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<120> ADMINISTRACIÓN VIRAL DE NEOANTÍGENOS

<130> 32669-38804/PCT

<140> PCT/US2017/063133

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<150> 62/523,212

<151> 2017-06-21

<150> 62/503,196

<151> 2017-05-08

<150> 62/435,266

<151> 2016-12-16

<150> 62/425,996

<151> 2016-11-23

<160> 185

<170> PatentIn versión 3.5

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<220>
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Arg Ala Ser Gln Ser Ile Asn Ser Tyr Leu Asp Trp Tyr Gln Gln Lys
 20 25 30

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

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

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

Cys Gln Gln Tyr Tyr Ser Thr Pro Phe Thr Phe Gly Pro Gly Thr Lys
 85 90 95

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

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

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

<210> 17
 <211> 167
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Polipéptido sintético

<400> 17
 Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser
 1 5 10 15

Gly Phe Thr Phe Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro
 20 25 30

Gly Lys Gly Leu Glu Trp Val Ala Val Ile Trp Tyr Asp Gly Ser Asn
 35 40 45

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

Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu
 65 70 75 80

Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Pro Arg Gly Ala Thr Leu
 85 90 95

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

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

Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu
 Página 94

130

135

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

Ala Leu Thr Ser Gly Val His
165

<210> 18
<211> 10
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 18
Gly Phe Thr Phe Ser Ser Tyr Gly Met His
1 5 10

<210> 19
<211> 15
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 19
Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
1 5 10 15

<210> 20
<211> 16
<212> PRT
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<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 20
Asp Pro Arg Gly Ala Thr Leu Tyr Tyr Tyr Tyr Tyr Gly Met Asp Val
1 5 10 15

<210> 21
<211> 11
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 21
Arg Ala Ser Gln Ser Ile Asn Ser Tyr Leu Asp
1 5 10

<210> 22
<211> 7
<212> PRT
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<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 22
Ala Ala Ser Ser Leu Gln Ser
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<210> 23
<211> 9
<212> PRT
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<223> Descripción de secuencia artificial: Péptido sintético

<400> 23
Gln Gln Tyr Tyr Ser Thr Pro Phe Thr
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<210> 24
<211> 108
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<400> 24
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Val Ser Ser Ser
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20

25

30

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

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

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

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

Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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<210> 25

<211> 121

<212> PRT

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<223> Descripción de secuencia artificial: Polipéptido sintético

<400> 25

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

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

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

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
50 55 60

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

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

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

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 26

<211> 5

<212> PRT

<213> Secuencia artificial

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<223> Descripción de secuencia artificial: Péptido sintético

<400> 26

Arg Tyr Trp Met Ser
1 5

<210> 27

<211> 17

<212> PRT

<213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Péptido sintético

<400> 27

Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val Lys
1 5 10 15

Gly

<210> 28

<211> 12

<212> PRT

<213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Péptido sintético

<400> 28

<210> 29
<211> 12
<212> PRT
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<400> 29
Arg Ala Ser Gln Arg Val Ser Ser Ser Tyr Leu Ala
1510

<210> 30
<211> 7
<212> PRT
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<223> Descripción de secuencia artificial: Péptido sintético

<400> 30
Asp Ala Ser Ser Arg Ala Thr
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<210> 31
<211> 9
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 31
Gln Gln Tyr Gly Ser Leu Pro Trp Thr
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<210> 32
<211> 2019
<212> ADN
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<220>
<223> Descripción de secuencia artificial: Polinucleótido sintético

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<210> 33
<211> 619
<212> PRT
<213> Secuencia artificial

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<220>
<223> Descripción de secuencia artificial: Polipéptido sintético

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<400> 33
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Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp
          20          25          30

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Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys
          35          40          45

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```

Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu
          50          55          60

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```

Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Ala Met Phe Gln Ala
65          70          75          80

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

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```

Leu Gly Asp His Gln Val Ser Gly Leu Glu Gln Leu Glu Ser Ile Ile
          100          105          110

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Asn Phe Glu Lys Leu Thr Glu Trp Thr Ser Ser Asn Val Met Pro Ile
          115          120          125

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

```

```

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

```

```

Thr Pro Glu Ser Ala Asn Leu Gly Glu Glu Ile Leu Ser Gln Leu Tyr
          165          170          175

```

```

Leu Trp Pro Arg Val Thr Tyr His Ser Pro Ser Tyr Ala Tyr His Gln
          180          185          190

```

```

Phe Glu Arg Arg Ala Lys Tyr Lys Arg His Phe Pro Gly Phe Gly Gln
          195          200          205

```

```

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

```

```

Gly Asp Trp Asp Ala Ile Arg Phe Arg Tyr Cys Ala Pro Pro Gly Tyr
225          230          235          240

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Ala Leu Leu Arg Cys Asn Asp Thr Asn Tyr Ser Ala Leu Leu Ala Val
          245          250          255

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Gly Ala Leu Glu Gly Pro Arg Asn Gln Asp Trp Leu Gly Val Pro Arg
          260          265          270

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Gln Leu Val Thr Arg Met Gln Ala Ile Gln Asn Ala Gly Leu Cys Thr
          275          280          285

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Leu Val Ala Met Leu Glu Glu Thr Ile Phe Trp Leu Gln Ala Phe Leu
          290          295          300

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Met Ala Leu Thr Asp Ser Gly Pro Lys Thr Asn Ile Ile Val Asp Ser
305 310 315 320

Gln Tyr Val Met Gly Ile Ser Lys Pro Ser Phe Gln Glu Phe Val Asp
325 330 335

Trp Glu Asn Val Ser Pro Glu Leu Asn Ser Thr Asp Gln Pro Phe Trp
340 345 350

Gln Ala Gly Ile Leu Ala Arg Asn Leu Val Pro Met Val Ala Thr Val
355 360 365

Gln Gly Gln Asn Leu Lys Tyr Gln Gly Gln Ser Leu Val Ile Ser Ala
370 375 380

Ser Ile Ile Val Phe Asn Leu Leu Glu Leu Glu Gly Asp Tyr Arg Asp
385 390 395 400

Asp Gly Asn Val Trp Val His Thr Pro Leu Ser Pro Arg Thr Leu Asn
405 410 415

Ala Trp Val Lys Ala Val Glu Glu Lys Lys Gly Ile Pro Val His Leu
420 425 430

Glu Leu Ala Ser Met Thr Asn Met Glu Leu Met Ser Ser Ile Val His
435 440 445

Gln Gln Val Arg Thr Tyr Gly Pro Val Phe Met Cys Leu Gly Gly Leu
450 455 460

Leu Thr Met Val Ala Gly Ala Val Trp Leu Thr Val Arg Val Leu Glu
465 470 475 480

Leu Phe Arg Ala Ala Gln Leu Ala Asn Asp Val Val Leu Gln Ile Met
485 490 495

Glu Leu Cys Gly Ala Ala Phe Arg Gln Val Cys His Thr Thr Val Pro
500 505 510

Trp Pro Asn Ala Ser Leu Thr Pro Lys Trp Asn Asn Glu Thr Thr Gln
515 520 525

Pro Gln Ile Ala Asn Cys Ser Val Tyr Asp Phe Phe Val Trp Leu His
530 535 540

Tyr Tyr Ser Val Arg Asp Thr Leu Trp Pro Arg Val Thr Tyr His Met
545 550 555 560

Asn Lys Tyr Ala Tyr His Met Leu Glu Arg Arg Ala Lys Tyr Lys Arg
565 570 575

Gly Pro Gly Pro Gly Ala Lys Phe Val Ala Ala Trp Thr Leu Lys Ala
580 585 590

Ala Ala Gly Pro Gly Pro Gly Gln Tyr Ile Lys Ala Asn Ser Lys Phe
595 600 605

Ile Gly Ile Thr Glu Leu Gly Pro Gly Pro Gly
610 615

<210> 34
<211> 1638
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<213> Secuencia artificial

<220>
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cagctgtacc tgtggccccg ggtgacatat cactcccctt cttacgccta tcaccagttc 360
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<220>
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Ile Asn Gln Met Leu Asn Val Leu Gly Asp His Gln Val Ser Gly Leu
 20 25 30

Glu Gln Leu Glu Ser Ile Ile Asn Phe Glu Lys Leu Thr Glu Trp Thr
 35 40 45

Ser Ser Asn Val Met Pro Ile Leu Ser Pro Leu Thr Lys Gly Ile Leu
 50 55 60

Gly Phe Val Phe Thr Leu Thr Val Pro Ser Glu Arg Gly Leu Ser Cys
 65 70 75 80

Ile Ser Glu Ala Asp Ala Thr Thr Pro Glu Ser Ala Asn Leu Gly Glu
 85 90 95

Glu Ile Leu Ser Gln Leu Tyr Leu Trp Pro Arg Val Thr Tyr His Ser
 100 105 110

Pro Ser Tyr Ala Tyr His Gln Phe Glu Arg Arg Ala Lys Tyr Lys Arg
 115 120 125

His Phe Pro Gly Phe Gly Gln Ser Leu Leu Phe Gly Tyr Pro Val Tyr
 130 135 140

Val Phe Gly Asp Cys Val Gln Gly Asp Trp Asp Ala Ile Arg Phe Arg
 145 150 155 160

Tyr Cys Ala Pro Pro Gly Tyr Ala Leu Leu Arg Cys Asn Asp Thr Asn
 165 170 175

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

Asp Trp Leu Gly Val Pro Arg Gln Leu Val Thr Arg Met Gln Ala Ile
 195 200 205

Gln Asn Ala Gly Leu Cys Thr Leu Val Ala Met Leu Glu Glu Thr Ile
210 215 220

Phe Trp Leu Gln Ala Phe Leu Met Ala Leu Thr Asp Ser Gly Pro Lys
225 230 235 240

Thr Asn Ile Ile Val Asp Ser Gln Tyr Val Met Gly Ile Ser Lys Pro
245 250 255

Ser Phe Gln Glu Phe Val Asp Trp Glu Asn Val Ser Pro Glu Leu Asn
260 265 270

Ser Thr Asp Gln Pro Phe Trp Gln Ala Gly Ile Leu Ala Arg Asn Leu
275 280 285

Val Pro Met Val Ala Thr Val Gln Gly Gln Asn Leu Lys Tyr Gln Gly
290 295 300

Gln Ser Leu Val Ile Ser Ala Ser Ile Ile Val Phe Asn Leu Leu Glu
305 310 315 320

Leu Glu Gly Asp Tyr Arg Asp Asp Gly Asn Val Trp Val His Thr Pro
325 330 335

Leu Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Ala Val Glu Glu Lys
340 345 350

Lys Gly Ile Pro Val His Leu Glu Leu Ala Ser Met Thr Asn Met Glu
355 360 365

Leu Met Ser Ser Ile Val His Gln Gln Val Arg Thr Tyr Gly Pro Val
370 375 380

Phe Met Cys Leu Gly Gly Leu Leu Thr Met Val Ala Gly Ala Val Trp
385 390 395 400

Leu Thr Val Arg Val Leu Glu Leu Phe Arg Ala Ala Gln Leu Ala Asn
405 410 415

Asp Val Val Leu Gln Ile Met Glu Leu Cys Gly Ala Ala Phe Arg Gln
420 425 430

Val Cys His Thr Thr Val Pro Trp Pro Asn Ala Ser Leu Thr Pro Lys
435 440 445

Trp Asn Asn Glu Thr Thr Gln Pro Gln Ile Ala Asn Cys Ser Val Tyr
450 455 460

Asp Phe Phe Val Trp Leu His Tyr Tyr Ser Val Arg Asp Thr Leu Trp
465 470 475 480

Pro Arg Val Thr Tyr His Met Asn Lys Tyr Ala Tyr His Met Leu Glu
485 490 495

Arg Arg Ala Lys Tyr Lys Arg Gly Pro Gly Pro Gly Ala Lys Phe Val
500 505 510

Ala Ala Trp Thr Leu Lys Ala Ala Ala Gly Pro Gly Pro Gly Gln Tyr
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Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu Gly Pro Gly
530 535 540

Pro Gly
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Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys
 35 40 45

Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu
 50 55 60

Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Ala Met Phe Gln Ala
 65 70 75 80

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

Leu Gly Asp His Gln Phe Lys His Ile Lys Ala Phe Asp Arg Thr Phe
 100 105 110

Ala Asn Asn Pro Gly Pro Met Val Val Phe Ala Thr Pro Gly Pro Ile
 115 120 125

Leu Ser Pro Leu Thr Lys Gly Ile Leu Gly Phe Val Phe Thr Leu Thr
 130 135 140
 Val Pro Ser Glu Arg Gly Leu Ser Cys Ile Ser Glu Ala Asp Ala Thr
 145 150 155 160
 Thr Pro Glu Ser Ala Asn Leu Gly Glu Glu Ile Leu Ser Gln Leu Tyr
 165 170 175
 Leu Trp Pro Arg Val Thr Tyr His Ser Pro Ser Tyr Ala Tyr His Gln
 180 185 190
 Phe Glu Arg Arg Ala Lys Tyr Lys Arg His Phe Pro Gly Phe Gly Gln
 195 200 205
 Ser Leu Leu Phe Gly Tyr Pro Val Tyr Val Phe Gly Asp Cys Val Gln
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 Gly Asp Trp Asp Ala Ile Arg Phe Arg Tyr Cys Ala Pro Pro Gly Tyr
 225 230 235 240
 Ala Leu Leu Arg Cys Asn Asp Thr Asn Tyr Ser Ala Leu Leu Ala Val
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 Gly Ala Leu Glu Gly Pro Arg Asn Gln Asp Trp Leu Gly Val Pro Arg
 260 265 270
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 275 280 285
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 Met Ala Leu Thr Asp Ser Gly Pro Lys Thr Asn Ile Ile Val Asp Ser
 305 310 315 320
 Gln Tyr Val Met Gly Ile Ser Lys Pro Ser Phe Gln Glu Phe Val Asp
 325 330 335
 Trp Glu Asn Val Ser Pro Glu Leu Asn Ser Thr Asp Gln Pro Phe Trp
 340 345 350
 Gln Ala Gly Ile Leu Ala Arg Asn Leu Val Pro Met Val Ala Thr Val
 355 360 365
 Gln Gly Gln Asn Leu Lys Tyr Gln Gly Gln Ser Leu Val Ile Ser Ala
 370 375 380
 Ser Ile Ile Val Phe Asn Leu Leu Glu Leu Glu Gly Asp Tyr Arg Asp
 385 390 395 400
 Asp Gly Asn Val Trp Val His Thr Pro Leu Ser Pro Arg Thr Leu Asn
 405 410 415
 Ala Trp Val Lys Ala Val Glu Glu Lys Lys Gly Ile Pro Val His Leu
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 Glu Leu Ala Ser Met Thr Asn Met Glu Leu Met Ser Ser Ile Val His
 435 440 445
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 465 470 475 480
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 485 490 495
 Glu Leu Cys Gly Ala Ala Phe Arg Gln Val Cys His Thr Thr Val Pro
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530

535

Tyr Tyr Ser Val Arg Asp Thr Leu Trp Pro Arg Val Thr Tyr His Met
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Asn Lys Tyr Ala Tyr His Met Leu Glu Arg Arg Ala Lys Tyr Lys Arg
565 570 575

Gly Pro Gly Pro Gly Ala Lys Phe Val Ala Ala Trp Thr Leu Lys Ala
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Ile Gly Ile Thr Glu Leu Gly Pro Gly Pro Gly
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tttaggggtc tgggttttg tttcttcatt ctttactgca ctgagattta agccttacia	1860
agggaaagcc tctggccgtc acacgtagga cgcagtaagg tcaactcgtg tgaggctgac	1920
atgctcacac attacaacag tagagaggga aaatcctaag acagaggaa tccagagatg	1980
agtgtctgga gcgcttcagt tcagctttaa aggccaggac gggccacacg tggctggcgg	2040
cctcgttcca gtggcggcac gtccttgggc gtctctaagt tctgcagctc aagggtggc	2100
acttttttaa atataaaaat ggggtgttatt tttatttttt tttgtaaagt gatttttggg	2160
cttctgttga cattcggggg gatcctgttc tgcgctgtgt acaatgtgag atcgggtcgt	2220
tctcctgatg ttttgccgtg gcttggggat tgtacacggg accagctcac gtaatgcatt	2280
gcctgtaaca atgtaataaa aagcctcttt cttttaaaaa aaaaaaaaaa aaaaaaaaaa	2339

<210> 46
 <211> 45
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Oligonucleótido sintético

<400> 46
 cagtacatca aggccaacag caagttcatc ggcatcaccg aactc 45

<210> 47
 <211> 15
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 47
 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
 1 5 10 15

<210> 48
 <211> 39
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Oligonucleótido sintético

<400> 48
 gctaaatttg tggctgcctg gacactgaaa gccgccgct 39

<210> 49
 <211> 13
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 49
 Ala Lys Phe Val Ala Trp Thr Leu Lys Ala Ala Ala
 1 5 10

<210> 50
 <211> 593
 <212> ADN
 <213> Virus de la hepatitis de la marmota

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<400> 50
aatcaacctc tggattacaa aatttgtgaa agattgactg gtattcttaa ctatgttgct      60
ccttttacgc tatgtggata cgctgcttta atgcctttgt atcatgctat tgcttcccgt      120
atggctttca ttttctcctc cttgtataaa tcctggttgc tgtctcttta tgaggagttg      180
tggcccgttg tcaggcaacg tggcgtggtg tgcactgtgt ttgctgacgc aacccccact      240
ggttggggca ttgccaccac ctgtcagctc ctttccggga ctttcgcttt cccctccct      300
attgccacgg cggaactcat cgccgcctgc cttgcccgct gctggacagg ggctcggtg      360
ttgggcactg acaattccgt ggtgttgtcg gggaagctga cgtcctttcc atggctgctc      420
gcctgtgttg ccacctggat tctgcgcggg acgtccttct gctacgtccc ttcggccctc      480
aatccagcgg accttccttc ccgcggcctg ctgccggctc tgcggcctct tccgcgtctt      540
cgccttcgcc ctcagacgag tcggatctcc ctttgggccg cctccccgcc tgt          593
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<210> 51
 <211> 589
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Polinucleótido sintético

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<400> 51
tctccccccc cccctctcc ctcccccccc cctaacgtta ctggccgaag ccgcttgga      60
taaggccggt gtgcgtttgt ctatatgtta tttccacca tattgccgtc ttttggaat      120
gtgagggccc ggaacctgg ccctgtcttc ttgacgagca ttcctagggg tctttcccct      180
ctcgccaaag gaatgcaagg tctgttgaat gtcgtgaagg aagcagttcc tctggaagct      240
tcttgaagac aaacaacgtc tgtagcgacc ctttgcaggc agcggaaacc cccacctggc      300
gacaggtgcc tctgcggcca aaagccacgt gtataagata cacctgcaa ggcggcaca      360
ccccagtgcc acgttgtgag ttggatagtt gtggaaagag tcaaattggc ttcctcaagc      420
gtattcaaca aggggctgaa ggatgcccag aaggtacccc attgtatggg atctgatctg      480
gggcctcggg gcacatgctt tacatgtgtt tagtcgaggt taaaaaacg tctaggcccc      540
ccgaaccacg gggacgtggt tttcctttga aaaacacgat gataatatg          589
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<210> 52
 <211> 720
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Polinucleótido sintético

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<400> 52
atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctggt cgagctggac      60
ggcgacgtaa acggccacaa gttcagcgtg tccggcgagg gcgagggcga tgccacctac      120
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc      180
ctcgtgacca ccctgacctg cggcgtgcag tgcttcagcc gctaccccga ccacatgaag      240
cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg caccatcttc      300
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gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac      420
aagctggagt acaactacaa cagccacaac gtctatatca tggccgacaa gcagaagaac      480
ggcatcaagg tgaacttcaa gatccgccac aacatcgagg acggcagcgt gcagctcgcc      540
gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac      600
tacctgagca cccagtccgc cctgagcaaa gacccaacg agaagcgcgga tcacatggtc      660
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<210> 53
 <211> 1563
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Polinucleótido sintético

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<400> 53
atgctgctgc tgctgctgct gctgggcctg aggctacagc tctccctggg catcatcca      60
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gttgaggagg agaaccgga cttctggaac cgcgaggcag ccgaggccct gggtgccgcc      120
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atgggggtgt ctacggtgac agctgccagg atcctaaaag ggcagaagaa ggacaaactg      240
gggcctgaga taccctggc catggaccgc ttcccatatg tggctctgtc caagacatac      300
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caggacatcg ctacgcagct catctccaac atggacattg acgtgatcct aggtggaggc      660
cgaaagtaca tgtttcgcat gggaacccca gaccctgagt acccagatga ctacagccaa      720
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ttcgccgcct gcctggagcc ctacaccgcc tgcgacctgg cggcccccgc cggcaccacc     1500
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taa                                                                    1563

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<210> 54

<211> 1653

<212> ADN

<213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Polinucleótido sintético

<400> 54

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gcctttaccg acgcacatat cgaggtggac attacctacg ccgagtactt cgagatgagc     180
gttcggctgg cagaagctat gaagcgctat gggctgaata caaacatcg gatcgtggtg     240
tgcagcgaga atagcttgca gttcttcacg cccgtgttgg gtgccctgtt catcgggtgtg     300
gctgtggccc cagctaacga catctacaac gagcgcgagc tgctgaacag catgggcatc     360
agccagccca ccgtcgtatt cgtgagcaag aaagggctgc aaaagatcct caacgtgcaa     420
aagaagctac cgatcataca aaagatcatc atcatggata gcaagaccga ctaccagggc     480
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agtaccggat tgcccaaggg cgtagcccta ccgcaccgca ccgcttgtgt ccgattcagt     660
catgcccgcg acccatctt cggcaaccag atcatccccg acaccgctat cctcagcgtg     720
gtgccatttc accacggctt cggcatgttc accacgctgg gctacttgat ctgcggcttt     780
cgggtcgtgc tcatgtaccg cttcgaggag gagctattct tgcgcagctt gcaagactat     840
aagattcaat ctgccctgct ggtgcccaca ctatttagct tcttcgctaa gagcactctc     900
atcgacaagt acgacctaag caacttgac gagatcgcca gcggcggggc gccgctcagc     960
aaggaggtag gtgaggccgt ggccaaacgc ttccacctac caggcatccg ccagggctac    1020
ggcctgacag aaacaaccag cgccattctg atcacccccg aaggggacga caagcctggc    1080
gcagtaggca aggtgggtgcc cttcttcgag gctaaggtgg tggacttggg caccggtgag    1140
acactgggtg tgaaccagcg cggcgagctg tgcgtccgtg gcccctgat catgagcggc    1200

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P-2019-24978- Traducción secuencias.txt

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tacgttaaca accccgaggc tacaaacgct ctcacgcgaca aggacggctg gctgcacagc 1260
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ctgatcaaata acaagggcta ccaggttagcc ccagccgaac tggagagcat cctgctgcaa 1380
caccccaaca tcttcgacgc cggggtcgcc ggccgtgccg acgacgatgc cggcgagctg 1440
cccgccgcag tcgtcgtgct ggaacacggt aaaaccatga ccgagaagga gatcgtggac 1500
tatgtggcca gccaggttac aaccgccaag aagctgcgcg gtggtgttgt gttcgtggac 1560
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aaggccaaga agggcggcaa gatcgccgtg taa 1653

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<210> 55
 <211> 66
 <212> ADN
 <213> Virus de la fiebre aftosa

<400> 55
 gtaaagcaaa cactgaactt tgaccttctc aagttggctg gagacgttga gtccaatcct 60
 gggccc 66

<210> 56
 <211> 5
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Polinucleótido sintético
 <400> 56
 Gly Pro Gly Pro Gly
 1 5

<210> 57
 <211> 8
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 57
 Ser Ile Ile Asn Phe Glu Lys Leu
 1 5

<210> 58
 <211> 9
 <212> PRT
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<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 58
 Ser Pro Ser Tyr Ala Tyr His Gln Phe
 1 5

<210> 59
 <211> 10
 <212> PRT
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<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 59
 Tyr Val Tyr Val Ala Asp Val Ala Ala Lys
 1 5 10

<210> 60
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 <212> PRT
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<220>
 <223> Descripción de secuencia artificial: Péptido sintético

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 Tyr Glu Met Phe Asn Asp Lys Ser
 1 5

<210> 61
 <211> 9
 <212> PRT
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 <223> Descripción de secuencia artificial: Péptido sintético

<400> 61
 Tyr Glu Met Phe Asn Asp Lys Ser Phe
 1 5

<210> 62
 <211> 11
 <212> PRT
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<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<220>
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 <222> (3)..(3)
 <223> Pirrolisina

<220>
 <221> MOD_RES
 <222> (11)..(11)
 <223> Ile o Leu

<400> 62
 His Arg Xaa Glu Ile Phe Ser His Asp Phe Xaa
 1 5 10

<210> 63
 <211> 10
 <212> PRT
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<220>
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<220>
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 <223> Ile o Leu

<220>
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 <222> (5)..(5)
 <223> Ile o Leu

<220>
 <221> MOD_RES
 <222> (7)..(7)
 <223> Pirrolisina

<400> 63
 Phe Xaa Ile Glu Xaa Phe Xaa Glu Ser Ser
 1 5 10

<210> 64
 <211> 10
 <212> PRT
 <213> Secuencia artificial

<220>
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<220>
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 <222> (4)..(4)
 <223> Pirrolisina

<400> 64
 Asn Glu Ile Xaa Arg Glu Ile Arg Glu Ile
 1 5 10

<210> 65
 <211> 15
 <212> PRT
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<220>
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 <223> Ile o Leu

<220>
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 <222> (11)..(11)
 <223> Ile o Leu

<220>
 <221> MOD_RES
 <222> (15)..(15)
 <223> Selenocisteína

<400> 65
 Xaa Phe Lys Ser Ile Phe Glu Met Met Ser Xaa Asp Ser Ser Xaa
 1 5 10 15

<210> 66
 <211> 13
 <212> PRT
 <213> Secuencia artificial

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<220>
<223> Descripción de secuencia artificial: Péptido sintético

<220>
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<222> (11)..(11)
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<400> 66
Lys Asn Phe Leu Glu Asn Phe Ile Glu Ser Xaa Phe Ile
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<210> 67
<211> 15
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

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<222> (2)..(2)
<223> Pirrolisina

<220>
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<222> (14)..(14)
<223> Ile o Leu

<400> 67
Phe Xaa Glu Ile Phe Asn Asp Lys Ser Leu Asp Lys Phe Xaa Ile
1          5          10          15

<210> 68
<211> 9
<212> PRT
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<220>
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<220>
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<400> 68
Gln Cys Glu Ile Xaa Trp Ala Arg Glu
1          5

<210> 69
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<221> MOD_RES
<222> (4)..(4)
<223> Selenocisteína

<400> 69
Phe Ile Glu Xaa His Phe Trp Ile
1          5

<210> 70
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<220>
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<220>
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<400> 70
Phe Glu Trp Arg His Arg Xaa Thr Arg Xaa Xaa Arg
1          5          10

<210> 71
<211> 9

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<212> PRT
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<220>
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 <222> (8)..(8)
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<400> 71
 Gln Ile Glu Xaa Xaa Glu Ile Xaa Glu
 1 5

<210> 72
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<220>
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 <223> Ile o Leu

<400> 72
 Phe Xaa Glu Leu Phe Ile Ser Asx Xaa Ser Xaa Phe Ile Glu
 1 5 10

<210> 73
 <211> 11
 <212> PRT
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<220>
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<400> 73
 Ile Glu Phe Arg Xaa Glu Ile Phe Xaa Glu Phe
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<210> 74
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<220>
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 <222> (9)..(9)
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<400> 74
 Ile Glu Phe Arg Xaa Glu Ile Phe Xaa
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<210> 75
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<222> (4)..(4)

<223> Pirrolisina

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<222> (8)..(8)

<223> Ile o Leu

<400> 75

Glu Phe Arg Xaa Glu Ile Phe Xaa Glu
1 5

<210> 76

<211> 9

<212> PRT

<213> Secuencia artificial

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<223> Descripción de secuencia artificial: Péptido sintético

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<222> (3)..(3)

<223> Pirrolisina

<220>

<221> MOD_RES

<222> (7)..(7)

<223> Ile o Leu

<400> 76

Phe Arg Xaa Glu Ile Phe Xaa Glu Phe
1 5

<210> 77

<211> 9

<212> PRT

<213> Secuencia artificial

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<223> Descripción de secuencia artificial: Péptido sintético

<400> 77

Leu Leu Leu Leu Leu Val Val Val Val
1 5

<210> 78

<211> 9

<212> PRT

<213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Péptido sintético

<400> 78

Glu Lys Leu Ala Ala Tyr Leu Leu Leu
1 5

<210> 79

<211> 10

<212> PRT

<213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Péptido sintético

<400> 79

Lys Leu Ala Ala Tyr Leu Leu Leu Leu Leu
1 5 10

<210> 80

<211> 8

<212> PRT

<213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Péptido sintético

<400> 80

Phe Glu Lys Leu Ala Ala Tyr Leu
1 5

<210> 81

<211> 8

<212> PRT

<213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Péptido sintético

<400> 81

Ala Ala Tyr Leu Leu Leu Leu Leu
1 5

<210> 82
 <211> 9
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 82
 Tyr Leu Leu Leu Leu Val Val Val
 1 5

<210> 83
 <211> 10
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 83
 Val Val Val Val Ala Ala Tyr Ser Ile Asn
 1 5 10

<210> 84
 <211> 7
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 84
 Val Val Val Val Ala Ala Tyr
 1 5

<210> 85
 <211> 8
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 85
 Ala Tyr Ser Ile Asn Phe Glu Lys
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<210> 86
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 86
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 1 5 10 15

Asn Ile Trp His Val Gln Trp Asn Lys
 20 25

<210> 87
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 87
 Ile Glu Ala Leu Pro Tyr Val Phe Leu Gln Asp Gln Phe Glu Leu Arg
 1 5 10 15

Leu Leu Lys Gly Glu Gln Gly Asn Asn
 20 25

<210> 88
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 <212> PRT
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<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 88
 Asp Ser Glu Glu Thr Asn Thr Asn Tyr Leu His Tyr Cys His Phe His
 1 5 10 15

Trp Thr Trp Ala Gln Gln Thr Thr Val
 20 25

<210> 89
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 89
 Gly Met Leu Ser Gln Tyr Glu Leu Lys Asp Cys Ser Leu Gly Phe Ser
 1 5 10 15

Trp Asn Asp Pro Ala Lys Tyr Leu Arg
 20 25

<210> 90
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 90
 Val Arg Ile Asp Lys Phe Leu Met Tyr Val Trp Tyr Ser Ala Pro Phe
 1 5 10 15

Ser Ala Tyr Pro Leu Tyr Gln Asp Ala
 20 25

<210> 91
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 91
 Cys Val His Ile Tyr Asn Asn Tyr Pro Arg Met Leu Gly Ile Pro Phe
 1 5 10 15

Ser Val Met Val Ser Gly Phe Ala Met
 20 25

<210> 92
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 92
 Phe Thr Phe Lys Gly Asn Ile Trp Ile Glu Met Ala Gly Gln Phe Glu
 1 5 10 15

Arg Thr Trp Asn Tyr Pro Leu Ser Leu
 20 25

<210> 93
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 93
 Ala Asn Asp Asp Thr Pro Asp Phe Arg Lys Cys Tyr Ile Glu Asp His
 1 5 10 15

Ser Phe Arg Phe Ser Gln Thr Met Asn
 20 25

<210> 94
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 94
 Ala Ala Gln Tyr Ile Ala Cys Met Val Asn Arg Gln Met Thr Ile Val
 1 5 10 15

Tyr His Leu Thr Arg Trp Gly Met Lys
 20 25

<210> 95

<211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 95
 Lys Tyr Leu Lys Glu Phe Thr Gln Leu Leu Thr Phe Val Asp Cys Tyr
 1 5 10 15

Met Trp Ile Thr Phe Cys Gly Pro Asp
 20 25

<210> 96
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 96
 Ala Met His Tyr Arg Thr Asp Ile His Gly Tyr Trp Ile Glu Tyr Arg
 1 5 10 15

Gln Val Asp Asn Gln Met Trp Asn Thr
 20 25

<210> 97
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 97
 Thr His Val Asn Glu His Gln Leu Glu Ala Val Tyr Arg Phe His Gln
 1 5 10 15

Val His Cys Arg Phe Pro Tyr Glu Asn
 20 25

<210> 98
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 98
 Gln Thr Phe Ser Glu Cys Leu Phe Phe His Cys Leu Lys Val Trp Asn
 1 5 10 15

Asn Val Lys Tyr Ala Lys Ser Leu Lys
 20 25

<210> 99
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 99
 Ser Phe Ser Ser Trp His Tyr Lys Glu Ser His Ile Ala Leu Leu Met
 1 5 10 15

Ser Pro Lys Lys Asn His Asn Asn Thr
 20 25

<210> 100
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 100
 Ile Leu Asp Gly Ile Met Ser Arg Trp Glu Lys Val Cys Thr Arg Gln
 1 5 10 15

Thr Arg Tyr Ser Tyr Cys Gln Cys Ala
 20 25

<210> 101
 <211> 25

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<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 101
Tyr Arg Ala Ala Gln Met Ser Lys Trp Pro Asn Lys Tyr Phe Asp Phe
1          5          10          15

Pro Glu Phe Met Ala Tyr Met Pro Ile
          20          25

<210> 102
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 102
Pro Arg Pro Gly Met Pro Cys Gln His His Asn Thr His Gly Leu Asn
1          5          10          15

Asp Arg Gln Ala Phe Asp Asp Phe Val
          20          25

<210> 103
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 103
His Asn Ile Ile Ser Asp Glu Thr Glu Val Trp Glu Gln Ala Pro His
1          5          10          15

Ile Thr Trp Val Tyr Met Trp Cys Arg
          20          25

<210> 104
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 104
Ala Tyr Ser Trp Pro Val Val Pro Met Lys Trp Ile Pro Tyr Arg Ala
1          5          10          15

Leu Cys Ala Asn His Pro Pro Gly Thr
          20          25

<210> 105
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 105
His Val Met Pro His Val Ala Met Asn Ile Cys Asn Trp Tyr Glu Phe
1          5          10          15

Leu Tyr Arg Ile Ser His Ile Gly Arg
          20          25

<210> 106
<211> 484
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 106
Thr His Val Asn Glu His Gln Leu Glu Ala Val Tyr Arg Phe His Gln
1          5          10          15

Val His Cys Arg Phe Pro Tyr Glu Asn Ala Met His Tyr Gln Met Trp
          20          25          30

Asn Thr Tyr Arg Ala Ala Gln Met Ser Lys Trp Pro Asn Lys Tyr Phe
          35          40          45

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Asp Phe Pro Glu Phe Met Ala Tyr Met Pro Ile Cys Val His Ile Tyr
 50 55 60
 Asn Asn Tyr Pro Arg Met Leu Gly Ile Pro Phe Ser Val Met Val Ser
 65 70 75 80
 Gly Phe Ala Met Ala Tyr Ser Trp Pro Val Val Pro Met Lys Trp Ile
 85 90 95
 Pro Tyr Arg Ala Leu Cys Ala Asn His Pro Pro Gly Thr Ala Asn Asp
 100 105 110
 Asp Thr Pro Asp Phe Arg Lys Cys Tyr Ile Glu Asp His Ser Phe Arg
 115 120 125
 Phe Ser Gln Thr Met Asn Ile Glu Ala Leu Pro Tyr Val Phe Leu Gln
 130 135 140
 Asp Gln Phe Glu Leu Arg Leu Leu Lys Gly Glu Gln Gly Asn Asn Asp
 145 150 155 160
 Ser Glu Glu Thr Asn Thr Asn Tyr Leu His Tyr Cys His Phe His Trp
 165 170 175
 Thr Trp Ala Gln Gln Thr Thr Val Ile Leu Asp Gly Ile Met Ser Arg
 180 185 190
 Trp Glu Lys Val Cys Thr Arg Gln Thr Arg Tyr Ser Tyr Cys Gln Cys
 195 200 205
 Ala Phe Thr Phe Lys Gly Asn Ile Trp Ile Glu Met Ala Gly Gln Phe
 210 215 220
 Glu Arg Thr Trp Asn Tyr Pro Leu Ser Leu Ser Phe Ser Ser Trp His
 225 230 235 240
 Tyr Lys Glu Ser His Ile Ala Leu Leu Met Ser Pro Lys Lys Asn His
 245 250 255
 Asn Asn Thr Gln Thr Phe Ser Glu Cys Leu Phe Phe His Cys Leu Lys
 260 265 270
 Val Trp Asn Asn Val Lys Tyr Ala Lys Ser Leu Lys His Val Met Pro
 275 280 285
 His Val Ala Met Asn Ile Cys Asn Trp Tyr Glu Phe Leu Tyr Arg Ile
 290 295 300
 Ser His Ile Gly Arg His Asn Ile Ile Ser Asp Glu Thr Glu Val Trp
 305 310 315 320
 Glu Gln Ala Pro His Ile Thr Trp Val Tyr Met Trp Cys Arg Val Arg
 325 330 335
 Ile Asp Lys Phe Leu Met Tyr Val Trp Tyr Ser Ala Pro Phe Ser Ala
 340 345 350
 Tyr Pro Leu Tyr Gln Asp Ala Lys Tyr Leu Lys Glu Phe Thr Gln Leu
 355 360 365
 Leu Thr Phe Val Asp Cys Tyr Met Trp Ile Thr Phe Cys Gly Pro Asp
 370 375 380
 Ala Ala Gln Tyr Ile Ala Cys Met Val Asn Arg Gln Met Thr Ile Val
 385 390 395 400
 Tyr His Leu Thr Arg Trp Gly Met Lys Tyr Asn Tyr Ser Tyr Trp Ile
 405 410 415
 Ser Ile Phe Ala His Thr Met Trp Tyr Asn Ile Trp His Val Gln Trp
 420 425 430
 Asn Lys Gly Met Leu Ser Gln Tyr Glu Leu Lys Asp Cys Ser Leu Gly
 435 440 445
 Phe Ser Trp Asn Asp Pro Ala Lys Tyr Leu Arg Pro Arg Pro Gly Met
 450 455 460

Pro Cys Gln His His Asn Thr His Gly Leu Asn Asp Arg Gln Ala Phe
 465 470 475 480

Asp Asp Phe Val

<210> 107
 <211> 484
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 107
 Ile Glu Ala Leu Pro Tyr Val Phe Leu Gln Asp Gln Phe Glu Leu Arg
 1 5 10 15

Leu Leu Lys Gly Glu Gln Gly Asn Asn Ile Leu Asp Gly Ile Met Ser
 20 25 30

Arg Trp Glu Lys Val Cys Thr Arg Gln Thr Arg Tyr Ser Tyr Cys Gln
 35 40 45

Cys Ala His Val Met Pro His Val Ala Met Asn Ile Cys Asn Trp Tyr
 50 55 60

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

His Gln Leu Glu Ala Val Tyr Arg Phe His Gln Val His Cys Arg Phe
 85 90 95

Pro Tyr Glu Asn Phe Thr Phe Lys Gly Asn Ile Trp Ile Glu Met Ala
 100 105 110

Gly Gln Phe Glu Arg Thr Trp Asn Tyr Pro Leu Ser Leu Ala Met His
 115 120 125

Tyr Gln Met Trp Asn Thr Ser Phe Ser Ser Trp His Tyr Lys Glu Ser
 130 135 140

His Ile Ala Leu Leu Met Ser Pro Lys Lys Asn His Asn Asn Thr Val
 145 150 155 160

Arg Ile Asp Lys Phe Leu Met Tyr Val Trp Tyr Ser Ala Pro Phe Ser
 165 170 175

Ala Tyr Pro Leu Tyr Gln Asp Ala Gln Thr Phe Ser Glu Cys Leu Phe
 180 185 190

Phe His Cys Leu Lys Val Trp Asn Asn Val Lys Tyr Ala Lys Ser Leu
 195 200 205

Lys Tyr Arg Ala Ala Gln Met Ser Lys Trp Pro Asn Lys Tyr Phe Asp
 210 215 220

Phe Pro Glu Phe Met Ala Tyr Met Pro Ile Ala Tyr Ser Trp Pro Val
 225 230 235 240

Val Pro Met Lys Trp Ile Pro Tyr Arg Ala Leu Cys Ala Asn His Pro
 245 250 255

Pro Gly Thr Cys Val His Ile Tyr Asn Asn Tyr Pro Arg Met Leu Gly
 260 265 270

Ile Pro Phe Ser Val Met Val Ser Gly Phe Ala Met His Asn Ile Ile
 275 280 285

Ser Asp Glu Thr Glu Val Trp Glu Gln Ala Pro His Ile Thr Trp Val
 290 295 300

Tyr Met Trp Cys Arg Ala Ala Gln Tyr Ile Ala Cys Met Val Asn Arg
 305 310 315 320

Gln Met Thr Ile Val Tyr His Leu Thr Arg Trp Gly Met Lys Tyr Asn
 325 330 335

Tyr Ser Tyr Trp Ile Ser Ile Phe Ala His Thr Met Trp Tyr Asn Ile
340 345 350

Trp His Val Gln Trp Asn Lys Gly Met Leu Ser Gln Tyr Glu Leu Lys
355 360 365

Asp Cys Ser Leu Gly Phe Ser Trp Asn Asp Pro Ala Lys Tyr Leu Arg
370 375 380

Lys Tyr Leu Lys Glu Phe Thr Gln Leu Leu Thr Phe Val Asp Cys Tyr
385 390 395 400

Met Trp Ile Thr Phe Cys Gly Pro Asp Ala Asn Asp Asp Thr Pro Asp
405 410 415

Phe Arg Lys Cys Tyr Ile Glu Asp His Ser Phe Arg Phe Ser Gln Thr
420 425 430

Met Asn Asp Ser Glu Glu Thr Asn Thr Asn Tyr Leu His Tyr Cys His
435 440 445

Phe His Trp Thr Trp Ala Gln Gln Thr Thr Val Pro Arg Pro Gly Met
450 455 460

Pro Cys Gln His His Asn Thr His Gly Leu Asn Asp Arg Gln Ala Phe
465 470 475 480

Asp Asp Phe Val

<210> 108
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 108
Ser Ser Thr Pro Tyr Leu Tyr Tyr Gly Thr Ser Ser Val Ser Tyr Gln
1 5 10 15

Phe Pro Met Val Pro Gly Gly Asp Arg
20 25

<210> 109
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 109
Glu Met Ala Gly Lys Ile Asp Leu Leu Arg Asp Ser Tyr Ile Phe Gln
1 5 10 15

Leu Phe Trp Arg Glu Ala Ala Glu Pro
20 25

<210> 110
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 110
Ala Leu Lys Gln Arg Thr Trp Gln Ala Leu Ala His Lys Tyr Asn Ser
1 5 10 15

Gln Pro Ser Val Ser Leu Arg Asp Phe
20 25

<210> 111
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 111
Val Ser Ser His Ser Ser Gln Ala Thr Lys Asp Ser Ala Val Gly Leu
1 5 10 15

Lys Tyr Ser Ala Ser Thr Pro Val Arg
20 25

<210> 112
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 112
Lys Glu Ala Ile Asp Ala Trp Ala Pro Tyr Leu Pro Glu Tyr Ile Asp
1 5 10 15

His Val Ile Ser Pro Gly Val Thr Ser
20 25

<210> 113
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 113
Ser Pro Val Ile Thr Ala Pro Pro Ser Ser Pro Val Phe Asp Thr Ser
1 5 10 15

Asp Ile Arg Lys Glu Pro Met Asn Ile
20 25

<210> 114
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 114
Pro Ala Glu Val Ala Glu Gln Tyr Ser Glu Lys Leu Val Tyr Met Pro
1 5 10 15

His Thr Phe Phe Ile Gly Asp His Ala
20 25

<210> 115
<211> 22
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 115
Met Ala Asp Leu Asp Lys Leu Asn Ile His Ser Ile Ile Gln Arg Leu
1 5 10 15

Leu Glu Val Arg Gly Ser
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<210> 116
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 116
Ala Ala Ala Tyr Asn Glu Lys Ser Gly Arg Ile Thr Leu Leu Ser Leu
1 5 10 15

Leu Phe Gln Lys Val Phe Ala Gln Ile
20 25

<210> 117
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 117
Lys Ile Glu Glu Val Arg Asp Ala Met Glu Asn Glu Ile Arg Thr Gln
1 5 10 15

Leu Arg Arg Gln Ala Ala Ala His Thr
20 25

<210> 118
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 118
Asp Arg Gly His Tyr Val Leu Cys Asp Phe Gly Ser Thr Thr Asn Lys
1 5 10 15

Phe Gln Asn Pro Gln Thr Glu Gly Val
20 25

<210> 119
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 119
Gln Val Asp Asn Arg Lys Ala Glu Ala Glu Glu Ala Ile Lys Arg Leu
1 5 10 15

Ser Tyr Ile Ser Gln Lys Val Ser Asp
20 25

<210> 120
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 120
Cys Leu Ser Asp Ala Gly Val Arg Lys Met Thr Ala Ala Val Arg Val
1 5 10 15

Met Lys Arg Gly Leu Glu Asn Leu Thr
20 25

<210> 121
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 121
Leu Pro Pro Arg Ser Leu Pro Ser Asp Pro Phe Ser Gln Val Pro Ala
1 5 10 15

Ser Pro Gln Ser Gln Ser Ser Ser Gln
20 25

<210> 122
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 122
Glu Leu Val Leu Glu Asp Leu Gln Asp Gly Asp Val Lys Met Gly Gly
1 5 10 15

Ser Phe Arg Gly Ala Phe Ser Asn Ser
20 25

<210> 123
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 123
Val Thr Met Asp Gly Val Arg Glu Glu Asp Leu Ala Ser Phe Ser Leu
1 5 10 15

Arg Lys Arg Trp Glu Ser Glu Pro His

20

25

<210> 124
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 124
 Ile Val Gly Val Met Phe Phe Glu Arg Ala Phe Asp Glu Gly Ala Asp
 1 5 10 15

Ala Ile Tyr Asp His Ile Asn Glu Gly
 20 25

<210> 125
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 125
 Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Ser Pro Thr Pro
 1 5 10 15

Thr Pro Ile Thr Thr Thr Thr Thr Val
 20 25

<210> 126
 <211> 25
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 126
 Gln Glu Glu Met Pro Pro Arg Pro Cys Gly Gly His Thr Ser Ser Ser
 1 5 10 15

Leu Pro Lys Ser His Leu Glu Pro Ser
 20 25

<210> 127
 <211> 21
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 127
 Pro Asn Ile Gln Ala Val Leu Leu Pro Lys Lys Thr Asp Ser His His
 1 5 10 15

Lys Ala Lys Gly Lys
 20

<210> 128
 <211> 9
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 128
 Asn Leu Val Pro Met Val Ala Thr Val
 1 5

<210> 129
 <211> 9
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Descripción de secuencia artificial: Péptido sintético

<400> 129
 Cys Leu Gly Gly Leu Leu Thr Met Val
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<210> 130
 <211> 9
 <212> PRT
 <213> Secuencia artificial

<220>

<223> Descripción de secuencia artificial: Péptido sintético

<400> 130
Gly Ile Leu Gly Phe Val Phe Thr Leu
1 5

<210> 131
<211> 9
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 131
Leu Leu Phe Gly Tyr Pro Val Tyr Val
1 5

<210> 132
<211> 9
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 132
Gly Leu Cys Thr Leu Val Ala Met Leu
1 5

<210> 133
<211> 9
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 133
Trp Leu Ser Leu Leu Val Pro Phe Val
1 5

<210> 134
<211> 8
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 134
Phe Leu Leu Thr Arg Ile Cys Thr
1 5

<210> 135
<211> 8
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 135
Trp Gln Ala Gly Ile Leu Ala Arg
1 5

<210> 136
<211> 8
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 136
Gln Gly Gln Asn Leu Lys Tyr Gln
1 5

<210> 137
<211> 25
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 137
Trp Gln Ala Gly Ile Leu Ala Arg Asn Leu Val Pro Met Val Ala Thr
1 5 10 15

Val Gln Gly Gln Asn Leu Lys Tyr Gln
20 25

<210> 138

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<211> 20
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 138
gtggtgtgca gcgagaatag                                     20

<210> 139
<211> 22
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 139
cgctcgttgt agatgtcggt ag                                   22

<210> 140
<211> 15
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Sonda sintética

<400> 140
ttcatgcccg tggttg                                         15

<210> 141
<211> 22
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 141
gtttttgatc cagacccaga tg                                   22

<210> 142
<211> 21
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 142
gcccatatt cagagcgagt a                                     21

<210> 143
<211> 14
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Sonda sintética

<400> 143
tcaccaggat ccac                                           14

<210> 144
<211> 17
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Sonda sintética

<400> 144
ccttgacat gccggag                                         17

<210> 145
<211> 17
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 145
acagagcctc gcctttg                                         17

<210> 146
<211> 12
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Sonda sintética

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<400> 146
gtgagctggc gg                                     12

<210> 147
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<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 147
ctgaaagctc ggtttgctaa tg                           22

<210> 148
<211> 21
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 148
ccatgctgga agagacaatc t                             21

<210> 149
<211> 15
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Sonda sintética

<400> 149
tggcgctgac cgata                                    15

<210> 150
<211> 22
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 150
tatgcctatc ctgtctcctc tg                           22

<210> 151
<211> 22
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Cebador sintético

<400> 151
gctaatgcag ctaagtcctc tc                           22

<210> 152
<211> 15
<212> ADN
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Sonda sintética

<400> 152
tgaccgtgcc ttctg                                    15

<210> 153
<211> 9
<212> PRT
<213> Secuencia artificial

<220>
<223> Descripción de secuencia artificial: Péptido sintético

<400> 153
Ser Pro Ser Tyr Val Tyr His Gln Phe
1          5

<210> 154
<211> 9
<212> PRT
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<220>
<223> Descripción de secuencia artificial: Péptido sintético

<220>
<221> MOD_RES
<222> (6)..(6)
<223> Selenocisteína

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 Asp Leu Met Gly Tyr Ile Pro Ala Val
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<400> 158
 Phe Leu Pro Ser Asp Phe Phe Pro Ser Val
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 Phe Leu Leu Ser Leu Gly Ile His Leu
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 1 5 10

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 1 5 10

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Ser Ile Asn Phe Glu Lys Leu
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