaac cttcggtcag 300
ggtaccaaag ttgaaattaa a 321

<210> 138
<211> 1341
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 138
gaagtgcagc ttgtggaatc cgggggcggc ttggtccaac cgggtggcag cctccgtctg 60
tcgtgcgcgg cttcgggcta tgccatccgt tctgcctaca tgactgggt tcgccaggcg 120
cctgggaagg gcctggaatg ggtggccagg attgatcctg caaacggaaa tactatatat 180
gtggactccg tgaccggccg ctttacaatc agcgccgaca acgctaagaa ttccgcctac 240
ctgcaaatga atagcctgcg ggagaggat accgcggtgt actattgtgc catggattta 300
tattccacgt ctgaatattg gggccaagga accctggtaa cggtgtcgtc ggcgtcgacc 360
aaggggcccat cggctcttccc cctggcacc cctccaaga gcacctctgg gggcacagcg 420
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca 480
ggcgccctga ccagcggcgt gcacaccttc ccggctgtcc tacagtcctc aggactctac 540
tccctcagca gcgtgggtgac cgtgccctcc agcagcttgg gcaccagac ctacatctgc 600

aacgtgaatc acaagcccag caacaccaag gtggacaaga aagttgagcc caaatcttgt	660
gacaaaactc acacatgccc accgtgcccga gcacctgaag ccgctggggc accgtcagtc	720
ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcaca	780
tgcgtggtgg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac	840
ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagtacaa cagcacgtac	900
cgtgtggtca gcgtcctcac cgtcctgcac caggactggc tgaatggcaa ggagtacaag	960
tgcaaggtct ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa	1020
gggcagcccc gagaaccaca ggtgtacacc ctgccccat cccgggagga gatgaccaag	1080
aaccaggtca gcctgacctg cctgggtcaaa ggcttctatc ccagcgacat cgccgtggag	1140
tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc	1200
gacggctcct tcttcctcta tagcaagctc accgtggaca agagcaggtg gcagcagggg	1260
aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc	1320
ctctccctgt ccccgggaaa a	1341

<210> 139
 <211> 642
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 139	
gatattcaga tgacgcagtc cccatcttcc ctttcagcat ctgtgggtga ccgggttaca	60
atcacttgta aaacatccca gaacattgag cgttatttaa attggtatca gcagaaaccg	120
ggtaaagccc cgaaactatt gatttatgcc gcgtcctcgc tgcaatccgg cgtgccgagt	180
cgttttagcg gctccgggag cggcaccgat tttactctta ccatttcgag tctgcagccg	240
gaagactttg ccacttattt ctgtctccag gataacgcct ggccattaac cttcggtcag	300
ggtaccaaag ttgaaattaa acgtacggtg gctgcaccat ctgtcttcat cttcccgcca	360
tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat	420
cccagagagg ccaaagtaca gtggaaggtg gataacgccc tccaatcggg taactcccag	480
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg	540

ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc	600
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gt	642

<210> 140
 <211> 57
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 140	
atggaatgga gctgggtctt tctcttcttc ctgtcagtaa ctacaggtgt ccactcc	57

<210> 141
 <211> 57
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 141	
atgggatgga gctgtatcat cctcttcttg gtggcaacag ctacaggcgt gcactcc	57

<210> 142
 <211> 990
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 142	
gcgtcgacca agggcccatc ggtcttcccc ctggcaccct cctccaagag cacctctggg	60
ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg	120
tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca	180
ggactctact ccctcagcag cgtgggtgacc gtgccctcca gcagcttggg caccagacc	240
tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagaa agttgagccc	300
aaatcttgtg acaaaaactca cacatgccca ccgtgcccag cacctgaagc cgctggggca	360
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccctt	420
gaggtcacat gcgtgggtgt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg	480

tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac	540
agcacgtacc gtgtgggtcag cgtcctcacc gtcctgcacc aggactggct gaatggcaag	600
gagtacaagt gcaaggtctc caacaaagcc ctcccagccc ccatcgagaa aaccatctcc	660
aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgcccccatc ccgggaggag	720
atgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctatcc cagcgacatc	780
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg	840
ctggactccg acggctcctt cttcctctat agcaagctca ccgtggacaa gagcaggtgg	900
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg	960
cagaagagcc tctccctgtc cccgggaaaa	990

<210> 143
 <211> 321
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 143	
cgtaggtggtg ctgcaccatc tgtcttcac tttccgcat ctgatgagca gttgaaatct	60
ggaactgcct ctgttgtgtg cctgctgaat aacttctatc ccagagaggc caaagtacag	120
tggaaggtgg ataacgccct ccaatcgggt aactcccagg agagtgtcac agagcaggac	180
agcaaggaca gcacctacag cctcagcagc accctgacgc tgagcaaagc agactacgag	240
aaacacaaaag tctacgcctg cgaagtcacc catcagggcc tgagctcgcc cgtcacaaag	300
agcttcaaca ggggagagtg t	321

<210> 144
 <211> 351
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 144	
gaagtgcagc ttgtggaatc cgggggcggc ttggtccaac cgggtggcag cctccgtctg	60
tcgtgcgcgg cttcgggcta taacatccgt tctagctaca tgactgggt tcgccaggcg	120

cctgggaagg gcctggaatg ggtggccagg attgacatctg caaacggaaa tactatatat	180
gctgagaagt tcaaaatccg ctttacaatc agcgccgaca acgctaagaa ttccgcctac	240
ctgcaaatga atagcctgcg ggcagaggat accgcggtgt actattgtgc catggattta	300
tattccacgt ctgaatattg gggccaagga accctggtaa cgggtgtcgtc g	351

<210> 145
 <211> 321
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 145	
gatattcaga tgacgcagtc cccatcttcc ctttcagcat ctgtgggtga ccgggttaca	60
atcacttgta aaacatccca gaacattaac cgttatttaa attggtatca gcagaaaccg	120
ggtaaagccc cgaaactatt gatttataac gcgaactcgc tgcaaactgg cgtgccgagt	180
cgtttttagcg gctccgggag cggcaccgat tttactctta ccatttcgag tctgcagccg	240
gaagactttg ccacttattt ctgtctccag gataactcct ggccattaac cttcggtcag	300
ggtaccaaag ttgaaattaa a	321

<210> 146
 <211> 351
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 146	
gaagtgcagc ttgtggaatc cgggggcggc ttggtccaac cgggtggcag cctccgtctg	60
tcgtgcgcgg cttcgggcta taacatccgt tctagctaca tgcaactgggt tcgccaggcg	120
cctgggaagg gcctggaatg ggtggccagg attgacatctg caaacggaaa tactatatat	180
gtggactccg tgaaaggccg ctttacaatc agcgccgaca acgctaagaa ttccgcctac	240
ctgcaaatga atagcctgcg ggcagaggat accgcggtgt actattgtgc catggattta	300
tattccacgt ctgaatattg gggccaagga accctggtaa cgggtgtcgtc g	351

<210> 147

<211> 321
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 147
gatattcaga tgacgcagtc cccatcttcc ctttcagcat ctgtgggtga ccgggttaca 60
atcacttgta aaacatccca gaacattaac cgttatttaa attggtatca gcagaaaccg 120
ggtaaagccc cgaaactatt gatttatgcc gcgtcctcgc tgcaatccgg cgtgccgagt 180
cgtttttagcg gctccgggag cggcaccgat tttactctta ccatttcgag tctgcagccg 240
gaagactttg ccacttattt ctgtctccag gataactcct ggccattaac cttcggtcag 300
ggtaccaaag ttgaaattaa a 321

<210> 148
<211> 351
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 148
gaagtccagc tgcagcagtc tggggctgag tttgggaaac ctgggacctc agtcaagttg 60
tcttgcaagg tttctgggta taacattagg agttcataca tgcactgggt gaatcagagg 120
cctggaaagg gcctggaatg gataggaagg attgatcctg caaacggaaa tactatatat 180
gctgagaagt tcaaaatcaa ggccattctg actgcagatt catcgtcaa cacagcctac 240
atgcaactca gccaaactgaa atctgacgac acagcaatct atttttgtgc tatggacctc 300
tacagtacct ctgaatactg gggccaagga gtcattggtca cagtctcctc a 351

<210> 149
<211> 321
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 149
gacatccaga tgaccagtc tccttcattc ctgtctgcat ctgtgggaga cagagtcact 60

atcaactgca aaacgagtca gaatattaac aggtacttaa actggtacca gcaaaagctt	120
ggagaagctc ccaaactcct gatataataat gcaaacagtt tgcaaacggg catcccatca	180
cggttcagtg ccagtggatc cgggtactgat ttcacactca ccatcaacag cctgcagcct	240
gaagatgttg ccacatatatt ttgcttgacag gataatagtt ggccgctcac gttcggttct	300
gggaccaagc tggagatcaa a	321

<210> 150
 <211> 351
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 150	
gaagtgcagc ttgtggaatc cgggggcggc ttggtccaac cgggtggcag cctccgtctg	60
tcgtgcgcgg cttcgggcta tgccatccgt tctgcctaca tgactgggt tcgccaggcg	120
cctgggaagg gcctggaatg ggtggccagg attgacatctg caaacggaaa tactatatat	180
gtggactccg tgaaagagcg ctttacaatc agcgccgaca acgctaagaa ttccgcctac	240
ctgcaaatga atagcctgcg ggcagaggat accgcggtgt actattgtgc catggattta	300
tattccacgt ctgaatattg gggccaagga accctggtaa cgggtgtcgtc g	351

<210> 151
 <211> 351
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 151	
gaagtgcagc ttgtggaatc cgggggcggc ttggtccaac cgggtggcag cctccgtctg	60
tcgtgcgcgg cttcgggcta tgccatccgt tctgcctaca tgactgggt tcgccaggcg	120
cctgggaagg gcctggaatg ggtggccagg attgacatctg caaacggaaa tactatatat	180
gtggagtccg tggagggccg ctttacaatc agcgccgaca acgctaagaa ttccgcctac	240
ctgcaaatga atagcctgcg ggcagaggat accgcggtgt actattgtgc catggattta	300
tattccacgt ctgaatattg gggccaagga accctggtaa cgggtgtcgtc g	351

<210> 152
<211> 351
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 152
gaagtgcagc ttgtggaatc cgggggaggc ttggtccaac cgggtggcag cctccgtctg 60
tcgtgcgcgg cttcgggcta tgccatccgt tctgcctaca tgcactgggt tcgccaggcg 120
cctgggaagg gcctggaatg ggtggccagg attgatcctg caaacggaaa tactatatat 180
gtggactccg tggagggccg ctttacaatc agcgccgaca acgctaagaa ttccgcctac 240
ctgcaaatga atagcctgcg ggcagaggat accgcggtgt actattgtgc catggattta 300
tattccacgt ctgaatattg gggccaagga accctggtaa cgggtgctgc g 351

<210> 153
<211> 372
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 153
gaggtacagt tggtggaatc tggcggcggc ctggtccagc cgggcgggtc tttgcgcctg 60
agttgtgcag cgagtggggt tagcctgacg ggctactaca tgcaatgggt ccgtcaggcg 120
ccgggcaaag gtctggaatg gatgggtttt atacggagta gtggaagcac agagtataat 180
tcagagttca aatccccgtt taccatctct cgcgataacg cgaaaaacag cgtgtatctg 240
cagatgaata gcctgcgcgc cgaagatacc gccgtgtact actgcgcgcg ttgcccgtat 300
aaatatagtt catttgtata tgtgggtgtc atggatgcgt ggggccaggg tacactgggt 360
accgtgagct cg 372

<210> 154
<211> 321
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 154
gatatccaaa tgacgcaatc gcctagcagc ttatccgcgt cagttggcga tcgctgacc 60
atcacttgca aagcgtcgca aaccgtcgga atcaacgtgg attggtacca acagaaaccg 120
ggcaaggcgc cgaaactgct gatctatgga gccagcaatc gccacacagg agtgccgtcc 180
cgtttttagcg gcagcgggag cggtacggat tttaccctga cgatttcttc actccaaccc 240
gaagactttg caacctattg ctgcttgcaa tatggttcaa tcccgcatac tttcggccag 300
ggtacaaaag tggaaattaa a 321

<210> 155
<211> 372
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 155
caggtgcagc tgaaggagac aggacctggc ctggtgcaac caacacagac cctgtccatc 60
acatgtactg tttctggggt ctcattaacc ggctattata tgcagtgggt tcgccagact 120
ccaggaaagg ggctagaatg gatgggattt atacggagta gtggaagcac agagtataat 180
tcagagttca aatcccgact tagcatcagc aggacacct ccaagaacca agttttctta 240
aaaatgaaca gtctgaaaac agaagataca ggcgtgtatt actgtgccag atgcccttat 300
aagtatagca gctttgtcta cgtagggggt atggatgcct ggggtcaagg agctccagtc 360
actgtctcct ca 372

<210> 156
<211> 321
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 156
gaaattgtga tgaccagtc tcccacatcc atgtccacat caataggaga gagggtcacc 60
ctgaactgca aggccagtca gactgtgggt attaattgtg actggtacca acagacacca 120
gggcagcctc ctaaactact gatatatggg gcatccaacc gacacactgg ggtccctgat 180

cgcttcacag gcagtggtt tgggagagat ttcactctca ccatcagcaa cgtggaggct	240
gaagacctag ctgtttattg ctgtctgcaa tatggctcca ttcctcacac gtttgacct	300
gggaccaagc tggagctgaa a	321

<210> 157
 <211> 345
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 157	
gaagtgcagt tagtggaaag tggcggtggc ctggtgcaac cgggaggatc cttacgttta	60
agctgcgccg tgtccgggtt tagtatcagc acctataatg tacactggct gcgtcaagcc	120
ccgggcaaag ggtagaatg gatgggaatg atgtggagtgt gtggaagccc agattataat	180
tcagctctca aatccccgatt cactattagt cgcgataccg caaaaaactc cgtgtacctt	240
cagatgaact ctcttcgctc agaggatacg gcggtttact actgtgctcg ctggggcggc	300
gggtttgatt actggggcca gggaacgctg gtaacggttt ccagt	345

<210> 158
 <211> 321
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 158	
gacattcaac tgaccagag cccgtccagc ttatctgcga gtgttgggga ccgggtcacg	60
attacctgcc gggctagtca cagcattggg acgaacttgc attggtacca gcagaaacct	120
ggcaaagctc cgaaactgct gatttatttt acatcccaaa gcatcagcgg tgtcccctcc	180
cgattttccg ggtccggatc cggtaccgat tttactttta cgatcagcag tctgcagcca	240
gaggatttcg ccacctacta ttgtcagcaa actcagtctt ggcccctgac ctttggccaa	300
gggaccaagg tagaaatcaa g	321

<210> 159
 <211> 345
 <212> ADN

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 159

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acctgcactg tctctgggtt ctcaataagc acctataacg tacactggct tcgacagcct	120
ccaggaaaag gtctggagtg gatgggaatg atgtggagtg gtggaagccc agattataat	180
tcagctctca aatccccgact gagcatcagc agggacacct ccaagaacca agttttctta	240
aaaatgaaca gtctgcaaag tgaagacaca accacttact actgtgccag atgggggggg	300
ggctttgatt actggggcca aggagtcatg gtcacagtct cctca	345

<210> 160

<211> 321

<212> ADN

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 160

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ctctcctgca gggctagcca tagtattggc acaaattctac actggtatca acaaaaaaca	120
aatgagtctc caaggcttct catcaagttt acttcccagt ccatctctgg gatccccctc	180
aggttcagtg ccagtggatc agggacagat ttactctca acatcaaca tgtggagttt	240
gatgatgtct caagttattt ttgtcaacag actcaaagct ggcccctcac gttcggttct	300
gggaccaagc tggagatcaa a	321

<210> 161

<211> 351

<212> ADN

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 161

caagtacaac tggtgcagag tggggccgaa gtgaaaaaac ccggcgctag cgtgaaagtc	60
agctgtaaag tgtccggtta taatattaga agcacctata tgcattgggt gcgtcaagcg	120

ccgggccagg gcttagagt gatgggtagg attgacatc caaatggaaa tactatattat	180
gctgagaagt tcaaaaggag agttacgctg acccgcgaca cgtccacctc gacggcctat	240
atggagctgt cttctttacg ctgagaggac actgcagttt actattgtgc catggaagtt	300
agagtttagct tcgaatattg ggggtcaaggc acattgggtca cggtcagcag t	351

<210> 162
 <211> 318
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 162	
gatatccaga tgactcaatc tccatcgagc ctttcggcgt cagtgggtga tcgtgttacc	60
atcacttgta aggccctcca aacattaat aaatatctgg actggtacca gcagaaaccg	120
ggcaaagccc caaagttact gatctactat acaaataacc tacacacagg tgttccatca	180
cgcttttcag gtagcggaag cgggaccgac tttacgttta cgatctccag cttgcaacca	240
gaagacattg ccacttatta ttgtctccag catgacagtg gctatacctt tggacagggt	300
actaagggtg aaatcaag	318

<210> 163
 <211> 351
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 163	
gaagtccagc tgcagcagtc tggggctgag ctagggaaac ctgggacctc agtcaagttg	60
tcttgcaagg tttctggcta taacattagg agtacctaca tgcactgggt gagtcagagg	120
cctggaaagg gcctggaatg gataggaagg attgacatc caaatggaaa tactatattat	180
gctgagaagt tcaaaaggaa ggccacactg actgcagata catcgtccaa cacagcctac	240
atgcaactca gccaaactgaa atctgacgac agagcaatct atttttgtgc tatggaagta	300
cgggtgtcct ttgagtactg gggccaggga gtcattgggtca ccgtctcctc a	351

<210> 164

<211> 318
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 164
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atcaactgca aagcaagtca gaatattaac aagtacttag actggtatca gcaaaagctt 120
ggtgaaggtc ccaaactcct gatatattat acaacaatt tacatacagg aatcccatca 180
aggttcagtg gcagtgggtc tggtagtgat ttcacactta ccatcagcag cctgcagcct 240
gaagatgttg ccacatattt ctgccttcag catgacagtg ggtacacgtt tggagctggg 300
accaagctgg aactgaaa 318

<210> 165
<211> 351
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 165
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agctgcaaag tgagtgggta tagcattcgt tcaacctata tgcactgggt tcgtcaggcg 120
ccaggccaag gtctcgagtg gatgggaagg attgatcctg caaatggaaa tacaatatat 180
gctgagagggt tcaaaaaccg cgtgacgctg accgcagata ccagcacttc cacggcgtac 240
atggaaactgt cctccctgcg gtccgaagat accgcagtat attattgcgc cgtagaaatc 300
ctaggcattt ttgattattg ggggcagggc aactggtca ccgtatcgag c 351

<210> 166
<211> 318
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 166
gatatacaaa tgacacagag tccgagttcc ctatcagcga gcgtgggaga cagggttacc 60

ataacgtgta aagcatcgca gaatattgac aaatatctcg actggtatca acagaagccg	120
ggcaaagcac caaaactcct tatgtataac accaactctt tacatactgg cgtcccaagt	180
cgttttttcgg ggtctggcag cggcacagat tttacgtca ccattagttc gctgcagcca	240
gaagactttg ctacctactt ctgtctgcaa cataatagcg gctacacctt cggtcagggg	300
actaaagttg aaataaaa	318

<210> 167
 <211> 351
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 167	
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tcttgcaagg tttctggcta tagtattagg agtacctaca tgcactgggt gaatcagagg	120
cctggaaagg gcctggaatg ggtaggaagg attgacacctg caaatggaaa tacaatatat	180
gctgagaggt tcaaaaacaa ggccacactg actgcagata catcgtccaa cacagcctac	240
atgcaactca gccaaactgaa atctgacgac acagcaatct atttttgtgc tgtggagatc	300
cttgggatct ttgattactg gggccaagga gtcatggtca cagtctcctc a	351

<210> 168
 <211> 318
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 168	
gacatccaga tgaccagtc tccttcattc ctgtctgcat ctgtgggaga cagagtcact	60
atcaactgca aagcaagtca gaatattgac aagtacttag actggtatca gcaaaagctt	120
ggtgaagctc ccaaactcct gatgtataat acaaacagtt tgcatacagg aattccatca	180
aggttcagtg gcagtggatc tgggtactgat ttcacactta ccatcagcag cctgcagcct	240
gaagatgttg ccacatatct ctgccttcag cataacagtg ggtacacggt tggagctggg	300
accaagctgg aactgaaa	318

<210> 169
<211> 351
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 169
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tcatgcgccg tgtctgggta taaaatccgc agcagttata tgcattgggt tcgtcaagct 120
ccgggtaaaag gtttagaatg gatcgggagg attgatcctg caaatggaaa tactatatac 180
ggtgacaagt tcaaaagtcg gtttactctg tcatccgata ccgcgaaaaa ctcagcctat 240
ctgcaaatga attccctgcg cgcggaagac actgctgtct attattgcgc aattgatatc 300
ggtaccacgt ttgattattg gggccagggt acgttggtga cggttagctc c 351

<210> 170
<211> 321
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 170
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ataacctgta aggcttcgca acacatcaac cgttatttga actggtatca acagaaaccg 120
gggaaagcgc cgaaattgct gatttatgat gctaacaacc tgcagacagg cgtaccatcg 180
cgatttagcg gctccggaag cgggacggat tttactctca ccatcagctc tctgcagccg 240
gaagactttg caacctatct ctgtttacag cataattcct ggccgaatac ctttggccag 300
gggacaaagg tggaatcaa a 321

<210> 171
<211> 351
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 171

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tcttgcaagg tttctggcta taagattagg agttcctaca tgcactgggt gaatcagagg	120
cctggaaagg gcctggaatg gataggaagg attgatacctg caaatggaaa tactatatac	180
ggtgacaagt tcaaaagtaa ggccacactg acttcagata catcgtccaa cacagcctac	240
atccaactca gccaaactgaa atctgacgac acagcaatct atttttgtgc tatagatata	300
ggtacaacct ttgattattg gggccaagga gtcatggtca cagtctcctc a	351

<210> 172
 <211> 321
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 172	
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atcaactgca aagcaagtca gcatattaat aggtacttaa actggtacca gcaaaagctt	120
ggagaagctc ccaaactcct gatatatgat gcaaacaatt tgcaaacggg catcccatca	180
cggttcagtg gcagtggatc tgggtactgat ttcacactca ccatcagcag cctgcagcct	240
gaagatgttg ccacatattt ctgcttgag cataatagtt ggccgaacac gtttggggct	300
gggaccaagc tggaattgaa a	321

<210> 173
 <211> 357
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 173	
gaagtccacc tgcaccagtc tgggcctgag cttgggaggc ctgggtcctc agtcaagatt	60
tcttgcaagg cttctggcta cacctttaca gattacgtta tgaactgggt gaggcagagt	120
cctggacagg ggctggaatg gataggatgg atcaatcctg aagattatag ttttgattct	180
ggtgagaagt tcctagagag ggccacactg actgcagcta cgtcctccaa cacagtctac	240
atccagctta gcggcctgac atctgacgac acagccacct atttttgtgt tagaggggga	300

ctacccgggg attggtttgc ttactggggc caaggcactc tggtcactgt ctcttca 357

<210> 174
<211> 321
<212> ADN
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 174
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atcaactgca agacaagtca gaatattaac aggtacttaa actggttcca gcaaaagctt 120
ggagaacctc ccaaactcct gatataataat gcaaacagtt tgcaagcgga cattccatca 180
cggttcagtg gcagtggatc tgggtactgat ttcacactca ccatcaccag cctgcagcct 240
gaagatgttg ccacatattt ctgcttgcag catcatttct ggccgtacac gtttggagct 300
gggaccaagc tggaactgag a 321

<210> 175
<211> 535
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 175

Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr Tyr Asp Glu Ala Ser
1 5 10 15

Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val Ala Ile Gln Asn Lys
20 25 30

Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser Tyr Ser Pro Ser Tyr
35 40 45

Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Val Trp Val Gly
50 55 60

Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn Trp Ala Pro Gly Glu
65 70 75 80

Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val Glu Ile Tyr Ile Lys
85 90 95

Arg Asp Lys Asp Val Gly Met Trp Asn Asp Glu Arg Cys Ser Lys Lys
100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr Asn Thr Ser Cys Ser
115 120 125

Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn Tyr Thr Cys Lys Cys
130 135 140

Asp Pro Gly Phe Ser Gly Leu Glu Cys Glu Gln Ile Val Asn Cys Thr
145 150 155 160

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

Gly Asn Phe Ser Tyr Ser Ser Ser Cys Ser Val Ser Cys Asp Arg Gly
180 185 190

Tyr Leu Pro Ser Ser Val Glu Thr Thr Gln Cys Met Ser Ser Gly Glu
195 200 205

Trp Ser Val Pro Ile Pro Ala Cys Lys Val Val Glu Cys Asp Ala Val
210 215 220

Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe Gln Asn Pro Gly Ser
225 230 235 240

Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys Glu Glu Gly Phe Glu
245 250 255

Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser Ser Gly Asn Trp Asp
260 265 270

Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys Arg Ala Ile Arg Gln
275 280 285

Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser Pro Ala Gly Glu Phe

290

295

300

Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu Glu Gly Phe Met Leu
 305 310 315 320

Gln Gly Ala Ala Gln Val Glu Cys Thr Thr Gln Gly Gln Trp Thr Gln
 325 330 335

Gln Val Pro Val Cys Glu Ala Phe Gln Cys Thr Ala Leu Ser Asn Pro
 340 345 350

Glu Arg Gly Tyr Met Asn Cys Leu Pro Ser Ala Ser Gly Ser Phe Arg
 355 360 365

Asn Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln Gly Phe Val Leu Lys
 370 375 380

Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly Glu Trp Asp Asn Glu
 385 390 395 400

Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala Val His Gln Pro Gln
 405 410 415

Arg Gly Leu Val Arg Cys Ala His Ser Pro Ile Gly Glu Phe Thr Tyr
 420 425 430

Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly Phe Glu Leu His Gly
 435 440 445

Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln Trp Thr Glu Glu Val
 450 455 460

Pro Ser Cys Gln Val Val Lys Cys Ser Ser Leu Ala Val Leu Glu Lys
 465 470 475 480

Ile Asn Met Ser Cys Ser Gly Glu Pro Val Phe Gly Thr Val Cys Asn
 485 490 495

Phe Ala Cys Pro Glu Gly Trp Arg Leu Asn Gly Ser Ala Ala Met Thr
 500 505 510

Cys Gly Ala Thr Gly His Trp Ser Gly Met Leu Pro Thr Cys Glu Ala
515 520 525

Pro Thr Glu Ser Asn Thr Pro
530 535

<210> 176
<211> 13
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 176

Ile Asp Pro Ala Asn Gly Asn Thr Ile Tyr Ala Glu Lys
1 5 10

<210> 177
<211> 18
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 177

Thr Ser Gln Asn Ile Asn Arg Tyr Leu Asn Trp Tyr Gln Gln Lys Pro
1 5 10 15

Gly Lys

<210> 178
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 178

Tyr Asn Ile Arg Ser Ser Tyr Met His
1 5

<210> 179
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 179

Phe Lys Ile Arg Phe Thr Ile Ser Ala
1 5

<210> 180
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 180

Ile Arg Phe Thr Ile Ser Ala Asp Asn
1 5

<210> 181
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 181

Ile Asn Arg Tyr Leu Asn Trp Tyr Gln
1 5

<210> 182
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 182

Leu Leu Ile Tyr Asn Ala Asn Ser Leu

1

5

<210> 183
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 183

Leu Ile Tyr Asn Ala Asn Ser Leu Gln
1 5

<210> 184
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 184

Ile Tyr Asn Ala Asn Ser Leu Gln Thr
1 5

<210> 185
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 185

Tyr Asn Ala Asn Ser Leu Gln Thr Gly
1 5

<210> 186
<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 186

Tyr Val Asp Ser Val Lys Gly
1 5

<210> 187
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 187

Val Lys Gly Arg Phe Thr Ile Ser Ala
1 5

<210> 188
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 188

Tyr Ala Ile Arg Ser Ala Tyr Met His
1 5

<210> 189
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 189

Val Glu Gly Arg Phe Thr Ile Ser Ala
1 5

<210> 190
<211> 9
<212> PRT
<213> Secuencia Artificial

<220>
<223> Constructo Sintético

<400> 190

Val Thr Gly Arg Phe Thr Ile Ser Ala
1 5

<210> 191

<211> 9

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 191

Val Lys Glu Arg Phe Thr Ile Ser Ala
1 5

<210> 192

<211> 9

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 192

Ile Glu Arg Tyr Leu Asn Trp Tyr Gln
1 5

<210> 193

<211> 9

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 193

Cys Ser Ser Leu Ala Val Leu Glu Lys
1 5

<210> 194

<211> 17

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 194

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

Arg

<210> 195

<211> 18

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 195

Thr Ser Gln Asn Ile Glu Arg Tyr Leu Asn Trp Tyr Gln Gln Lys Pro
1 5 10 15

Gly Lys

<210> 196

<211> 610

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 196

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

Lys Glu Ser Gly Ala Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr
20 25 30

Tyr Asp Glu Ala Ser Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val
35 40 45

Ala Ile Gln Asn Lys Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser

50

55

60

Tyr Ser Pro Ser Tyr Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val
65 70 75 80

Trp Val Trp Val Gly Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn
85 90 95

Trp Ala Pro Gly Glu Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val
100 105 110

Glu Ile Tyr Ile Lys Arg Glu Lys Asp Val Gly Met Trp Asn Asp Glu
115 120 125

Arg Cys Ser Lys Lys Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr
130 135 140

Asn Thr Ser Cys Ser Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn
145 150 155 160

Tyr Thr Cys Lys Cys Asp Pro Gly Phe Ser Gly Leu Lys Cys Glu Gln
165 170 175

Ile Val Asn Cys Thr Ala Leu Glu Ser Pro Glu His Gly Ser Leu Val
180 185 190

Cys Ser His Pro Leu Gly Asn Phe Ser Tyr Asn Ser Ser Cys Ser Ile
195 200 205

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

Met Ser Ser Gly Glu Trp Ser Ala Pro Ile Pro Ala Cys Asn Val Val
225 230 235 240

Glu Cys Asp Ala Val Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe
245 250 255

Gln Asn Pro Gly Ser Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys
260 265 270

Glu Glu Gly Phe Glu Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser
275 280 285

Ser Gly Asn Trp Asp Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys
290 295 300

Arg Ala Val Arg Gln Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser
305 310 315 320

Pro Ala Gly Glu Phe Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu
325 330 335

Glu Gly Phe Met Leu Gln Gly Pro Ala Gln Val Glu Cys Thr Thr Gln
340 345 350

Gly Gln Trp Thr Gln Gln Ile Pro Val Cys Glu Ala Phe Gln Cys Thr
355 360 365

Ala Leu Ser Asn Pro Glu Arg Gly Tyr Met Asn Cys Leu Pro Ser Ala
370 375 380

Ser Gly Ser Phe Arg Tyr Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln
385 390 395 400

Gly Phe Val Leu Lys Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly
405 410 415

Glu Trp Asp Asn Glu Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala
420 425 430

Val His Gln Pro Pro Lys Gly Leu Val Arg Cys Ala His Ser Pro Ile
435 440 445

Gly Glu Phe Thr Tyr Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly
450 455 460

Phe Glu Leu His Gly Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln
465 470 475 480

Trp Thr Glu Glu Val Pro Ser Cys Gln Val Val Lys Cys Ser Ser Leu

485

490

495

Ala Val Pro Gly Lys Ile Asn Met Ser Cys Ser Gly Glu Pro Val Phe
 500 505 510

Gly Thr Val Cys Lys Phe Ala Cys Pro Glu Gly Trp Thr Leu Asn Gly
 515 520 525

Ser Ala Ala Arg Thr Cys Gly Ala Thr Gly His Trp Ser Gly Leu Leu
 530 535 540

Pro Thr Cys Glu Ala Pro Thr Glu Ser Asn Ile Pro Leu Val Ala Gly
 545 550 555 560

Leu Ser Ala Ala Gly Leu Ser Leu Leu Thr Leu Ala Pro Phe Leu Leu
 565 570 575

Trp Leu Arg Lys Cys Leu Arg Lys Ala Lys Lys Phe Val Pro Ala Ser
 580 585 590

Ser Cys Gln Ser Leu Glu Ser Asp Gly Ser Tyr Gln Lys Pro Ser Tyr
 595 600 605

Ile Leu
 610

<210> 197

<211> 157

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 197

Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr Tyr Asp Glu Ala Ser
 1 5 10 15

Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val Ala Ile Gln Asn Lys
 20 25 30

Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser Tyr Ser Pro Ser Tyr

35

40

45

Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Val Trp Val Gly
50 55 60

Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn Trp Ala Pro Gly Glu
65 70 75 80

Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val Glu Ile Tyr Ile Lys
85 90 95

Arg Glu Lys Asp Val Gly Met Trp Asn Asp Glu Arg Cys Ser Lys Lys
100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr Asn Thr Ser Cys Ser
115 120 125

Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn Tyr Thr Cys Lys Cys
130 135 140

Asp Pro Gly Phe Ser Gly Leu Lys Cys Glu Gln Ile Val
145 150 155

<210> 198

<211> 612

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 198

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

Gly Glu Ser Thr Ala Trp Tyr Tyr Asn Ala Ser Ser Glu Leu Met Thr
20 25 30

Tyr Asp Glu Ala Ser Ala Tyr Cys Gln Arg Asp Tyr Thr His Leu Val
35 40 45

Ala Ile Gln Asn Lys Glu Glu Ile Asn Tyr Leu Asn Ser Asn Leu Lys

50

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60

His Ser Pro Ser Tyr Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val
 65 70 75 80

Trp Ile Trp Val Gly Thr Gly Lys Pro Leu Thr Glu Glu Ala Gln Asn
 85 90 95

Trp Ala Pro Gly Glu Pro Asn Asn Lys Gln Arg Asn Glu Asp Cys Val
 100 105 110

Glu Ile Tyr Ile Gln Arg Thr Lys Asp Ser Gly Met Trp Asn Asp Glu
 115 120 125

Arg Cys Asn Lys Lys Lys Leu Ala Leu Cys Tyr Thr Ala Ser Cys Thr
 130 135 140

Asn Ala Ser Cys Ser Gly His Gly Glu Cys Ile Glu Thr Ile Asn Ser
 145 150 155 160

Tyr Thr Cys Lys Cys His Pro Gly Phe Leu Gly Pro Asn Cys Glu Gln
 165 170 175

Ala Val Thr Cys Lys Pro Gln Glu His Pro Asp Tyr Gly Ser Leu Asn
 180 185 190

Cys Ser His Pro Phe Gly Pro Phe Ser Tyr Asn Ser Ser Cys Ser Phe
 195 200 205

Gly Cys Lys Arg Gly Tyr Leu Pro Ser Ser Met Glu Thr Thr Val Arg
 210 215 220

Cys Thr Ser Ser Gly Glu Trp Ser Ala Pro Ala Pro Ala Cys His Val
 225 230 235 240

Val Glu Cys Glu Ala Leu Thr His Pro Ala His Gly Ile Arg Lys Cys
 245 250 255

Ser Ser Asn Pro Gly Ser Tyr Pro Trp Asn Thr Thr Cys Thr Phe Asp
 260 265 270

Cys Val Glu Gly Tyr Arg Arg Val Gly Ala Gln Asn Leu Gln Cys Thr
275 280 285

Ser Ser Gly Ile Trp Asp Asn Glu Thr Pro Ser Cys Lys Ala Val Thr
290 295 300

Cys Asp Ala Ile Pro Gln Pro Gln Asn Gly Phe Val Ser Cys Ser His
305 310 315 320

Ser Thr Ala Gly Glu Leu Ala Phe Lys Ser Ser Cys Asn Phe Thr Cys
325 330 335

Glu Gln Ser Phe Thr Leu Gln Gly Pro Ala Gln Val Glu Cys Ser Ala
340 345 350

Gln Gly Gln Trp Thr Pro Gln Ile Pro Val Cys Lys Ala Val Gln Cys
355 360 365

Glu Ala Leu Ser Ala Pro Gln Gln Gly Asn Met Lys Cys Leu Pro Ser
370 375 380

Ala Ser Gly Pro Phe Gln Asn Gly Ser Ser Cys Glu Phe Ser Cys Glu
385 390 395 400

Glu Gly Phe Glu Leu Lys Gly Ser Arg Arg Leu Gln Cys Gly Pro Arg
405 410 415

Gly Glu Trp Asp Ser Lys Lys Pro Thr Cys Ser Ala Val Lys Cys Asp
420 425 430

Asp Val Pro Arg Pro Gln Asn Gly Val Met Glu Cys Ala His Ala Thr
435 440 445

Thr Gly Glu Phe Thr Tyr Lys Ser Ser Cys Ala Phe Gln Cys Asn Glu
450 455 460

Gly Phe Ser Leu His Gly Ser Ala Gln Leu Glu Cys Thr Ser Gln Gly
465 470 475 480

Lys Trp Thr Gln Glu Val Pro Ser Cys Gln Val Val Gln Cys Pro Ser

485

490

495

Leu Asp Val Pro Gly Lys Met Asn Met Ser Cys Ser Gly Thr Ala Val
 500 505 510

Phe Gly Thr Val Cys Glu Phe Thr Cys Pro Asp Asp Trp Thr Leu Asn
 515 520 525

Gly Ser Ala Val Leu Thr Cys Gly Ala Thr Gly Arg Trp Ser Gly Met
 530 535 540

Pro Pro Thr Cys Glu Ala Pro Val Ser Pro Thr Arg Pro Leu Val Val
 545 550 555 560

Ala Leu Ser Ala Ala Gly Thr Ser Leu Leu Thr Ser Ser Ser Leu Leu
 565 570 575

Tyr Leu Leu Met Arg Tyr Phe Arg Lys Lys Ala Lys Lys Phe Val Pro
 580 585 590

Ala Ser Ser Cys Gln Ser Leu Gln Ser Phe Glu Asn Tyr His Val Pro
 595 600 605

Ser Tyr Asn Val
 610

<210> 199

<211> 157

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 199

Trp Tyr Tyr Asn Ala Ser Ser Glu Leu Met Thr Tyr Asp Glu Ala Ser
 1 5 10 15

Ala Tyr Cys Gln Arg Asp Tyr Thr His Leu Val Ala Ile Gln Asn Lys
 20 25 30

Glu Glu Ile Asn Tyr Leu Asn Ser Asn Leu Lys His Ser Pro Ser Tyr

35

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45

Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Ile Trp Val Gly
 50 55 60

Thr Gly Lys Pro Leu Thr Glu Glu Ala Gln Asn Trp Ala Pro Gly Glu
 65 70 75 80

Pro Asn Asn Lys Gln Arg Asn Glu Asp Cys Val Glu Ile Tyr Ile Gln
 85 90 95

Arg Thr Lys Asp Ser Gly Met Trp Asn Asp Glu Arg Cys Asn Lys Lys
 100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ser Cys Thr Asn Ala Ser Cys Ser
 115 120 125

Gly His Gly Glu Cys Ile Glu Thr Ile Asn Ser Tyr Thr Cys Lys Cys
 130 135 140

His Pro Gly Phe Leu Gly Pro Asn Cys Glu Gln Ala Val
 145 150 155

<210> 200

<211> 610

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 200

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

Lys Glu Ser Gly Ala Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr
 20 25 30

Tyr Asp Glu Ala Ser Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val
 35 40 45

Ala Ile Gln Asn Lys Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser

50

55

60

Tyr Ser Pro Ser Tyr Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val
65 70 75 80

Trp Val Trp Val Gly Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn
85 90 95

Trp Ala Pro Gly Glu Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val
100 105 110

Glu Ile Tyr Ile Lys Arg Asp Lys Asp Val Gly Met Trp Asn Asp Glu
115 120 125

Arg Cys Ser Lys Lys Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr
130 135 140

Asn Thr Ser Cys Ser Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn
145 150 155 160

Tyr Thr Cys Lys Cys Asp Pro Gly Phe Ser Gly Leu Glu Cys Glu Gln
165 170 175

Ile Val Asn Cys Thr Ala Leu Glu Ser Pro Glu His Gly Ser Leu Val
180 185 190

Cys Ser His Pro Leu Gly Asn Phe Ser Tyr Ser Ser Ser Cys Ser Val
195 200 205

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

Met Ser Ser Gly Glu Trp Ser Val Pro Ile Pro Ala Cys Lys Val Val
225 230 235 240

Glu Cys Asp Ala Val Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe
245 250 255

Gln Asn Pro Gly Ser Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys
260 265 270

Glu Glu Gly Phe Glu Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser
275 280 285

Ser Gly Asn Trp Asp Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys
290 295 300

Arg Ala Ile Arg Gln Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser
305 310 315 320

Pro Ala Gly Glu Phe Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu
325 330 335

Glu Gly Phe Met Leu Gln Gly Ala Ala Gln Val Glu Cys Thr Thr Gln
340 345 350

Gly Gln Trp Thr Gln Gln Val Pro Val Cys Glu Ala Phe Gln Cys Thr
355 360 365

Ala Leu Ser Asn Pro Glu Arg Gly Tyr Met Asn Cys Leu Pro Ser Ala
370 375 380

Ser Gly Ser Phe Arg Asn Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln
385 390 395 400

Gly Phe Val Leu Lys Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly
405 410 415

Glu Trp Asp Asn Glu Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala
420 425 430

Val His Gln Pro Gln Arg Gly Leu Val Arg Cys Ala His Ser Pro Ile
435 440 445

Gly Glu Phe Thr Tyr Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly
450 455 460

Phe Glu Leu His Gly Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln
465 470 475 480

Trp Thr Glu Glu Val Pro Ser Cys Gln Val Val Lys Cys Ser Ser Leu

485

490

495

Ala Val Leu Glu Lys Ile Asn Met Ser Cys Ser Gly Glu Pro Val Phe
 500 505 510

Gly Thr Val Cys Asn Phe Ala Cys Pro Glu Gly Trp Arg Leu Asn Gly
 515 520 525

Ser Ala Ala Met Thr Cys Gly Ala Thr Gly His Trp Ser Gly Met Leu
 530 535 540

Pro Thr Cys Glu Ala Pro Thr Glu Ser Asn Thr Pro Leu Val Ala Gly
 545 550 555 560

Leu Ser Ala Ala Gly Leu Ser Leu Leu Thr Leu Ala Pro Phe Leu Leu
 565 570 575

Trp Leu Arg Lys Cys Phe Arg Lys Ala Lys Lys Phe Val Pro Ala Ser
 580 585 590

Ser Cys Gln Ser Leu Glu Ser Asp Gly Ser Tyr Gln Lys Pro Ser Tyr
 595 600 605

Ile Leu
 610

<210> 201

<211> 589

<212> PRT

<213> Secuencia Artificial

<220>

<223> Constructo Sintético

<400> 201

Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr Tyr Asp Glu Ala Ser
 1 5 10 15

Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val Ala Ile Gln Asn Lys
 20 25 30

Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Ser Tyr Ser Pro Ser Tyr

35

40

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Tyr Trp Ile Gly Ile Arg Lys Val Asn Asn Val Trp Val Trp Val Gly
 50 55 60

Thr Gln Lys Pro Leu Thr Glu Glu Ala Lys Asn Trp Ala Pro Gly Glu
 65 70 75 80

Pro Asn Asn Arg Gln Lys Asp Glu Asp Cys Val Glu Ile Tyr Ile Lys
 85 90 95

Arg Asp Lys Asp Val Gly Met Trp Asn Asp Glu Arg Cys Ser Lys Lys
 100 105 110

Lys Leu Ala Leu Cys Tyr Thr Ala Ala Cys Thr Asn Thr Ser Cys Ser
 115 120 125

Gly His Gly Glu Cys Val Glu Thr Ile Asn Asn Tyr Thr Cys Lys Cys
 130 135 140

Asp Pro Gly Phe Ser Gly Leu Glu Cys Glu Gln Ile Val Asn Cys Thr
 145 150 155 160

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

Gly Asn Phe Ser Tyr Ser Ser Ser Cys Ser Val Ser Cys Asp Arg Gly
 180 185 190

Tyr Leu Pro Ser Ser Val Glu Thr Thr Gln Cys Met Ser Ser Gly Glu
 195 200 205

Trp Ser Val Pro Ile Pro Ala Cys Lys Val Val Glu Cys Asp Ala Val
 210 215 220

Thr Asn Pro Ala Asn Gly Phe Val Glu Cys Phe Gln Asn Pro Gly Ser
 225 230 235 240

Phe Pro Trp Asn Thr Thr Cys Thr Phe Asp Cys Glu Glu Gly Phe Glu
 245 250 255

Leu Met Gly Ala Gln Ser Leu Gln Cys Thr Ser Ser Gly Asn Trp Asp
260 265 270

Asn Glu Lys Pro Thr Cys Lys Ala Val Thr Cys Arg Ala Ile Arg Gln
275 280 285

Pro Gln Asn Gly Ser Val Arg Cys Ser His Ser Pro Ala Gly Glu Phe
290 295 300

Thr Phe Lys Ser Ser Cys Asn Phe Thr Cys Glu Glu Gly Phe Met Leu
305 310 315 320

Gln Gly Ala Ala Gln Val Glu Cys Thr Thr Gln Gly Gln Trp Thr Gln
325 330 335

Gln Val Pro Val Cys Glu Ala Phe Gln Cys Thr Ala Leu Ser Asn Pro
340 345 350

Glu Arg Gly Tyr Met Asn Cys Leu Pro Ser Ala Ser Gly Ser Phe Arg
355 360 365

Asn Gly Ser Ser Cys Glu Phe Ser Cys Glu Gln Gly Phe Val Leu Lys
370 375 380

Gly Ser Lys Arg Leu Gln Cys Gly Pro Thr Gly Glu Trp Asp Asn Glu
385 390 395 400

Lys Pro Thr Cys Glu Ala Val Arg Cys Asp Ala Val His Gln Pro Gln
405 410 415

Arg Gly Leu Val Arg Cys Ala His Ser Pro Ile Gly Glu Phe Thr Tyr
420 425 430

Lys Ser Ser Cys Ala Phe Ser Cys Glu Glu Gly Phe Glu Leu His Gly
435 440 445

Ser Thr Gln Leu Glu Cys Thr Ser Gln Gly Gln Trp Thr Glu Glu Val
450 455 460

Pro Ser Cys Gln Val Val Lys Cys Ser Ser Leu Ala Val Leu Glu Lys

465		470		475		480									
Ile	Asn	Met	Ser	Cys	Ser	Gly	Glu	Pro	Val	Phe	Gly	Thr	Val	Cys	Asn
				485					490					495	
Phe	Ala	Cys	Pro	Glu	Gly	Trp	Arg	Leu	Asn	Gly	Ser	Ala	Ala	Met	Thr
			500					505					510		
Cys	Gly	Ala	Thr	Gly	His	Trp	Ser	Gly	Met	Leu	Pro	Thr	Cys	Glu	Ala
		515					520					525			
Pro	Thr	Glu	Ser	Asn	Thr	Pro	Leu	Val	Ala	Gly	Leu	Ser	Ala	Ala	Gly
	530					535					540				
Leu	Ser	Leu	Leu	Thr	Leu	Ala	Pro	Phe	Leu	Leu	Trp	Leu	Arg	Lys	Cys
545					550					555					560
Phe	Arg	Lys	Ala	Lys	Lys	Phe	Val	Pro	Ala	Ser	Ser	Cys	Gln	Ser	Leu
				565					570					575	
Glu	Ser	Asp	Gly	Ser	Tyr	Gln	Lys	Pro	Ser	Tyr	Ile	Leu			
			580					585							
<210>	202														
<211>	98														
<212>	PRT														
<213>	Secuencia Artificial														
<220>															
<223>	Constructo Sintético														
<400>	202														
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		
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

<210> 203
 <211> 15
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 203

Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1 5 10 15

<210> 204
 <211> 95
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 204

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	Ser	Thr	Pro
				85					90					95

<210> 205
 <211> 12
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 205

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

<210> 206
 <211> 1338
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Constructo Sintético

<400> 206

gaagtgcagc ttgtggaatc cgggggcggc ttggtccaac cgggtggcag cctccgtctg	60
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cctgggaagg gcctggaatg ggtggccagg attgatcctg caaacggaaa tactatatat	180
gtggactccg tgaccggccg ctttacaatc agcgccgaca acgctaagaa ttccgcctac	240
ctgcaaatga atagcctgcg ggcagaggat accgcggtgt actattgtgc catggattta	300
tattccacgt ctgaatattg gggccaagga accctggtaa cggtgtcgtc ggcgtcgacc	360
aaggggcccat cggtcttccc cctggcaccc tcctccaaga gcacctctgg gggcacagcg	420
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca	480
ggcgccctga ccagcggcgt gcacaccttc ccggctgtcc tacagtcctc aggactctac	540
tccctcagca gcgtgggtgac cgtgccctcc agcagcttgg gcaccagac ctacatctgc	600
aacgtgaatc acaagcccag caacaccaag gtggacaaga aagttgagcc caaatcttgt	660

gacaaaactc acacatgccc accgtgccc	gcacctaag ccgctggggc accgtcagtc	720
ttcctcttcc ccccaaaacc caaggacacc	ctcatgatct cccggacccc tgaggtcaca	780
tgcgtgggtgg tggacgtgag ccacgaagac	cctgaggtca agttcaactg gtacgtggac	840
ggcgtggagg tgcataatgc caagacaaag	ccgcgggagg agcagtacaa cagcacgtac	900
cgtgtgggtca gcgtcctcac cgtcctgcac	caggactggc tgaatggcaa ggagtacaag	960
tgcaaggtct ccaacaaagc cctcccagcc	cccatcgaga aaaccatctc caaagccaaa	1020
gggcagcccc gagaaccaca ggtgtacacc	ctgcccccat cccgggagga gatgaccaag	1080
aaccaggtca gcctgacctg cctgggtcaaa	ggcttctatc ccagcgacat cgccgtggag	1140
tgggagagca atgggcagcc ggagaacaac	tacaagacca cgcctcccgt gctggactcc	1200
gacggctcct tcttcctcta tagcaagctc	accgtggaca agagcaggtg gcagcagggg	1260
aacgtcttct catgctccgt gatgcatgag	gctctgcaca accactacac gcagaagagc	1320
ctctccctgt ccccgga		1338