

LISTADO DE SECUENCIAS

<110> MACROGENICS, INC
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<120> MOLÉCULAS DE UNIÓN A LAG-3 Y MÉTODOS DE USO DE LAS MISMAS

<130> 1301.0121PCT

<150> US 62/255,094
 <151> 2015-11-13

<150> US 62/172,277
 <151> 2015-06-08

<160> 140

<170> PatentIn versión 3.5

<210> 1
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 <213> Homo sapiens

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 <222> (1)..(217)
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<220>
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 <222> (217)..(217)
 <223> Xaa217 es Lisina (K) o Ausente

<400> 1

Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys
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Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val
			20					25					30		
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr
		35					40					45			
Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu
	50					55					60				

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
 65 70 75 80
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 85 90 95
 Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
 100 105 110
 Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
 115 120 125
 Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
 130 135 140
 Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
 145 150 155 160
 Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
 165 170 175
 Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
 180 185 190
 Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
 195 200 205
 Lys Ser Leu Ser Leu Ser Pro Gly Xaa
 210 215

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 <222> (216)..(216)
 <223> Xaa216 es Lisina (K) o Ausente

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 Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 1 5 10 15
 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 20 25 30
 Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val
 35 40 45

Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln
50						55					60				
Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Val	His	Gln
65					70					75				80	
Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Gly
				85					90					95	
Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Thr	Lys	Gly	Gln	Pro
			100					105					110		
Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu	Met	Thr
		115					120					125			
Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser
	130					135					140				
Asp	Ile	Ser	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr
145					150					155					160
Lys	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr
				165					170					175	
Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe
			180					185					190		
Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys
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Ser	Leu	Ser	Leu	Ser	Pro	Gly	Xaa								
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 <223> IgG3 Fc

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 <222> (217)..(217)
 <223> Xaa217 es Lisina (K) o Ausente

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 1 5 10 15

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Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
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Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Lys Trp Tyr
      35                      40                      45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
      50                      55                      60

Gln Tyr Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Leu His
      65                      70                      75                      80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
      85                      90                      95

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

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
      115                     120                     125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
      130                     135                     140

Ser Asp Ile Ala Val Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn Asn
      145                     150                     155                     160

Tyr Asn Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
      165                     170                     175

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile
      180                     185                     190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln
      195                     200                     205

Lys Ser Leu Ser Leu Ser Pro Gly Xaa
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<213> Homo sapiens

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<222> (1)..(217)
<223> Región Fc de IgG4

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<222> (217)..(217)
<223> Xaa217 es Lisina (K) o Ausente

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

Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
 35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 50 55 60

Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
 65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 85 90 95

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

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met
 115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
 130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
 145 150 155 160

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
 165 170 175

Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val
 180 185 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
 195 200 205

Lys Ser Leu Ser Leu Ser Leu Gly Xaa
 210 215

<210> 5

<211> 525

<212> PRT

<213> Homo sapiens

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(525)

<223> LAG-3

<400> 5

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Val Ala Pro Val Lys Pro Leu Gln Pro Gly Ala Glu Val Pro Val Val
 20 25 30

Trp Ala Gln Glu Gly Ala Pro Ala Gln Leu Pro Cys Ser Pro Thr Ile
 35 40 45

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

His Gln Pro Asp Ser Gly Pro Pro Ala Ala Ala Pro Gly His Pro Leu
 65 70 75 80

Ala Pro Gly Pro His Pro Ala Ala Pro Ser Ser Trp Gly Pro Arg Pro
 85 90 95

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

Arg Leu Pro Leu Gln Pro Arg Val Gln Leu Asp Glu Arg Gly Arg Gln
 115 120 125

Arg Gly Asp Phe Ser Leu Trp Leu Arg Pro Ala Arg Arg Ala Asp Ala
 130 135 140

Gly Glu Tyr Arg Ala Ala Val His Leu Arg Asp Arg Ala Leu Ser Cys
 145 150 155 160

Arg Leu Arg Leu Arg Leu Gly Gln Ala Ser Met Thr Ala Ser Pro Pro
 165 170 175

Gly Ser Leu Arg Ala Ser Asp Trp Val Ile Leu Asn Cys Ser Phe Ser
 180 185 190

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

Gly Arg Val Pro Val Arg Glu Ser Pro His His His Leu Ala Glu Ser
 210 215 220

Phe Leu Phe Leu Pro Gln Val Ser Pro Met Asp Ser Gly Pro Trp Gly
 225 230 235 240

Cys Ile Leu Thr Tyr Arg Asp Gly Phe Asn Val Ser Ile Met Tyr Asn
 245 250 255

Leu Thr Val Leu Gly Leu Glu Pro Pro Thr Pro Leu Thr Val Tyr Ala
 260 265 270

Gly Ala Gly Ser Arg Val Gly Leu Pro Cys Arg Leu Pro Ala Gly Val
 275 280 285

Gly Thr Arg Ser Phe Leu Thr Ala Lys Trp Thr Pro Pro Gly Gly Gly
 290 295 300
 Pro Asp Leu Leu Val Thr Gly Asp Asn Gly Asp Phe Thr Leu Arg Leu
 305 310 315 320
 Glu Asp Val Ser Gln Ala Gln Ala Gly Thr Tyr Thr Cys His Ile His
 325 330 335
 Leu Gln Glu Gln Gln Leu Asn Ala Thr Val Thr Leu Ala Ile Ile Thr
 340 345 350
 Val Thr Pro Lys Ser Phe Gly Ser Pro Gly Ser Leu Gly Lys Leu Leu
 355 360 365
 Cys Glu Val Thr Pro Val Ser Gly Gln Glu Arg Phe Val Trp Ser Ser
 370 375 380
 Leu Asp Thr Pro Ser Gln Arg Ser Phe Ser Gly Pro Trp Leu Glu Ala
 385 390 395 400
 Gln Glu Ala Gln Leu Leu Ser Gln Pro Trp Gln Cys Gln Leu Tyr Gln
 405 410 415
 Gly Glu Arg Leu Leu Gly Ala Ala Val Tyr Phe Thr Glu Leu Ser Ser
 420 425 430
 Pro Gly Ala Gln Arg Ser Gly Arg Ala Pro Gly Ala Leu Pro Ala Gly
 435 440 445
 His Leu Leu Leu Phe Leu Ile Leu Gly Val Leu Ser Leu Leu Leu Leu
 450 455 460
 Val Thr Gly Ala Phe Gly Phe His Leu Trp Arg Arg Gln Trp Arg Pro
 465 470 475 480
 Arg Arg Phe Ser Ala Leu Glu Gln Gly Ile His Pro Pro Gln Ala Gln
 485 490 495
 Ser Lys Ile Glu Glu Leu Glu Gln Glu Pro Glu Pro Glu Pro Glu Pro
 500 505 510
 Glu Pro Glu Pro Glu Pro Glu Pro Glu Gln Leu
 515 520 525

<210> 6
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 <213> Mus musculus

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 <222> (1)..(120)
 <223> LAG-3 mAb 1 VH

<400> 6

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

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

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Asp Asp Phe
 50 55 60

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

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

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

Gly Thr Ser Val Thr Val Ser Ser
 115 120

<210> 7

<211> 360

<212> ADN

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<223> Polinucleótido que codifica LAG-3 mAb 1 VH

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 tcctgcaagg cttctgggta taccttcaga aactatggaa tgaactgggt gaagcaggct 120
 ccaggaaagg ttttaaagtg gatgggctgg ataaacacct aactggaga gtcaacatat 180
 gctgatgact tcgagggacg gtttgccttc tctttgggaa cctctgccag cactgcctat 240
 ttgcagatca acatcctcaa aaatgaggac acggctacat atttctgtgc aagagaatcc 300
 ctctatgatt actattctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 8

<211> 5

<212> PRT

<213> Mus musculus

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<222> (1)..(5)

<223> LAG-3 mAb 1 VH CDR 1

<400> 8

Asn Tyr Gly Met Asn
 1 5

<210> 9

<211> 17

<212> PRT

<213> Mus musculus

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<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(17)

<223> LAG-3 mAb 1 VH CDR2

<400> 9

Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Asp Asp Phe Glu
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Gly

<210> 10

<211> 11

<212> PRT

<213> Mus musculus

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<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(11)

<223> LAG-3 mAb 1 VH CDR3

<400> 10

Glu Ser Leu Tyr Asp Tyr Tyr Ser Met Asp Tyr
 1 5 10

<210> 11

<211> 112

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(112)

<223> LAG-3 mAb 1 VL

<400> 11

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

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

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

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

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

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

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

<210> 12
 <211> 336
 <212> ADN
 <213> Mus musculus

<220>
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 <223> Polinucleótido que codifica LAG-3 mAb 1 VL

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 ttgttacaga ggccaggcca gtctccagag cgcctaactc atctgggtgac tgaactggac 180
 tctggagtcc ctgacagggt cactggcagt ggatcaggga cagatttcac actgaaaatc 240
 agcagagtgg aggctgagga tttgggagtt tattattgct ggcaaggtag acattttccg 300
 tacacgttcg gagggggggac caagctggaa ataaaa 336

<210> 13
 <211> 16
 <212> PRT
 <213> Mus musculus

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 <222> (1)..(16)
 <223> LAG-3 mAb 1 VL CDR1

<400> 13
 Lys Ser Ser Gln Ser Leu Leu His Ser Asp Gly Lys Thr Tyr Leu Asn
 1 5 10 15

<210> 14
 <211> 7
 <212> PRT
 <213> Mus musculus

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 <222> (1)..(7)
 <223> LAG-3 mAb 1 VL CDR2

<400> 14
 Leu Val Ser Glu Leu Asp Ser
 1 5

<210> 15
 <211> 9
 <212> PRT
 <213> Mus musculus

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 <222> (1)..(9)
 <223> LAG-3 mAb 1 VL CDR3

<400> 15
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<210> 16
 <211> 120
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> hLAG-3 mAb 1 VH1

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 1 5 10 15

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

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

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Asp Asp Phe
 50 55 60

Glu Gly Arg Phe Val Phe Ser Met Asp Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80

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

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

Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 17
 <211> 360
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Polinucleótido que codifica hLAG-3 mAb 1 VH1

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 20 25 30
 Gly Ala Ala Ala Ala Ala Gly Cys Cys Thr Gly Gly Cys Gly Cys Cys
 35 40 45
 Thr Cys Cys Gly Thr Gly Ala Ala Ala Gly Thr Gly Thr Cys Cys Thr
 50 55 60
 Gly Thr Ala Ala Gly Gly Cys Ala Thr Cys Thr Gly Gly Gly Thr Ala
 65 70 75 80
 Thr Ala Cys Gly Thr Thr Cys Ala Cys Ala Ala Ala Thr Thr Ala Thr
 85 90 95
 Gly Gly Thr Ala Thr Gly Ala Ala Cys Thr Gly Gly Gly Thr Gly Cys
 100 105 110
 Gly Ala Cys Ala Gly Gly Cys Ala Cys Cys Ala Gly Gly Gly Cys Ala
 115 120 125
 Gly Gly Gly Ala Cys Thr Gly Gly Ala Ala Thr Gly Gly Ala Thr Gly
 130 135 140
 Gly Gly Gly Thr Gly Gly Ala Thr Cys Ala Ala Thr Ala Cys Thr Thr
 145 150 155 160
 Ala Thr Ala Cys Ala Gly Gly Cys Gly Ala Gly Ala Gly Thr Ala Cys
 165 170 175
 Thr Thr Ala Thr Gly Cys Thr Gly Ala Cys Gly Ala Thr Thr Thr Cys
 180 185 190
 Gly Ala Gly Gly Gly Cys Ala Gly Ala Thr Thr Thr Gly Thr Cys Thr
 195 200 205
 Thr Cys Thr Cys Cys Ala Thr Gly Gly Ala Cys Ala Cys Cys Ala Gly
 210 215 220

Cys Gly Cys Thr Ala Gly Thr Ala Cys Cys Gly Cys Thr Thr Ala Thr
 225 230 235 240
 Cys Thr Cys Cys Ala Gly Ala Thr Thr Ala Gly Thr Thr Cys Thr Cys
 245 250 255
 Thr Cys Ala Ala Gly Gly Cys Gly Gly Ala Gly Gly Ala Cys Ala Cys
 260 265 270
 Ala Gly Cys Thr Gly Thr Thr Thr Ala Thr Thr Ala Thr Thr Gly Thr
 275 280 285
 Gly Cys Cys Cys Gly Cys Gly Ala Gly Ala Gly Thr Thr Thr Gly Thr
 290 295 300
 Ala Thr Gly Ala Cys Thr Ala Cys Thr Ala Thr Ala Gly Cys Ala Thr
 305 310 315 320
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 340 345 350
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 355 360

<210> 18
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 <212> PRT
 <213> Secuencia Artificial

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 <223> hLAG-3 mAb 1 VH2

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

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

Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 19
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 <212> ADN
 <213> Secuencia Artificial

<220>
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 ctccagatta gttctctcaa ggcggaggac acagctgttt atttctgtgc ccgcgagagt 300
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<210> 20
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 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> hLAG-3 mAb 1 VL1

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

<210> 21
 <211> 336
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Polinucleótido que codifica hLAG-3 mAb 1 VL1

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 cttctgcaga aaccaggcca aagtccagag agattgatct acctcgtttc agaactcgac 180
 agtggagtgc ccgatcgctt ctcagggtcc ggctctggga ctgattttac tctcaagatc 240
 tcaagagtgg aggccgagga cgtcgggggtt tactactggtt ggcagggtac ccacttcct 300
 tatacatttg gcggaggcac aaaagtggag attaaa 336

<210> 22
 <211> 112
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> hLAG-3 mAb 1 VL2

<400> 22
 Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
 1 5 10 15
 Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu His Ser
 20 25 30
 Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro Gly Gln Ser
 35 40 45
 Pro Glu Arg Leu Ile Tyr Leu Val Ser Glu Leu Asp Ser Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly
 85 90 95
 Thr His Phe Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105 110

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 <212> ADN
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<220>
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cttctgcaga gaccaggcca aagtccagag agattgatct acctcgtttc agaactcgac 180
agtggagtgc ccgatcgctt ctcagggtcc ggctctggga ctgattttac tctcaagatc 240
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<210> 24
<211> 112
<212> PRT
<213> Secuencia Artificial

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<220>
<223> hLAG-3 mAb 1 VL3

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<400> 24
Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
1 5 10 15

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

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

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

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

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

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

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<210> 25
<211> 336
<212> ADN
<213> Secuencia Artificial

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<220>
<223> Polinucleótido que codifica hLAG-3 mAb 1 VL3

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<400> 25
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atttcctgta aatcatccca gtccctcctg catagcgatg gaaagaccta tttgaactgg 120
cttctgcaga aaccaggcca accgccagag agattgatct acctcgtttc agaactcgac 180
agtggagtgc ccgatcgctt ctcagggtcc ggctctggga ctgattttac tctcaagatc 240
tcaagagtgg aggccgagga cgtcgggggtt tactactggtt ggcagggtac ccacttcct 300

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tatacatttg gcggaggcac aaaagtggag attaaa

336

<210> 26
 <211> 112
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> hLAG-3 mAb 1 VL4

<400> 26
 Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
 1 5 10 15
 Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu His Ser
 20 25 30
 Asp Ala Lys Thr Tyr Leu Asn Trp Leu Leu Gln Lys Pro Gly Gln Pro
 35 40 45
 Pro Glu Arg Leu Ile Tyr Leu Val Ser Glu Leu Asp Ser Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly
 85 90 95
 Thr His Phe Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105 110

<210> 27
 <211> 336
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Polinucleótido que codifica hLAG-3 mAb 1 VL4

<400> 27
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 atttcctgta aatcatccca gtccctcctg catagcgatg caaagaccta tttgaactgg 120
 cttctgcaga aaccaggcca accgccagag agattgatct acctcgtttc agaactcgac 180
 agtggagtgc ccgatcgctt ctcaggggtcc ggctctggga ctgattttac tctcaagatc 240
 tcaagagtgg aggccgagga cgtcgggggt tactactggt ggcagggtac ccacttcct 300
 tatacatttg gcggaggcac aaaagtggag attaaa 336

<210> 28
 <211> 16
 <212> PRT
 <213> Secuencia Artificial

<220>

<223> hLAG-3 mAb 1 VL4 CDR1

<400> 28

Lys	Ser	Ser	Gln	Ser	Leu	Leu	His	Ser	Asp	Ala	Lys	Thr	Tyr	Leu	Asn
1				5					10					15	

<210> 29

<211> 121

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(121)

<223> LAG-3 mAb 2 VH

<400> 29

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

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

Asn	Ile	His	Trp	Leu	Arg	Gln	Ser	His	Gly	Glu	Ser	Leu	Glu	Trp	Ile
		35					40					45			

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

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

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

Ala	Arg	Trp	His	Arg	Asn	Tyr	Phe	Gly	Pro	Trp	Phe	Ala	Tyr	Trp	Gly
			100					105					110		

Gln	Gly	Thr	Pro	Val	Thr	Val	Ser	Ala
		115					120	

<210> 30

<211> 363

<212> ADN

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<223> Polinucleótido que codifica LAG-3 mAb 2 VH

<400> 30

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gaggtccagc ttcagcagtc aggacctgag ctggtgaaac ctggggcctc agtgaagatt 60
tcctgcaaga cttctggata cacatttact gactacaaca tacactgggtt gaggcagagc 120
catggagaga gccttgagtg gattggatat atttatcctt acagtgggtga tattggatac 180
aaccagaagt tcaagaacag ggccacattg actgtagaca attcctccag cacagcctac 240
atggatctcc gcagcctgac atctgaagac tctgcagtct tttactgtgc aagatggcac 300
aggaactact ttggcccctg gtttgcttac tggggccaag ggactccggt cactgtctct 360
gca 363

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<210> 31
<211> 5
<212> PRT
<213> Mus musculus

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(5)
<223> LAG-3 mAb 2 VH CDR 1

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```

<400> 31
Asp Tyr Asn Ile His
1 5

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```

<210> 32
<211> 17
<212> PRT
<213> Mus musculus

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(17)
<223> LAG-3 mAb 2 VH CDR2

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```

<400> 32
Tyr Ile Tyr Pro Tyr Ser Gly Asp Ile Gly Tyr Asn Gln Lys Phe Lys
1 5 10 15

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Asn

```

<210> 33
<211> 12
<212> PRT
<213> Mus musculus

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(12)
<223> LAG-3 mAb 2 VH CDR3

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```

<400> 33
Trp His Arg Asn Tyr Phe Gly Pro Trp Phe Ala Tyr
1 5 10

```

<210> 34
 <211> 111
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(111)
 <223> LAG-3 mAb 2 VL

<400> 34
 Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Gln Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Val Asp Tyr Asp
 20 25 30
 Gly Glu Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
 35 40 45
 Lys Leu Leu Ile Tyr Val Val Ser Asn Leu Glu Ser Gly Ile Pro Ala
 50 55 60
 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
 65 70 75 80
 Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Ser Ser
 85 90 95
 Glu Asp Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
 100 105 110

<210> 35
 <211> 333
 <212> ADN
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <223> Polinucleótido que codifica LAG-3 mAb 2 VL

<400> 35
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 caacagaaac caggacagcc acccaaactc ctcatattatg ttgtatccaa tctagaatct 180
 gggatcccgag ccagggttag tggcagtggg tctgggacag acttcaccct caacatccat 240
 cctgtggagg aggaggatgc tgcaacctat tactgtcagc aaagtagtga ggatccgctc 300
 acgttcggtg ctgggaccaa gctggagctg aaa 333

<210> 36
 <211> 15
 <212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(15)

<223> LAG-3 mAb 2 VL CDR1

<400> 36

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

<210> 37

<211> 7

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(7)

<223> LAG-3 mAb 2 VL CDR2

<400> 37

Val	Val	Ser	Asn	Leu	Glu	Ser
1				5		

<210> 38

<211> 9

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(9)

<223> LAG-3 mAb 2 VL CDR3

<400> 38

Gln	Gln	Ser	Ser	Glu	Asp	Pro	Leu	Thr
1				5				

<210> 39

<211> 121

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(121)

<223> LAG-3 mAb 3 VH

<400> 39

Glu Val Arg Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30
 Asn Ile His Trp Val Arg Gln Ser His Gly Gln Ser Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Tyr Pro Tyr Asn Gly Asp Thr Gly Tyr Asn Gln Lys Phe
 50 55 60
 Lys Thr Lys Ala Thr Leu Thr Val Asp Asn Ser Ser Asn Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Arg Ser Leu Ala Ser Glu Asp Ser Ala Val Tyr Tyr Cys
 85 90 95
 Thr Arg Trp Ser Arg Asn Tyr Phe Gly Pro Trp Phe Ala Tyr Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ala
 115 120

<210> 40
 <211> 363
 <212> ADN
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <223> Polinucleótido que codifica LAG-3 mAb 3 VH

<400> 40
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 tcctgcaagg cttctggata cacattcact gactacaaca ttcactgggt gaggcagagc 120
 catggacaga gccttgagtg gattggatat atttatcctt ataatgggtga tactggctac 180
 aaccagaagt tcaagaccaa ggccacattg actgtagaca attcctccaa cacagcctac 240
 atggaactcc gcagcctggc atctgaagac tctgcagtct attactgtac aagatggagc 300
 aggaactact ttggcccctg gtttgcttac tggggccaag ggactctggt cactgtctct 360
 gca 363

<210> 41
 <211> 5
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(5)
 <223> LAG-3 mAb 3 VH CDR 1
 <400> 41

Asp Tyr Asn Ile His
1 5

<210> 42
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(17)
<223> LAG-3 mAb 3 VH CDR2

<400> 42
Tyr Ile Tyr Pro Tyr Asn Gly Asp Thr Gly Tyr Asn Gln Lys Phe Lys
1 5 10 15

Thr

<210> 43
<211> 12
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(12)
<223> LAG-3 mAb 3 VH CDR3

<400> 43
Trp Ser Arg Asn Tyr Phe Gly Pro Trp Phe Ala Tyr
1 5 10

<210> 44
<211> 111
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(111)
<223> LAG-3 mAb 3 VL

<400> 44
Asp Ile Val Leu Thr Gln Ser Pro Thr Ser Leu Ala Val Ser Leu Gly
1 5 10 15

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

Gly Asp Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro

35

40

45

Lys Leu Leu Ile Tyr Ala Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
 50 55 60

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

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

Glu Asp Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
 100 105 110

<210> 45
 <211> 333
 <212> ADN
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <223> Polinucleótido que codifica LAG-3 mAb 3 VL

<400> 45
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 atctcctgca aggccagcca aagtgttgat tatgatgggtg atagttatat gaactggtat 120
 caacagaaac caggacagcc acccaaactc ctcatctatg ctgcatccaa tctagaatct 180
 gggatccag ccagggttag tggcagtggg tctgggacag acttcaccct caacatccat 240
 cctgtggagg aggaggatgc tgcaacctat tactgtcagc aaagtagtga ggatccgctc 300
 acgttcggtg ctgggaccaa gctggagctg aaa 333

<210> 46
 <211> 15
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(15)
 <223> LAG-3 mAb 3 VL CDR1

<400> 46
 Lys Ala Ser Gln Ser Val Asp Tyr Asp Gly Asp Ser Tyr Met Asn
 1 5 10 15

<210> 47
 <211> 7
 <212> PRT
 <213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(7)

<223> LAG-3 mAb 3 VL CDR2

<400> 47

Ala Ala Ser Asn Leu Glu Ser
1 5

<210> 48

<211> 9

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(9)

<223> LAG-3 mAb 3 VL CDR3

<400> 48

Gln Gln Ser Ser Glu Asp Pro Leu Thr
1 5

<210> 49

<211> 121

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(121)

<223> LAG-3 mAb 4 VH

<400> 49

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

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

Asn Ile His Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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

Ala Arg Trp Asn Met Asn Tyr Phe Gly Pro Trp Phe Ala Tyr Trp Gly

	100	105	110
Gln Gly Thr Leu Val Thr Val Ser Ala			
	115	120	

<210> 50
 <211> 363
 <212> ADN
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <223> Polinucleótido que codifica LAG-3 mAb 4 VH

<400> 50
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 tcctgcaaga cttctggata cactttcact gactacaaca tacactgggt gaagcagagc 120
 catggaaaga gccttgagtg gattggatat atttatcctt acaatgggtga tgctggctac 180
 aaccagaact tcaagaccaa ggccacattg actgtagaca attcctccag cacagcctac 240
 atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagatggaac 300
 atgaactact ttggcccctg gtttgcttac tggggccaag ggactctggt cactgtctct 360
 gcg 363

<210> 51
 <211> 5
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(5)
 <223> LAG-3 mAb 4 VH CDR 1

<400> 51
 Asp Tyr Asn Ile His
 1 5

<210> 52
 <211> 17
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(17)
 <223> LAG-3 mAb 4 VH CDR2

<400> 52
 Tyr Ile Tyr Pro Tyr Asn Gly Asp Ala Gly Tyr Asn Gln Asn Phe Lys
 1 5 10 15
 Thr

<210> 53
 <211> 12
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(12)
 <223> LAG-3 mAb 4 VH CDR3

<400> 53
 Trp Asn Met Asn Tyr Phe Gly Pro Trp Phe Ala Tyr
 1 5 10

<210> 54
 <211> 111
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(111)
 <223> LAG-3 mAb 4 VL

<400> 54
 Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
 1 5 10 15
 Gln Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Val Asp Tyr Asp
 20 25 30
 Gly Val Thr Tyr Ile Asn Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
 35 40 45
 Lys Leu Leu Ile Phe Ala Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
 50 55 60
 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
 65 70 75 80
 Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Ser Asn
 85 90 95
 Glu Asp Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
 100 105 110

<210> 55
 <211> 333
 <212> ADN
 <213> Mus musculus
 <220>

<221> CARACTERÍSTICA_MISCELÁNEA

<223> Polinucleótido que codifica LAG-3 mAb 4 VL

<400> 55

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gacattgtgc tgacccaatc tccagcttct ttggctgtgt ctctagggca gagggccacc 60
atctcctgca aggccagcca aagtgttgat tatgatgggtg ttacttatat caactgggtac 120
caacagaaac caggacagcc acccaaactc ctcatctttg ctgcatccaa tctagaatct 180
gggatccag ccaggtttag tggcagtggg tctgggacag acttcaccct caacatccat 240
cctgtggagg aggaggatgc tgcaacctat tactgtcagc aaagtaatga ggatccgctc 300
acgttcggtg ctgggaccaa gctggagctg aaa 333

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<210> 56

<211> 15

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(15)

<223> LAG-3 mAb 4 VL CDR1

<400> 56

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

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<210> 57

<211> 7

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(7)

<223> LAG-3 mAb 4 VL CDR2

<400> 57

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Ala Ala Ser Asn Leu Glu Ser
1             5

```

<210> 58

<211> 9

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(9)

<223> LAG-3 mAb 4 VL CDR3

<400> 58

Gln Gln Ser Asn Glu Asp Pro Leu Thr
1 5

<210> 59
<211> 121
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(121)
<223> LAG-3 mAb 5 VH

<400> 59
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

Asn Ile His Trp Val Lys Gln Ser Pro Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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

Ala Arg Trp His Arg Asn Tyr Phe Gly Pro Trp Phe Ala Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ala
115 120

<210> 60
<211> 363
<212> ADN
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<223> Polinucleótido que codifica LAG-3 mAb 5 VH

<400> 60
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tcctgcaaag cttctggata cacatttact gactacaaca tacactgggt gaagcagagc 120
cctggaaaga gccttgaatg gattggatat atttatcctt acagtgggtga ttttggatac 180
aaccagaagt tcaagagcaa ggccacattg actgtagaca attcctccag cacagcctac 240
atggatctcc gcagcctgac atctgaggac tctgcagtct tttactgtgc aagatggcac 300

aggaactact ttggcccctg gtttgcttac tggggccaag ggactctggt cactgtctct 360
gca 363

<210> 61
<211> 5
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(5)
<223> LAG-3 mAb 5 VH CDR 1

<400> 61
Asp Tyr Asn Ile His
1 5

<210> 62
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(17)
<223> LAG-3 mAb 5 VH CDR2

<400> 62
Tyr Ile Tyr Pro Tyr Ser Gly Asp Phe Gly Tyr Asn Gln Lys Phe Lys
1 5 10 15

Ser

<210> 63
<211> 12
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(12)
<223> LAG-3 mAb 5 VH CDR3

<400> 63
Trp His Arg Asn Tyr Phe Gly Pro Trp Phe Ala Tyr
1 5 10

<210> 64
<211> 111

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(111)

<223> LAG-3 mAb 5 VL

<400> 64

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

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

Gly Glu Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Tyr Val Val Ser Asn Leu Glu Ser Gly Ile Pro Ala
50 55 60

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

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

Glu Asp Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105 110

<210> 65

<211> 333

<212> ADN

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<223> Polinucleótido que codifica LAG-3 mAb 5 VL

<400> 65

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atctcctgca aggccagcca aagtgttgat tatgatgggtg aaagttatat gaactggtac 120
caacagaaac caggacagcc acccaaactc ctcatthtatg ttgtttccaa tctagaatct 180
gggatcccag ccaggtttag tggcagtggg tctgggacag acttcaccct caacatccat 240
cctgtggagg aggaggatgc tgcaacctat tactgtcagc aaagtagtga ggatccgctc 300
acgttcggtg ctgggaccaa gctggagctg aaa 333

<210> 66

<211> 15

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(15)

<223> LAG-3 mAb 5 VL CDR1

<400> 66

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

<210> 67

<211> 7

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(7)

<223> LAG-3 mAb 5 VL CDR2

<400> 67

Val Val Ser Asn Leu Glu Ser
1 5

<210> 68

<211> 9

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(9)

<223> LAG-3 mAb 5 VL CDR3

<400> 68

Gln Gln Ser Ser Glu Asp Pro Leu Thr
1 5

<210> 69

<211> 118

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(118)

<223> LAG-3 mAb 6 VH

<400> 69

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

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

Asn Met Asp Trp Val Lys Gln Ser His Gly Glu Ser Leu Glu Trp Ile
 35 40 45

Gly Asp Ile Asn Pro Asp Asn Gly Val Thr Ile Tyr Asn Gln Lys Phe
 50 55 60

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

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

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

Thr Leu Thr Val Ser Ser
 115

<210> 70
 <211> 354
 <212> ADN
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <223> Polinucleótido que codifica LAG-3 mAb 6 VH

<400> 70
 gaggtcctgc tgcaacagtc tggacctgag ctggtgaagc ctggggcttc agtgaagata 60
 ccctgcaagg cttctggata cacattcact gactacaaca tggactgggt gaagcagagc 120
 catggagaga gccttgagtg gattggagat attaatacctg acaatggtgt tactatctac 180
 aaccagaagt ttgagggcaa ggccacactg actgtagaca agtcctccag tacagcctac 240
 atggagctcc gcagcctgac atctgaggac actgcagtct attactgtgc aagagaggcg 300
 gattacttct actttgacta ctggggccaa ggcaccactc tcacagtctc ctca 354

<210> 71
 <211> 5
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(5)
 <223> LAG-3 mAb 6 VH CDR 1

<400> 71
 Asp Tyr Asn Met Asp
 1 5

<210> 72
 <211> 17

<212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(17)
 <223> LAG-3 mAb 6 VH CDR2

<400> 72
 Asp Ile Asn Pro Asp Asn Gly Val Thr Ile Tyr Asn Gln Lys Phe Glu
 1 5 10 15

Gly

<210> 73
 <211> 9
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(9)
 <223> LAG-3 mAb 6 VH CDR3

<400> 73
 Glu Ala Asp Tyr Phe Tyr Phe Asp Tyr
 1 5

<210> 74
 <211> 107
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(107)
 <223> LAG-3 mAb 6 VL

<400> 74
 Asp Ile Val Met Thr Gln Ser His Arg Phe Met Ser Thr Ser Val Gly
 1 5 10 15

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

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

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

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

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

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

```
<210> 75
<211> 321
<212> ADN
<213> Mus musculus
```

```
<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<223> Polinucleótido que codifica LAG-3 mAb 6 VL
```

<400>	75						
gacattgtga	tgaccagtc	tcacagattc	atgtccacat	cagttggaga	cagggtcagc		60
atcacctgca	aggccagtc	ggatgtgagt	tctgtttag	cctggtatca	acagaaacca		120
ggacaatctc	ctaaattact	gattttttcg	gcacacctacc	ggtacactgg	agtccctgat		180
cgcttcaactg	gcagtggtac	tgggacggat	ttcactttca	ccatcagcag	tgtgcaggct		240
gcagacctgg	cagtttatta	ctgtcagcaa	cattatagta	ctccgtggac	gttcgggtgga		300
ggcaccaagc	tggaatcaa	a					321

```
<210> 76
<211> 11
<212> PRT
<213> Mus musculus
```

```

<220>
<221>   CARACTERÍSTICA_MISCELÁNEA
<222>   (1)..(11)
<223>   LAG-3 mAb 6 VL CDR1

```

<400> 76
Lys Ala Ser Gln Asp Val Ser Ser Val Val Ala
1 5 10

```
<210> 77
<211> 7
<212> PRT
<213> Mus musculus
```

```

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(7)
<223> LAG-3 mAb 6 VL CDR2

```

<400> 77
Ser Ala Ser Tyr Arg Tyr Thr

1 5

<210> 78
 <211> 7
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(7)
 <223> LAG-3 mAb 6 VL CDR3

<400> 78
 His Tyr Ser Thr Pro Trp Thr
 1 5

<210> 79
 <211> 118
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> hLAG-3 mAb 6 VH-1

<400> 79
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

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

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

Gly Asp Ile Asn Pro Asp Asn Gly Val Thr Ile Tyr Asn Gln Lys Phe
 50 55 60

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

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

Thr Leu Thr Val Ser Ser
 115

<210> 80
 <211> 354

<212> ADN
 <213> Secuencia Artificial

<220>

<223> Polinucleótido que codifica hLAG-3 mAb 6 VH-1

<400> 80

```
caggtccagc tgggtgcagtc tggcgccgaa gtgaagaaac ctggcgcaag cgtgaagggtg 60
tcctgcaagg ccagcggcta caccttcacc gactacaaca tggactgggt cgcacaggcc 120
ccaggacagg gcctggaatg gatggggcgc atcaaccccg acaacggcgt gaccatctac 180
aaccagaaat tcgagggcag agtgaccatg accaccgaca ccagcaccag caccgcctac 240
atggaactgc ggtccctgcg gagcgacgac accgccgtgt actactgcgc cagagaggcc 300
gactacttct acttcgacta ctggggccag ggcaccaccc tgaccgtgtc ctcc 354
```

<210> 81

<211> 118

<212> PRT

<213> Secuencia Artificial

<220>

<223> hLAG-3 mAb 6 VH-2

<400> 81

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

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

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

```
Ser Asp Ile Asn Pro Asp Asn Gly Val Thr Ile Tyr Asn Gln Lys Phe
50 55 60
```

```
Glu 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 Ala Asp Tyr Phe Tyr Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110
```

```
Thr Leu Thr Val Ser Ser
115
```

<210> 82

<211> 354

<212> ADN

<213> Secuencia Artificial

<220>

<223> Polinucleótido que codifica hLAG-3 mAb 6 VH-2

```

<400> 82
gaggtccagc tgggtggaatc tggcgggcgga ctggtcaagc ctggcgggcag cctgagactg 60
agctgcgctg ccagcggctt caccttcagc gactacaaca tggactgggt ccgacaggcc 120
cctggcaagg gcctggaatg ggtgtccgac atcaaccccg acaacggcgt gaccatctac 180
aaccagaagt tcgagggccg gttcaccatc agccgggaca acgccaagaa cagcctgtac 240
ctgcagatga acagcctgcg ggccgaggac accgccgtgt actactgcgc cagagaggcc 300
gactacttct acttcgacta ctggggccag ggcaccaccc tgaccgtgtc ctcc 354

```

```

<210> 83
<211> 107
<212> PRT
<213> Secuencia Artificial

```

```

<220>
<223> hLAG-3 mAb 6 VL-1

```

```

<400> 83
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1             5             10             15

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

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

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

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

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

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

```

```

<210> 84
<211> 321
<212> ADN
<213> Secuencia Artificial

```

```

<220>
<223> Polinucleótido que codifica hLAG-3 mAb 6 VL-1

```

```

<400> 84
gacatccaga tgacccagag ccccagcagc ctgagcgcca gcgtgggcca cagagtgacc 60
atcacctgtc gggccagcca ggatgtgtcc agcgtggtgg cctggtatca gcagaagccc 120
ggcaaggccc ccaagctgct gatctacagc gccagctacc ggtacacagg cgtgcccagc 180
agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagcag cctgcagccc 240
gaggacttcg ccacctacta ctgccagcag cactacagca cccctggac cttcggcgga 300

```

ggcaccaagc tggaaatcaa g

321

<210> 85
 <211> 107
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> hLAG-3 mAb 6 VL-2

<400> 85
 Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Ser Ser Val
 20 25 30
 Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp 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 Val Tyr Tyr Cys Gln Gln His Tyr Ser Thr Pro Trp
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 86
 <211> 321
 <212> ADN
 <213> Secuencia Artificial

<220>
 <223> Polinucleótido que codifica hLAG-3 mAb 6 VL-2

<400> 86
 gacatcgtga tgacccagag ccccagcagc ctgagcgcca gcgtgggcga cagagtgacc 60
 atcacctgtc gggccagcca ggatgtgtcc agcgtgggtg cctggtatca gcagaagccc 120
 ggcaaggccc ccaagctgct gatctacagc gccagctacc ggtacacagg cgtgcccgat 180
 agattcagcg gcagcggctc cggcaccgac ttcaccttca ccatcagcag cctgcagccc 240
 gaggacatcg ccgtttacta ctgccagcag cactacagca cccctggac cttcggcgga 300
 ggcaccaagc tggaaatcaa g 321

<210> 87
 <211> 11

<212> PRT
 <213> Secuencia Artificial

 <220>
 <223> hLAG-3 mAb 6 VL-1/VL-2 CDRL1

 <400> 87
 Arg Ala Ser Gln Asp Val Ser Ser Val Val Ala
 1 5 10

<210> 88
 <211> 8
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Enlazador 1

<400> 88
 Gly Gly Gly Ser Gly Gly Gly Gly
 1 5

<210> 89
 <211> 6
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Cys Enlazador 2

<400> 89
 Gly Gly Cys Gly Gly Gly
 1 5

<210> 90
 <211> 4
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> ABD Enlazador

<400> 90
 Gly Gly Gly Ser
 1

<210> 91
 <211> 6
 <212> PRT
 <213> Secuencia Artificial

<220>

<223> Enlazador

<400> 91

Leu Gly Gly Gly Ser Gly
1 5

<210> 92

<211> 11

<212> PRT

<213> Secuencia Artificial

<220>

<223> Enlazador

<400> 92

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

<210> 93

<211> 5

<212> PRT

<213> Secuencia Artificial

<220>

<223> Enlazador

<400> 93

Ala Ser Thr Lys Gly
1 5

<210> 94

<211> 6

<212> PRT

<213> Secuencia Artificial

<220>

<223> Enlazador

<400> 94

Leu Glu Pro Lys Ser Ser
1 5

<210> 95

<211> 5

<212> PRT

<213> Secuencia Artificial

<220>

<223> Enlazador

<400> 95
Ala Pro Ser Ser Ser
1 5

<210> 96
<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Dominio que Promueve Heterodímero

<400> 96
Gly Val Glu Pro Lys Ser Cys
1 5

<210> 97
<211> 6
<212> PRT
<213> Secuencia Artificial

<220>
<223> Dominio que Promueve Heterodímero

<400> 97
Val Glu Pro Lys Ser Cys
1 5

<210> 98
<211> 6
<212> PRT
<213> Secuencia Artificial

<220>
<223> Dominio que Promueve Heterodímero

<400> 98
Ala Glu Pro Lys Ser Cys
1 5

<210> 99
<211> 7
<212> PRT
<213> Secuencia Artificial

<220>
<223> Dominio que Promueve Heterodímero

<400> 99
Gly Phe Asn Arg Gly Glu Cys

1 5

<210> 100
 <211> 6
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Dominio que Promueve Heterodímero

<400> 100
 Phe Asn Arg Gly Glu Cys
 1 5

<210> 101
 <211> 28
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> E-Espiral

<400> 101
 Glu Val Ala Ala Leu Glu Lys Glu Val Ala Ala Leu Glu Lys Glu Val
 1 5 10 15
 Ala Ala Leu Glu Lys Glu Val Ala Ala Leu Glu Lys
 20 25

<210> 102
 <211> 28
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> K-Espiral

<400> 102
 Lys Val Ala Ala Leu Lys Glu Lys Val Ala Ala Leu Lys Glu Lys Val
 1 5 10 15
 Ala Ala Leu Lys Glu Lys Val Ala Ala Leu Lys Glu
 20 25

<210> 103
 <211> 28
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> E-Espiral modificada

<400> 103

Glu Val Ala Ala Cys Glu Lys Glu Val Ala Ala Leu Glu Lys Glu Val
 1 5 10 15

Ala Ala Leu Glu Lys Glu Val Ala Ala Leu Glu Lys
 20 25

<210> 104

<211> 28

<212> PRT

<213> Secuencia Artificial

<220>

<223> K-Espiral modificada

<400> 104

Lys Val Ala Ala Cys Lys Glu Lys Val Ala Ala Leu Lys Glu Lys Val
 1 5 10 15

Ala Ala Leu Lys Glu Lys Val Ala Ala Leu Lys Glu
 20 25

<210> 105

<211> 46

<212> PRT

<213> Secuencia Artificial

<220>

<223> ABD

<400> 105

Leu Ala Glu Ala Lys Val Leu Ala Asn Arg Glu Leu Asp Lys Tyr Gly
 1 5 10 15

Val Ser Asp Tyr Tyr Lys Asn Leu Ile Asp Asn Ala Lys Ser Ala Glu
 20 25 30

Gly Val Lys Ala Leu Ile Asp Glu Ile Leu Ala Ala Leu Pro
 35 40 45

<210> 106

<211> 46

<212> PRT

<213> Secuencia Artificial

<220>

<223> deimm ABD

<400> 106

Leu Ala Glu Ala Lys Val Leu Ala Asn Arg Glu Leu Asp Lys Tyr Gly

1 5 10 15
Val Ser Asp Tyr Tyr Lys Asn Leu Ile Asp Asn Ala Lys Ser Ala Glu
 20 25 30

Gly Val Lys Ala Leu Ile Asp Glu Ile Leu Ala Ala Leu Pro
35 40 45

```
<210> 107
<211> 46
<212> PRT
<213> Secuencia Artificial
```

<220>
<223> deimm ABD

```
<400> 107
Leu Ala Glu Ala Lys Val Leu Ala Asn Arg Glu Leu Asp Lys Tyr Gly
1          5          10          15
```

Val Ser Asp Tyr Tyr Lys Asn Ala Ala Asn Asn Ala Lys Thr Val Glu
20 25 30

Gly Val Lys Ala Leu Ile Ala Glu Ile Leu Ala Ala Leu Pro
35 40 45

```
<210> 108
<211> 46
<212> PRT
<213> Secuencia Artificial
```

<220>
<223> deimm ABD

```
<400> 108
Leu Ala Glu Ala Lys Val Leu Ala Asn Arg Glu Leu Asp Lys Tyr Gly
1          5          10          15
```

Val Ser Asp Tyr Tyr Lys Asn Leu Ile Ser Asn Ala Lys Ser Val Glu
20 25 30

Gly Val Lys Ala Leu Ile Ala Glu Ile Leu Ala Ala Leu Pro
35 40 45

```
<210> 109
<211> 10
<212> PRT
<213> Secuencia Artificial
```

<220>
<223> Enlazador de Bisagra

<400> 109

Asp Lys Thr His Thr Cys Pro Pro Cys Pro
1 5 10

<210> 110

<211> 8

<212> PRT

<213> Secuencia Artificial

<220>

<223> Enlazador

<400> 110

Ala Pro Ser Ser Ser Pro Met Glu
1 5

<210> 111

<211> 15

<212> PRT

<213> Secuencia Artificial

<220>

<223> Cys Enlazador

<400> 111

Leu Glu Pro Lys Ser Ala Asp Lys Thr His Thr Cys Pro Pro Cys
1 5 10 15

<210> 112

<211> 13

<212> PRT

<213> Secuencia Artificial

<220>

<223> Enlazador

<400> 112

Gly Gly Gly Asp Lys Thr His Thr Cys Pro Pro Cys Pro
1 5 10

<210> 113

<211> 16

<212> PRT

<213> Secuencia Artificial

<220>

<223> Enlazador

<400> 113

Leu Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro

1	5	10	15
---	---	----	----

<210> 114
 <211> 15
 <212> PRT
 <213> Homo sapiens

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(15)
 <223> IgG1 Bisagra

<400> 114
 Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro
 1 5 10 15

<210> 115
 <211> 12
 <212> PRT
 <213> Homo sapiens

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(12)
 <223> IgG2 Bisagra

<400> 115
 Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro
 1 5 10

<210> 116
 <211> 12
 <212> PRT
 <213> Homo sapiens

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(12)
 <223> IgG4 Bisagra

<400> 116
 Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro
 1 5 10

<210> 117
 <211> 12
 <212> PRT
 <213> Homo sapiens

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(12)

<223> IgG4 Bisagra (S228P)

<400> 117

Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro
1 5 10

<210> 118

<211> 107

<212> PRT

<213> Homo sapiens

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(107)

<223> LC kappa

<400> 118

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
1 5 10 15

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
65 70 75 80

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
100 105

<210> 119

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(104)

<223> LC lambda

<400> 119

Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu

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

<210> 120
 <211> 98
 <212> PRT
 <213> Homo sapiens

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(98)
 <223> IgG1 CH1

<400>	120														
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														

<210> 121
 <211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(98)

<223> IgG2 CH1

<400> 121

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

Ser	Thr	Ser	Glu	Ser	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	Asn	Phe	Gly	Thr	Gln	Thr
65					70					75					80

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

Thr Val

<210> 122

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(98)

<223> IgG4 CH1

<400> 122

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

Ser	Thr	Ser	Glu	Ser	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	Lys	Thr
65					70					75					80

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

Arg Val

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<210> 123
<211> 217
<212> PRT
<213> Homo sapiens
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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1) .. (217)
<223> IgG1 (AA)
```

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (217)..(217)
<223> Xaa217 es una Lisina (K) o está Ausente

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```
<400> 123
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1          5          10          15
```

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

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

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
165 170 175

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
 195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Xaa
 210 215

<210> 124
 <211> 217
 <212> PRT
 <213> Homo sapiens

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(217)
 <223> IgG1 Fc (AA/YTE)

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (217)..(217)
 <223> Xaa217 es una Lisina (K) o está Ausente

<400> 124
 Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15

Pro Lys Asp Thr Leu Tyr Ile Thr Arg Glu Pro Glu Val Thr Cys Val
 20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
 35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
 65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 85 90 95

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

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
 115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
 130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
 145 150 155 160

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
165 170 175

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Xaa
210 215

<210> 125

<211> 217

<212> PRT

<213> Homo sapiens

 $\langle 220 \rangle$

<221> CARACTERÍSTICA MISCELÁNEA

<222> (1) . . (217)

<223> IgG4 Fc (YTE)

 $\langle 220 \rangle$

<221> CARACTERÍSTICA MISCELÁNEA

 $\langle 222 \rangle \quad (217) \dots (217)$

<223> Xaa217 es una Lisina (K) o está Ausente

<400> 125

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

Pro Lys Asp Thr Leu Tyr Ile Thr Arg Glu Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

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

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met
115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
165 170 175

Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val
180 185 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Leu Gly Xaa
210 215

<210> 126

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(217)

<223> Dominio Fc de Nudo

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (217)..(217)

<223> Xaa217 es una Lisina (K) o está Ausente

<400> 126

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

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

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

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
115 120 125

```

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
 130                      135                      140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145                      150                      155                      160

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
                      165                      170                      175

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
 195                      200                      205

Lys Ser Leu Ser Leu Ser Pro Gly Xaa
 210                      215

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<210> 127
<211> 217
<212> PRT
<213> Homo sapiens

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(217)
<223> Fc de Cavidad

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (217)..(217)
<223> Xaa217 es una Lisina (K) o está Ausente

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<400> 127
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1                      5                      10                      15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
                      20                      25                      30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
 35                      40                      45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 50                      55                      60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
 65                      70                      75                      80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
                      85                      90                      95

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

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Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
      115                      120                      125

Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro
      130                      135                      140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145                      150                      155                      160

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
      165                      170                      175

Val Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
      180                      185                      190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Tyr Thr Gln
      195                      200                      205

Lys Ser Leu Ser Leu Ser Pro Gly Xaa
      210                      215

```

```

<210> 128
<211> 217
<212> PRT
<213> Homo sapiens

```

```

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(217)
<223> IgG1 Fc universal

```

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (4)..(5)
<223> Xaa4(X1) y Xaa5(X2) son ambos L (tipo silvestre), o son ambos
A
      (unión FcR disminuida)

```

```

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (22)..(26)
<223> Xaa22(X3), Xaa24(X4), y Xaa26(X5) son respectivamente M, S y T
      (tipo silvestre), o Y, T y E (vida media extendida)

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```

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (136)..(138)
<223> Xaa136(X6), y Xaa138(X7) son respectivamente T y L (tipo
silvestre)
      o W y L (tipo silvestre), o son S y A (nudo)

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA

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<222> (177)..(177)
 <223> Xaa177(X8) es Y (tipo silvestre) cuando Xaa136(X6) es cualquier T o W, y Xaa138(X7) es L, y Xaa177(X8) es V (nudo) cuando Xaa136(X6) y Xaa138(X7) son, respectivamente, S y A

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (204)..(205)
 <223> Xaa204(X9) y Xaa205(X10) respectivamente son N y H (tipo silvestre), o son N y R (no unión de proteína A), o son A y K (no unión de proteína A)

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (217)..(217)
 <223> Xaa217(X11) es K o está Ausente

<400> 128
 Ala Pro Glu Xaa Xaa Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15
 Pro Lys Asp Thr Leu Xaa Ile Xaa Arg Xaa Pro Glu Val Thr Cys Val
 20 25 30
 Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
 35 40 45
 Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 50 55 60
 Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
 65 70 75 80
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 85 90 95
 Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
 100 105 110
 Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
 115 120 125
 Thr Lys Asn Gln Val Ser Leu Xaa Cys Xaa Val Lys Gly Phe Tyr Pro
 130 135 140
 Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
 145 150 155 160
 Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
 165 170 175
 Xaa Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
 180 185 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Xaa Xaa Tyr Thr Gln
 195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Xaa
 210 215

<210> 129
 <211> 120
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(120)
 <223> LAG-3 mAb A VH

<400> 129
 Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
 1 5 10 15

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

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

Gly Glu Ile Asn His Asn Gly Asn Thr Asn Ser Asn Pro Ser Leu Lys
 50 55 60

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

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

Phe Gly Tyr Ser Asp Tyr Glu Tyr Asn Trp Phe Asp Pro Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 130
 <211> 107
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(107)
 <223> LAG-3 mAb A VL

<400> 130
 Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly

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

<210> 131

<211> 113

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(113)

<223> PD-1 mAb 1 VH

<400> 131

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

Ser

<210> 132
 <211> 107
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(107)
 <223> PD-1 mAb 1 VL

<400> 132
 Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 35 40 45
 Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
 65 70 75 80
 Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Ser Ser Asn Trp Pro Arg
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 133
 <211> 120
 <212> PRT
 <213> Mus musculus

<400> 133
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
 20 25 30
 Tyr Met Tyr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Gly Ile Asn Pro Ser Asn Gly Gly Thr Asn Phe Asn Glu Lys Phe
 50 55 60
 Lys Asn Arg Val Thr Leu Thr Thr Asp Ser Ser Thr Thr Thr Ala Tyr
 65 70 75 80

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

Ala Arg Arg Asp Tyr Arg Phe Asp Met Gly Phe Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 134
<211> 111
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(111)
<223> PD-1 mAb 2 VL

<400> 134
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

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

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

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

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

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

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

<210> 135
<211> 121
<212> PRT
<213> Mus musculus

<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(121)
<223> PD-1 mAb 3 VH

<400> 135
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Lys Pro Gly Ala

1		5		10		15									
Ser	Val	Gln	Met	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ser	Phe	Thr	Ser	Ser
		20						25					30		
Trp	Ile	His	Trp	Val	Lys	Gln	Arg	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Tyr	Ile	Tyr	Pro	Ser	Thr	Gly	Phe	Thr	Glu	Tyr	Asn	Gln	Lys	Phe
	50					55					60				
Lys	Asp	Lys	Ala	Thr	Leu	Thr	Ala	Asp	Lys	Ser	Ser	Ser	Thr	Ala	Tyr
65					70					75					80
Met	Gln	Leu	Ser	Ser	Leu	Thr	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Tyr	Cys
			85						90					95	
Ala	Arg	Trp	Arg	Asp	Ser	Ser	Gly	Tyr	His	Ala	Met	Asp	Tyr	Trp	Gly
			100					105					110		
Gln	Gly	Thr	Ser	Val	Thr	Val	Ser	Ser							
		115					120								

<210> 136

<211> 111

<212> PRT

<213> Mus musculus

<220>

<221> CARACTERÍSTICA_MISCELÁNEA

<222> (1)..(111)

<223> PD-1 mAb 3 VL

<400> 136

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

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

Gly	Tyr	Ser	Tyr	Met	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro
		35					40					45			

Lys	Leu	Leu	Ile	Lys	Phe	Gly	Ser	Asn	Leu	Glu	Ser	Gly	Ile	Pro	Ala
	50					55					60				

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

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

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

<210> 137
 <211> 117
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(117)
 <223> PD-1 mAb 4 VH

<400> 137
 Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
 20 25 30
 Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Gln Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Asp Ser Gly Glu Ser Thr Tyr Ala Glu Glu Phe
 50 55 60
 Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Asn Thr Ala Tyr
 65 70 75 80
 Leu Gln Ile Thr Ser Leu Thr Ala Glu Asp Thr Gly Met Tyr Phe Cys
 85 90 95
 Val Arg Val Gly Tyr Asp Ala Leu Asp Tyr Trp Gly Gln Gly Thr Leu
 100 105 110
 Val Thr Val Ser Ser
 115

<210> 138
 <211> 106
 <212> PRT
 <213> Mus musculus

<220>
 <221> CARACTERÍSTICA_MISCELÁNEA
 <222> (1)..(106)
 <223> PD-1 mAb 4 VL

<400> 138
 Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Ser Ala Arg Ser Ser Val Ser Tyr Met
 20 25 30

```

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

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

Gly Ser Gly Thr Ser Tyr Cys Leu Thr Ile Asn Ser Leu Gln Pro Glu
65              70              75              80

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

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

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<210> 139
<211> 330
<212> PRT
<213> Homo sapiens

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(330)
<223> región constante completa de IgG1 (AA)

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (330)..(330)
<223> Xaa330 es una Lisina (K) o está Ausente

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<400> 139
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

Arg 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 Gly Pro Ser Val Phe Leu Phe Pro Pro
      115              120              125

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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
    290                      295                      300

Val  Phe  Ser  Cys  Ser  Val  Met  His  Glu  Ala  Leu  His  Asn  His  Tyr  Thr
    305                      310                      315                      320

Gln  Lys  Ser  Leu  Ser  Leu  Ser  Pro  Gly  Xaa
                      325                      330

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<210> 140
<211> 327
<212> PRT
<213> Homo sapiens

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (1)..(327)
<223> región constante completa de IgG (P)

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<220>
<221> CARACTERÍSTICA_MISCELÁNEA
<222> (327)..(327)
<223> Xaa327 es una Lisina (K) o está Ausente

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<400> 140

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

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

Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro
100 105 110

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

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

Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp
145 150 155 160

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe
165 170 175

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
180 185 190

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

Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
210 215 220

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

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

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

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

Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser
290 295 300

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
305 310 315 320

Leu Ser Leu Ser Leu Gly Xaa
325