

LISTADO DE SECUENCIAS

<110> UCB Biopharma SPRL
 5 <120> Moléculas de anticuerpos que se unen al factor de necrosis tumoral
 alfa (TNF ALFA)
 <130> PF0057_WO
 10 <150> GB1522394.4
 <151> 2015-12-18
 <160> 37
 15 <170> PatentIn version 3.5
 <210> 1
 <211> 10
 <212> PRT
 20 <213> Secuencia Artificial
 <220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRH1
 25 <400> 1
 Gly Tyr Thr Phe Thr Asp Asn Tyr Ile His
 1 5 10
 30 <210> 2
 <211> 17
 <212> PRT
 <213> Secuencia Artificial
 35 <220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRH2
 <400> 2
 40 Tyr Ile Asn Pro Ser Ser Ala Tyr Ala His Tyr Asn Glu Lys Phe Lys
 1 5 10 15
 45 Thr
 <210> 3
 50 <211> 10
 <212> PRT
 <213> Secuencia Artificial
 <220>

<223> Secuencias de CDR del anticuerpo 2109 - CDRH3
 <400> 3

5 Arg Tyr Tyr Ser Ala Met Pro Phe Ala Tyr
 1 5 10

<210> 4
 <211> 11
 10 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRL1
 15 <400> 4

Arg Ala Ser Glu Asp Ile Tyr Ser Gly Leu Ala
 1 5 10

20 <210> 5
 <211> 11
 <212> PRT
 25 <213> Secuencia Artificial

<220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRL1
 30 <400> 5

Arg Ala Ser Glu Asp Ile Tyr Asn Gly Leu Ala
 1 5 10

35 <210> 6
 <211> 7
 <212> PRT
 <213> Secuencia Artificial

40 <220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRL2
 <400> 6

45 Asp Ser Ser Thr Leu His Thr
 1 5

50 <210> 7
 <211> 7
 <212> PRT
 <213> Secuencia Artificial

55 <220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRL2

<400> 7
 Asn Ser Asn Thr Leu His Thr
 1 5
 5
 <210> 8
 <211> 7
 <212> PRT
 10 <213> Secuencia Artificial
 <220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRL2
 15 <400> 8
 Asn Ser Ser Thr Leu His Thr
 1 5
 20
 <210> 9
 <211> 7
 <212> PRT
 <213> Secuencia Artificial
 25
 <220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRL2
 <400> 9
 30 Asp Ser Asn Thr Leu His Thr
 1 5
 35 <210> 10
 <211> 9
 <212> PRT
 <213> Secuencia Artificial
 40 <220>
 <223> Secuencias de CDR del anticuerpo 2109 - CDRL3
 <400> 10
 45 Gln Gln Asn Tyr Asp Phe Pro Leu Thr
 1 5
 50 <210> 11
 <211> 109
 <212> PRT
 <213> Secuencia Artificial
 <220>
 55 <223> Región variable de cadena ligera del anticuerpo 2109 gL18

<400> 11

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

5

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

10

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

15

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

20

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

25

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

30

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

35

<210> 12
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> Región variable de cadena pesada del anticuerpo 2109 gH2

40

<400> 12

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

45

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

50

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

55

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

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

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

10 Thr Arg Arg Tyr Tyr Ser Ala Met Pro Phe Ala Tyr Trp Gly Gln Gly
 100 105 110

15 Thr Leu Val Thr Val Ser Ser
 115

<210> 13

20 <211> 327
 <212> ADN
 <213> Secuencia Artificial

25 <220>
 <223> Región variable de cadena ligera que codifica el ADN del anticuerpo 2109 gL18

<400> 13
 gatatacaga tgaccaatc accaagctct ctgagtgcct ccgttggcga tcgcgttaca 60

30 attacctgcc gagctagcga ggatatatac tcaggactgg cctggtacca gcaaaagcct 120
 ggcaaagtgc ctaagctcct gatctacgac tccagtaccc tgcacactgg tgtgccaagc 180

35 cgcttttagcg gaactggatc tggaaccgac tatacactga cgatttcctc actgcaaccg 240
 gaagacgtgg caacctactt ctgtcagcaa aactacgact tccccttgac gtttgggcaa 300
 gggacaaagc tggagatcaa acgtacc 327

40 <210> 14
 <211> 357
 <212> ADN
 <213> Secuencia Artificial

45 <220>
 <223> Región variable de cadena pesada que codifica el ADN del anticuerpo 2109 gH2

50 <400> 14
 gaagttcaac tggtcgaaag cggaggtggg ctcgtaaac ctggcggatc tctgcgattg 60
 tcatgtgctg caagcggcta cacgtttacc gataactata tccactgggt gcgacaagca 120

55 ccaggaagg gactggaatg gattggatat attaaccga gctccgccta cgcacactac 180

```

aacgagaaat tcaagacccg attcaccatc tccgtggaca aagccaagaa ctccgcttac      240
ctgcaaata ga actctctgcg ggccgaagac actgccgtgt attactgcac ccgccgatac      300
5  tatagcgcta tgccctttgc ctactgggga caagggacac tggtcactgt ctcaagt      357

<210> 15
<211> 109
<212> PRT
10 <213> Secuencia Artificial
    <220>
    <223> Región variable de cadena ligera del anticuerpo 2109 gL18

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

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

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

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

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

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

40  Thr Phe Gly Cys Gly Thr Lys Leu Glu Ile Lys Arg Thr
    100            105

45  <210> 16
    <211> 119
    <212> PRT
    <213> Secuencia Artificial

    <220>
50 <223> Región variable de cadena pesada del anticuerpo 2109 gH2

    <400> 16

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

```

[illegible]

<223> Región variable de cadena pesada que codifica el ADN del anticuerpo 2109 gH2

<400> 18

5 gaagtgcagt tggtagtagt ggggggaggg ttggtgaagc caggaggatc attgcggttg 60

tcatgtgcgg cttagggcta cactttcact gacaattaca ttactgggt gcgacaagca 120

ccagggaagt gcctcgaatg gattggctac atcaaccgt caagcgata cgccattac 180

10 aacgaaaagt tcaagaccg gttcaccatc tccgtggata aggcgaaaaa cagcgctac 240

cttcagatga actccctgcg ggccgaggat accgccgttt actactgcac tagacggtac 300

15 tacagcgcca tgccgttcgc gtactgggga caaggcactc tggtcaccgt gtcgtcg 357

<210> 19

<211> 248

20 <212> PRT

<213> Secuencia Artificial

<220>

25 <223> scFv (VH-VL) del anticuerpo 2109 gH2gL18

<400> 19

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

1 5 10 15

30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asp Asn

20 25 30

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

35 40 45

40 Gly Tyr Ile Asn Pro Ser Ser Ala Tyr Ala His Tyr Asn Glu Lys Phe

50 55 60

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

65 70 75 80

45 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

50 Thr Arg Arg Tyr Tyr Ser Ala Met Pro Phe Ala Tyr Trp Gly Gln Gly

100 105 110

55

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 115 120 125

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

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

15 Thr Cys Arg Ala Ser Glu Asp Ile Tyr Ser Gly Leu Ala Trp Tyr Gln
 165 170 175

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

20 Leu His Thr Gly Val Pro Ser Arg Phe Ser Gly Thr Gly Ser Gly Thr
 195 200 205

25 Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr
 210 215 220

30 Tyr Phe Cys Gln Gln Asn Tyr Asp Phe Pro Leu Thr Phe Gly Gln Gly
 225 230 235 240

35 Thr Lys Leu Glu Ile Lys Arg Thr
 245

<210> 20
 <211> 744
 <212> ADN
 40 <213> Secuencia Artificial

<220>
 <223> scFv (VH-VL) que codifica el ADN del anticuerpo 2109 gH2gL18

45 <400> 20
 gaagttcaac tggtcgaaag cggaggtggg ctcgtgaaac ctggcggatc tctgcgattg 60
 tcatgtgctg caagcggcta cacgtttacc gataactata tccactgggt gcgacaagca 120
 50 ccaggggaagg gactggaatg gattggatat attaaccga gctccgccta cgcacactac 180
 aacgagaaat tcaagacccg attcaccatc tccgtggaca aagccaagaa ctccgcttac 240
 ctgcaaataa actctctgcg ggccgaagac actgccgtgt attactgcac ccgccgatac 300
 55

tatagcgcta tgccctttgc ctactgggga caaggacac tggtcactgt ctcaagtgga 360
 ggtggcggtt ctggcggtgg cggttccggt ggcggtggat cgggaggtgg cggttctgat 420
 5 atacagatga cccaatcacc aagctctctg agtgcttccg ttggcgatcg cgttacaatt 480
 acctgccgag ctagcgagga tatataactca ggactggcct ggtaccagca aaagcctggc 540
 aaagtgccta agctcctgat ctacgactcc agtaccctgc aactgggtgt gccaaagccgc 600
 10 tttagcggaa ctggatctgg aaccgactat aactgacga tttcctcact gcaaccggaa 660
 gacgtggcaa cctacttctg tcagcaaac tacgacttcc ccttgacgtt tgggcaaggg 720
 15 acaaagctgg agatcaaacg tacc 744

<210> 21
 <211> 248
 20 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> dsscFv (VH-VL) del anticuerpo 2109 gH2gL18
 25 <400> 21

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 30 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asp Asn
 35 20 25 30

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

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

Lys Thr Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr
 45 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 50 85 90 95

Thr Arg Arg Tyr Tyr Ser Ala Met Pro Phe Ala Tyr Trp Gly Gln Gly
 55 100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 115 120 125

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

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

15 Thr Cys Arg Ala Ser Glu Asp Ile Tyr Ser Gly Leu Ala Trp Tyr Gln
 165 170 175

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

20 Leu His Thr Gly Val Pro Ser Arg Phe Ser Gly Thr Gly Ser Gly Thr
 195 200 205

25 Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr
 210 215 220

30 Tyr Phe Cys Gln Gln Asn Tyr Asp Phe Pro Leu Thr Phe Gly Cys Gly
 225 230 235 240

35 Thr Lys Leu Glu Ile Lys Arg Thr
 245

<210> 22
 <211> 744
 <212> ADN
 40 <213> Secuencia Artificial

<220>
 <223> dsscFv (VH-VL) que codifica el ADN del anticuerpo 2109 gH2gL18

45 <400> 22
 gaagtgcagt tgggtggagtc ggggggaggg ttggtgaagc caggaggatc attgcggttg 60
 tcatgtgcgg cttcgggcta cactttcact gacaattaca ttactgggt gcgacaagca 120
 50 ccagggaagt gcctcgaatg gattggctac atcaaccgt caagcgcata cgccattac 180
 aacgaaaagt tcaagaccog gttcaccatc tccgtggata aggcgaaaaa cagcgcgtac 240
 cttcagatga actccctgcg ggccgaggat accgccgttt actactgcac tagacggtac 300
 55

tacagcgcca tgccgttcgc gtactgggga caaggcactc tggtcaccgt gtcgtcggga 360
 ggaggaggct cgggtggagg cggatcgggt ggcggaggga gcggcggagg cggttcggat 420
 5 atccagatga cccagtcgcc gtccagcctc tccgcctccg tgggagacag agtgacgac 480
 acttgcagag catcagagga catctactct ggccttgctt ggtatcagca gaagccggga 540
 aaggtgcca aactgctcat ctatgactcc tcgaccctcc acacgggagt gccatcgcg 600
 10 ttcagcggga ccggatctgg gaccgactac accctgacca tttcatcgct ccagccggag 660
 gatgttgcca cttacttctg ccaacagaat tacgacttcc cacttacttt tggatgtggc 720
 15 actaagctcg aaatcaagcg cacc 744

<210> 23
 <211> 107
 20 <212> PRT
 <213> Secuencia Artificial

<220>
 25 <223> Región variable de cadena ligera del anticuerpo 2109 de la rata
 <400> 23

Asp Ile Val Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Leu Gly
 1 5 10 15
 30

Glu Thr Val Thr Ile Glu Cys Arg Ala Ser Glu Asp Ile Tyr Asn Gly
 20 25 30

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

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

45 Thr Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser
 65 70 75 80

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

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

<210> 24
 <211> 119
 <212> PRT
 <213> Secuencia Artificial
 5
 <220>
 <223> Región variable de cadena pesada del anticuerpo 2109 de la rata
 <400> 24
 10 Glu Val Gln Leu His Gln Ser Gly Ala Ala Leu Val Lys Pro Gly Ala
 1 5 10 15
 15 Ser Val Lys Leu Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Asp Asn
 20 25 30
 20 Tyr Ile His Trp Val Lys Gln Ser Pro Gly Lys Ser Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Asn Pro Ser Ser Ala Tyr Ala His Tyr Asn Glu Lys Phe
 50 55 60
 25 Lys Thr Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Asn Thr Ala Tyr
 65 70 75 80
 30 Met Glu Leu Ser Arg Leu Thr Ser Glu Asp Ser Ala Thr Tyr Phe Cys
 85 90 95
 35 Thr Arg Arg Tyr Tyr Ser Ala Met Pro Phe Ala Tyr Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser
 115
 40
 <210> 25
 <211> 107
 <212> PRT
 <213> Secuencia Artificial
 45
 <220>
 <223> Estructura del aceptor VK1 2-1(U) A20 JK2 humano
 50 <400> 25
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
 55

	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Ser	Asn	Tyr	
				20					25					30			
5	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Val	Pro	Lys	Leu	Leu	Ile	
			35					40					45				
10	Tyr	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	
		50					55					60					
15	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	
	65					70					75					80	
20	Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Lys	Tyr	Asn	Ser	Ala	Pro	Tyr	
					85					90					95		
25	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys						
				100					105								
30	<210>	26															
	<211>	113															
	<212>	PRT															
	<213>	Secuencia Artificial															
35	<220>																
	<223>	Estructura del aceptor VH3 1-3 3-21 JH4 humano															
	<400>	26															
40	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Lys	Pro	Gly	Gly	
	1				5					10					15		
45	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr	
				20					25					30			
50	Ser	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
			35					40					45				
55	Ser	Ser	Ile	Ser	Ser	Ser	Thr	Ser	Tyr	Ile	Tyr	Tyr	Ala	Asp	Ser	Val	
			50					55				60					
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

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

10 Ser

15 <210> 27
    <211> 107
    <212> PRT
    <213> Secuencia Artificial

20 <220>
    <223> Región variable de cadena ligera del anticuerpo 2109 gL1
    <400> 27

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

30 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asp Ile Tyr Asn Gly
    20          25          30

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

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

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

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

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

55 <210> 28
    <211> 119
    <212> PRT
    <213> Secuencia Artificial

    <220>

```

<223> Región variable de cadena pesada del anticuerpo 2109 gH1

<400> 28

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

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

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

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

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

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

30 Thr Arg Arg Tyr Tyr Ser Ala Met Pro Phe Ala Tyr Trp Gly Gln Gly
100 105 110

35 Thr Leu Val Thr Val Ser Ser
115
<210> 29
<211> 107
<212> PRT
<213> Secuencia Artificial

40 <220>
<223> Región variable de cadena ligera del anticuerpo 2109 gL18

<400> 29

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

50 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asp Ile Tyr Ser Gly
20 25 30

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

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

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

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

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

<210> 30
 <211> 324
 <212> PRT
 20 <213> Secuencia Artificial

<220>
 <223> Región constante g1 pesada del ratón

25

<400> 30

30 Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala
 1 5 10 15

35 Ala Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr
 20 25 30

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

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

45 Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val
 65 70 75 80

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

55 Ile Val Pro Arg Asp Cys Gly Cys Lys Pro Cys Ile Cys Thr Val Pro
 100 105 110

[illegible]

<210> 31
 <211> 102
 <212> PRT
 <213> Secuencia Artificial
 5
 <220>
 <223> Región constante sin articulación de Fab gl pesada del ratón
 <400> 31
 10 Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala
 1 5 10 15
 15 Ala Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr
 20 25 30
 20 Phe Pro Glu Pro Val Thr Val Thr Trp Asn Ser Gly Ser Leu Ser Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Asp Leu Tyr Thr Leu
 50 55 60
 25 Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val
 65 70 75 80
 30 Thr Cys Asn Val Ala His Pro Ala Ser Ser Thr Lys Val Asp Lys Lys
 85 90 95
 35 Ile Val Pro Arg Asp Cys
 100
 <210> 32
 <211> 107
 <212> PRT
 <213> Secuencia Artificial
 <220>
 <223> Región constante de cadena ligera del ratón
 45
 <400> 32
 Arg Thr Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu
 1 5 10 15
 50 Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe Leu Asn Asn Phe
 20 25 30
 55

Tyr Pro Lys Asp Ile Asn Val Lys Trp Lys Ile Asp Gly Ser Glu Arg
 35 40 45
 5 Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln Asp Ser Lys Asp Ser
 50 55 60
 10 Thr Tyr Ser Met Ser Ser Thr Leu Thr Leu Thr Lys Asp Glu Tyr Glu
 65 70 75 80
 15 Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His Lys Thr Ser Thr Ser
 85 90 95
 Pro Ile Val Lys Ser Phe Asn Arg Asn Glu Cys
 100 105
 20 <210> 33
 <211> 107
 <212> PRT
 <213> Secuencia Artificial
 25 <220>
 <223> Región constante de cadena ligera
 <400> 33
 30 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 1 5 10 15
 35 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 20 25 30
 40 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
 45 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
 65 70 75 80
 50 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 85 90 95
 55 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 100 105

<210> 34
 <211> 103
 <212> PRT
 <213> Secuencia Artificial
 5
 <220>
 <223> Región constante sin articulación de Fab CH1 gamma 1 de la cadena pesada
 10 <400> 34
 Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 15 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 20 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 25 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
 30 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 35 Lys Val Glu Pro Lys Ser Cys
 100
 40 <210> 35
 <211> 330
 <212> PRT
 <213> Secuencia Artificial
 <220>
 45 <223> Región constante de longitud completa de gamma 1 de la cadena pesada
 <400> 35
 50 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
 55

	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	
			35					40					45				
5	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	
		50					55					60					
10	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	
	65					70					75					80	
15	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	
				85						90					95		
20	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	
				100					105					110			
25	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	
			115				120						125				
30	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	
		130					135					140					
35	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	
	145					150					155					160	
40	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	
				165						170					175		
45	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	
				180					185					190			
50	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	
			195				200						205				
55	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	
		210					215					220					
60	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	
	225					230					235					240	
65	Leu	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			
5	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	
			275					280					285				
10	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	
		290					295					300					
15	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	
	305					310					315					320	
20	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys							
					325					330							
	<210>	36															
	<211>	327															
	<212>	PRT															
25	<213>	Secuencia Artificial															
	<220>																
	<223>	Región constante de longitud completa de gamma 4 de la cadena pesada															
30	<400>	36															
35	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg	
	1				5					10					15		
40	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	
				20					25					30			
45	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	
			35					40					45				
50	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	
		50					55				60						
55	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	Ser	Cys	Pro	Ala	Pro	
				100					105					110			
5	Glu	Phe	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	
			115					120					125				
10	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	
		130					135					140					
15	Asp	Val	Ser	Gln	Glu	Asp	Pro	Glu	Val	Gln	Phe	Asn	Trp	Tyr	Val	Asp	
	145					150					155					160	
20	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Phe	
					165					170					175		
25	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	
				180					185					190			
30	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Gly	Leu	
			195					200					205				
35	Pro	Ser	Ser	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	
		210					215					220					
40	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Gln	Glu	Glu	Met	Thr	Lys	
	225					230					235					240	
45	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	
					245					250					255		
50	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	
			260						265					270			
55	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	
			275					280					285				
60	Arg	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Glu	Gly	Asn	Val	Phe	Ser	
		290					295					300					
65	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 Lys
325

5 <210> 37
<211> 327
<212> PRT
<213> Secuencia Artificial
<220>
10 <223> Región constante de longitud completa de gamma 4P de la cadena
pesada

<400> 37

15 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 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
25 35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
50 55 60
30
Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr
65 70 75 80
35 Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95
40 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
45
Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
130 135 140
50
Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp
145 150 155 160
55

