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SEQUENCE LISTING

<110> DAIICHI SANKYO COMPANY, LIMITED
 <120> Derivado de pirrolobenzodiazepina inmunoconjugado
 <130> SAP-850-PCT
 <141> 2018-09-28
 <150> JP 2017190713
 <151> 2017-09-29
 <160> 75
 <170> Patente en versión 3.5
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 <211> 220
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <223> Secuencia de aminoácidos de la CLDN6 humana
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			20					25					30		

Thr	Ala	Phe	Ile	Gly	Asn	Ser	Ile	Val	Val	Ala	Gln	Val	Val	Trp	Glu
		35					40					45			

Gly	Leu	Trp	Met	Ser	Cys	Val	Val	Gln	Ser	Thr	Gly	Gln	Met	Gln	Cys
	50					55					60				

Lys	Val	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Ala	Ala
65					70				75					80	

LIST SEC

Arg Ala Leu Cys Val Ile Ala Leu Leu Val Ala Leu Phe Gly Leu Leu
85 90 95

Val Tyr Leu Ala Gly Ala Lys Cys Thr Thr Cys Val Glu Glu Lys Asp
100 105 110

Ser Lys Ala Arg Leu Val Leu Thr Ser Gly Ile Val Phe Val Ile Ser
115 120 125

Gly Val Leu Thr Leu Ile Pro Val Cys Trp Thr Ala His Ala Ile Ile
130 135 140

Arg Asp Phe Tyr Asn Pro Leu Val Ala Glu Ala Gln Lys Arg Glu Leu
145 150 155 160

Gly Ala Ser Leu Tyr Leu Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu
165 170 175

Gly Gly Gly Leu Leu Cys Cys Thr Cys Pro Ser Gly Gly Ser Gln Gly
180 185 190

Pro Ser His Tyr Met Ala Arg Tyr Ser Thr Ser Ala Pro Ala Ile Ser
195 200 205

Arg Gly Pro Ser Glu Tyr Pro Thr Lys Asn Tyr Val
210 215 220

<210> 2

<211> 663

<212> ADN

<213> Homo sapiens

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<223> Secuencia de nucleótidos del ADNc que codifica la secuencia de aminoácidos de la

CLDN6 humana

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gtggtggccc aggtggtgtg ggagggcctg tggatgtcct gcgtggtgca gagcaccggc      180
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<213> Homo sapiens

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<220>
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<223> Secuencia de aminoácidos de la CLDN9 humana

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<400> 3

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1           5           10          15

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          20          25          30

Thr Ala Phe Ile Gly Asn Ser Ile Val Val Ala Gln Val Val Trp Glu

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LIST SEC

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Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly Gln Met Gln Cys
 50 55 60

Lys Val Tyr Asp Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
 65 70 75 80

Arg Ala Leu Cys Val Ile Ala Leu Leu Leu Ala Leu Leu Gly Leu Leu
 85 90 95

Val Ala Ile Thr Gly Ala Gln Cys Thr Thr Cys Val Glu Asp Glu Gly
 100 105 110

Ala Lys Ala Arg Ile Val Leu Thr Ala Gly Val Ile Leu Leu Leu Ala
 115 120 125

Gly Ile Leu Val Leu Ile Pro Val Cys Trp Thr Ala His Ala Ile Ile
 130 135 140

Gln Asp Phe Tyr Asn Pro Leu Val Ala Glu Ala Leu Lys Arg Glu Leu
 145 150 155 160

Gly Ala Ser Leu Tyr Leu Gly Trp Ala Ala Ala Ala Leu Leu Met Leu
 165 170 175

Gly Gly Gly Leu Leu Cys Cys Thr Cys Pro Pro Pro Gln Val Glu Arg
 180 185 190

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 195 200 205

Ser Gly Leu Asp Lys Arg Asp Tyr Val
 210 215

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 <213> Mus musculus

<220>
 <221> MISC_FEATURE
 <223> Secuencia de aminoácidos de la CDRL1 de la cadena liviana del anticuerpo B1
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 <213> Mus musculus

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Phe Thr Ser Arg Leu His Ser
 1 5

<210> 7
 <211> 9
 <212> PRT
 <213> Mus musculus

<220>
 <221> MISC_FEATURE
 <223> Secuencia de aminoácidos de la CDRL3 de la cadena liviana del anticuerpo B1
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Gln Gln Gly Tyr Pro Leu Pro Trp Thr
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<210> 8
 <211> 9
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Anticuerpo humanizado

<220>
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 <223> Secuencia de aminoácidos de la CDRL3 de la cadena liviana del anticuerpo B1 humanizado

LIST SEC

L4

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<212> PRT

<213> Mus musculus

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<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la CDRH1 de la cadena pesada del anticuerpo B1

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<210> 10

<211> 10

<212> PRT

<213> Mus musculus

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<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la CDRH2 de la cadena pesada del anticuerpo B1

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<221> MISC_FEATURE

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<223> Secuencia de aminoácidos de la CDRH3 de la cadena pesada del anticuerpo B1

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Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met Asp Tyr
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<212> PRT

<213> Mus musculus

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<223> Secuencia de aminoácidos de la CDRL1 de la cadena liviana del anticuerpo C7

<400> 12

Arg Ala Ser Gln Asp Ile Asn Asn Tyr Leu Asn
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<210> 13

<211> 7

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<223> Secuencia de aminoácidos de la CDRL2 de la cadena liviana del anticuerpo C7

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<223> Secuencia de aminoácidos de la CDRL3 de la cadena liviana del anticuerpo C7

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<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la CDRH1 de la cadena pesada del anticuerpo C7

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1 5 10

<210> 16

<211> 10

<212> PRT

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<223> Secuencia de aminoácidos de la CDRH2 de la cadena pesada del anticuerpo C7

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<210> 17

<211> 13

<212> PRT

<213> Mus musculus

<220>

<221> MISC_FEATURE

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<223> Secuencia de aminoácidos de la CDRH3 de la cadena pesada del anticuerpo C7

<400> 17

Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met Asp Tyr
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<210> 18

<211> 321

<212> ADN

<213> Mus musculus

<220>

<221> misc_feature

<223> Secuencia de nucleótidos del ADNc que codifica la región variable de la cadena liviana del anticuerpo B1

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gatggaactg ttaaactcct gatctacttc acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacacat tattctctca ccattactaa cctggaacaa 240

gaagatattg ccacttactt ttgccaacag ggttatccgc ttccgtggac gttcgggtgga 300

ggcaccaaac tggaaatcaa a 321

<210> 19

<211> 107

<212> PRT

<213> Mus musculus

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena liviana del anticuerpo B1

<400> 19

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1 5 10 15

LIST SEC

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

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

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

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

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Tyr Pro Leu Pro Trp
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Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

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 cadena pesada del anticuerpo B1

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 catggaaaga gccttgagt gattggaggt gttaatccta atagtgggtga tactagctac 180
 aaccagaagt tcaagggcaa ggccacattg actgttgaca agtcctccag cacagcctac 240
 atggagctcc gcagcctgac atctgaggat tctgcagtct attactgtgc aagacccggg 300

LIST SEC

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tcctca 366

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<212> PRT

<213> Mus musculus

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena pesada del anticuerpo B1

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1 5 10 15

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

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

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

Lys 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 Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser
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LIST SEC

<210> 22
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 <213> Mus musculus

<220>
 <221> misc_feature
 <223> Secuencia de nucleótidos del ADNc que codifica la región variable de la cadena liviana del anticuerpo C7

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 gatggaactg ttaaactcct gatctactcc acatcaagat tacactcagg agtcccatca 180
 aggttcagtg gcagtgggtc tggaacacat tattctctca ccattactca cctggaacaa 240
 gaagatattg ccacttactt ttgccaacag ggttatccgc ttccgtggac gttcggtgga 300
 ggcaccaaac tggaaatcaa a 321

<210> 23
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 <212> PRT
 <213> Mus musculus

<220>
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 <223> Secuencia de aminoácidos de la región variable de la cadena liviana del anticuerpo C7

<400> 23

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

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

LIST SEC

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

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

Ser Gly Ser Gly Thr His Tyr Ser Leu Thr Ile Thr His Leu Glu Gln
 65 70 75 80

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

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

<210> 24
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 <212> ADN
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<220>
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 <223> Secuencia de nucleótidos del ADNc que codifica la región variable de la
 cadena pesada del anticuerpo C7

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 aaccagaagt tcaagggcaa ggccacattg actgttgaca agtcctccag cacagcctac 240
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 tcctca 366

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 1 5 10 15

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

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

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

Lys 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 Ser Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met Asp Tyr Trp
 100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser
 115 120

<210> 26
 <211> 449
 <212> ADN

LIST SEC

<213> Homo sapiens

<220>

<221> misc_feature

<223> Fragmento de ADN que comprende la secuencia de ADN que codifica la secuencia de señal de la cadena liviana humana y la región constante de la cadena fÈ humana

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cctgagcagc accctgacct tgagcaaagc cgactacgag aagcacaagg tgtacgcctg	360
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<210> 27

<211> 1137

<212> ADN

<213> Homo sapiens

<220>

<221> misc_feature

<223> Fragmento de ADN que comprende la secuencia de ADN que codifica la secuencia de señal de la cadena pesada humana y la región constante LALA IgG1 humana

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aagggcccaa gcgtcttccc cctggcacc tcctccaaga gcacctctgg cggcacagcc	180
gccctgggct gcctggtcaa ggactacttc cccgaaccg tgaccgtgag ctggaactca	240

LIST SEC

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aacgtgaatc acaagcccag caacaccaag gtggacaaga gagttgagcc caaatcttgt      420
gacaaaactc acacatgccc accctgcccga gcacctgaag ccgcgggggg accctcagtc      480
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tgcgtggtgg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac      600
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aaccagggtca gcctgacctg cctggtcaaa ggcttctatc ccagcgacat cgccgtggag      900
tgggagagca atggccagcc cgagaacaac tacaagacca cccctcccgt gctggactcc      960
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aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac ccagaagagc     1080
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<210> 28
<211> 234
<212> PRT
<213> Secuencia artificial

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<220>
<223> Anticuerpo quimérico

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<220>
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<223> Secuencia de aminoácidos de la cadena liviana del chB1

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<400> 28

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1           5           10          15

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LIST SEC

Gly Ala Tyr Gly Asp Ile Gln Met Thr Gln Thr Ala Ser Ser Leu Ser
20 25 30

Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
35 40 45

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

Lys Leu Leu Ile Tyr Phe Thr Ser Arg Leu His Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr His Tyr Ser Leu Thr Ile Thr
85 90 95

Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Tyr
100 105 110

Pro Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Ala Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

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His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
 210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 29
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<220>
 <223> Anticuerpo quimérico

<220>
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 <223> Fragmento de ADN que comprende la secuencia de ADN que codifica la
 secuencia de aminoácidos
 de la cadena pesada del chB1

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 cgccagcctg ggcgatagag tgaccatcag ctgcagagcc agccaggaca tcaacaacta 180
 cctgaactgg tatcagcaga aacccgacgg caccgtgaag ctgctgatct acttcaccag 240
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 cctgaccatc accaacctgg aacaggaaga tatcgctacc tacttctgtc agcaaggcta 360
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 cgtgtgcctg ctgaacaact tctacccccg cgaggccaag gtgcagtgga aggtggacaa 540
 tgccctgcag agcggcaaca gccaggaaag cgtgaccgag caggacagca aggactccac 600
 ctactccctg agcagcacc tgaccctgag caaggccgac tacgagaagc acaaggtgta 660

LIST SEC

cgctgtcgaa gtagccacc agggcctgtc tagccccgtg accaagagct tcaaccggg 720

cgagtgttga gtttaaacgg gggaggctaa ct 752

<210> 30

<211> 107

<212> PRT

<213> Secuencia artificial

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<223> Anticuerpo quimérico

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena liviana del chB1

<400> 30

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

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

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

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

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

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

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

LIST SEC

<210> 31
 <211> 321
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Anticuerpo quimérico

<220>
 <221> misc_feature
 <223> Secuencia de nucleótidos que codifica la secuencia de aminoácidos de la
 región variable
 de la cadena liviana del chB1

<400> 31
 gacatccaga tgaccagac agccagcagc ctgagcgcca gcctgggcga tagagtgacc 60
 atcagctgca gagccagcca ggacatcaac aactacctga actggtatca gcagaaaccc 120
 gacggcaccg tgaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc 180
 agattttctg gcagcggctc tggcaccac tacagcctga ccatcaccaa cctggaacag 240
 gaagatatcg ctacctactt ctgtcagcaa ggctaccccc tgccttgac ctttggcggc 300
 ggaacaaagc tggaaatcaa g 321

<210> 32
 <211> 471
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Anticuerpo quimérico

<220>
 <221> MISC_FEATURE
 <223> Secuencia de aminoácidos de la cadena pesada del chB1

<400> 32

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
 1 5 10 15

LIST SEC

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

Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Thr Ser Gly Tyr Thr Phe
35 40 45

Thr Glu Tyr Thr Met His Trp Val Gln Gln Ser His Gly Lys Ser Leu
50 55 60

Glu Trp Ile Gly Gly Val Asn Pro Asn Ser Gly Asp Thr Ser Tyr Asn
65 70 75 80

Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
85 90 95

Thr Ala Tyr Met Glu Leu Arg Ser Leu Thr Ser Glu Asp Ser Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser Thr
130 135 140

Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser
145 150 155 160

Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu
165 170 175

Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
180 185 190

Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser
195 200 205

LIST SEC

Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys
210 215 220

Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu
225 230 235 240

Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
245 250 255

Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
260 265 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
275 280 285

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
290 295 300

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
305 310 315 320

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
325 330 335

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
340 345 350

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
355 360 365

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
370 375 380

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
385 390 395 400

LIST SEC

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
 405 410 415

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
 420 425 430

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
 435 440 445

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
 450 455 460

Leu Ser Leu Ser Pro Gly Lys
 465 470

<210> 33
 <211> 1413
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Anticuerpo quimérico

<220>
 <221> misc_feature
 <223> Secuencia de nucleótidos que codifica la cadena pesada del chB1

<400> 33
 atgaaacacc tgtggttctt cctcctgctg gtggcagctc ccagatgggt gctgagcgaa 60
 gtgcagctgc agcagtctgg ccccgagctc gtgaaacctg gcgctccgt gaagatcagc 120
 tgcaagacca gcggctacac cttcaccgag tacacatgc actgggtgca gcagagccac 180
 ggcaagagcc tggaatggat cggcggcgtg aacccaaca gcggcgacac cagctacaac 240
 cagaagttca agggcaaggc caccctgacc gtggacaaga gcagcagcac cgcctacatg 300
 gaactgcgga gcctgaccag cgaggacagc gccgtgtact actgtgccag acctggcggc 360
 tacgacgtgg gctactacgc catggattac tggggccagg gcaccagcgt gaccgtcagc 420

LIST SEC

tcagcctcca ccaagggccc aagcgtcttc cccctggcac cctcctccaa gagcacctct	480
ggcggcacag ccgccctggg ctgcctggtc aaggactact tccccgaacc cgtgaccgtg	540
agctggaact caggcgccct gaccagcggc gtgcacacct tccccgtgt cctgcagtcc	600
tcaggactct actccctcag cagcgtgggt accgtgccct ccagcagctt gggcacccag	660
acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gagagttgag	720
cccaaattctt gtgacaaaac tcacacatgc ccaccctgcc cagcacctga agccgcgggg	780
ggaccctcag tcttcctctt cccccaaaa cccaaggaca cctcatgat ctcccggacc	840
cctgaggtca catgcgtggt ggtggacgtg agccacgaag accctgaggt caagttcaac	900
tggtacgtgg acggcgtgga ggtgcataat gccaaagaaa agccccggga ggagcagtac	960
aacagcacgt accgggtggt cagcgtcctc accgtcctgc accaggactg gctgaatggc	1020
aaggagtaca agtgcaaggt ctccaacaaa gccctcccag ccccatcga gaaaaccatc	1080
tccaaagcca aaggccagcc ccgggaacca caggtgtaca ccctgcccc atcccgggag	1140
gagatgacca agaaccaggt cagcctgacc tgcttgggtca aaggcttcta tcccagcgac	1200
atcgccgtgg agtgggagag caatggccag cccgagaaca actacaagac caccctccc	1260
gtgctggact ccgacggctc cttcttctc tacagcaagc tcaccgtgga caagagcagg	1320
tggcagcagg gcaacgtctt ctcatgctcc gtgatgcatg aggtcttgca caaccactac	1380
accagaaga gcctctccct gtctcccggc aaa	1413

<210> 34

<211> 122

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo quimérico

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena pesada del chB1

LIST SEC

<400> 34

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 Glu Tyr
20 25 30

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

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

Lys 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 Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 35

<211> 366

<212> ADN

<213> Secuencia artificial

<220>

<223> Anticuerpo quimérico

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la región variable de la cadena pesada del chB1

LIST SEC

```

<400> 35
gaagtgcagc tgcagcagtc tggccccgag ctcgtgaaac ctggcgcctc cgtgaagatc      60
agctgcaaga ccagcggcta caccttcacc gagtacacca tgcactgggt gcagcagagc      120
cacggcaaga gcctggaatg gatcggcggc gtgaacccca acagcggcga caccagctac      180
aaccagaagt tcaagggcaa ggccaccctg accgtggaca agagcagcag caccgcctac      240
atggaactgc ggagcctgac cagcgaggac agcgccgtgt actactgtgc cagacctggc      300
ggctacgacg tgggctacta cgccatggat tactggggcc agggcaccag cgtgaccgtc      360
agctca                                          366
  
```

```

<210> 36
<211> 234
<212> PRT
<213> Secuencia artificial
  
```

```

<220>
<223> humanized antibody
  
```

```

<220>
<221> MISC_FEATURE
<223> Secuencia de aminoácidos de la cadena liviana del anticuerpo humanizado hL1
  
```

<400> 36

```

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
1           5           10          15
  
```

```

Gly Ala Tyr Gly Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
          20          25          30
  
```

```

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp
          35          40          45
  
```

```

Ile Asn Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
50          55          60
  
```

LIST SEC

Lys Leu Leu Ile Tyr Phe Thr Ser Arg Leu His Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser
85 90 95

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Tyr
100 105 110

Pro Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230

<210> 37

<211> 702

<212> ADN

<213> Secuencia artificial

LIST SEC

<220>

<223> Anticuerpo humanizado

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la cadena liviana del anticuerpo humanizado hL1

<400> 37

atggtgctgc agaccaggt gttcatctcc ctgctgctgt ggatctccgg cgcgtacggc	60
gacatccaga tgaccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc	120
atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaagccc	180
ggcaaggccc ccaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc	240
agattttctg gcagcggctc cggcaccgac tacaccctga caatcagcag cctgcagccc	300
gaggacttcg ccacctacta ctgccagcag ggctaccccc tgccttggac atttggccag	360
ggcaccaagg tggaaatcaa gcgtacggtg gccgccccct ccgtgttcat cttccccccc	420
tccgacgagc agctgaagtc cggcaccgcc tccgtggtgt gcctgctgaa taacttctac	480
cccagagagg ccaaggtgca gtggaagggtg gacaacgccc tgcagtccgg gaactcccag	540
gagagcgtga ccgagcagga cagcaaggac agcacctaca gcctgagcag caccctgacc	600
ctgagcaaag ccgactacga gaagcacaag gtgtacgcct gcgaggtgac ccaccagggc	660
ctgagctccc ccgtcaccaa gagcttcaac aggggggagt gt	702

<210> 38

<211> 107

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena liviana del

LIST SEC

anticuerpo humanizado hL1

<400> 38

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 Ile Asn Asn Tyr
20 25 30

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

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

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

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

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

<210> 39

<211> 321

<212> ADN

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la región variable de la cadena liviana del anticuerpo humanizado hL1

<400> 39

gacatccaga tgaccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc 60

LIST SEC

atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaagccc 120
 ggcaaggccc ccaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc 180
 agattttctg gcagcggctc cggcaccgac tacaccctga caatcagcag cctgcagccc 240
 gaggacttcg ccacctacta ctgccagcag ggctaccccc tgccttggac atttggccag 300
 ggcaccaagg tggaatcaa g 321

<210> 40

<211> 234

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena liviana del anticuerpo humanizado hL2

<400> 40

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
 1 5 10 15

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

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp
 35 40 45

Ile Asn Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Val
 50 55 60

Lys Leu Leu Ile Tyr Phe Thr Ser Arg Leu His Ser Gly Val Pro Ser
 65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr His Tyr Thr Leu Thr Ile Ser

LIST SEC

85

90

95

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Tyr
 100 105 110

Pro Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
 145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
 165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
 180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
 195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
 210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 41

<211> 702

<212> ADN

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

LIST SEC

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la cadena liviana del anticuerpo humanizado hL2

<400> 41

atggtgctgc agaccaggt gttcatctcc ctgctgctgt ggatctccgg cgcgtacggc	60
gacatccaga tgaccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc	120
atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaaaccc	180
ggcaaggccg tgaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc	240
agattttctg gcagcggctc tggcaccac tacacctga caatcagcag cctgcagccc	300
gaggacttcg ccacctacta ctgccagcag ggctaccccc tgccttggac atttgccag	360
ggcaccaagg tggaaatcaa gcgtacggtg gccgccccct ccgtgttcat cttccccccc	420
tccgacgagc agctgaagtc cggcaccgcc tccgtggtgt gcctgctgaa taacttctac	480
cccagagagg ccaaggtgca gtggaagggtg gacaacgccc tgcagtccgg gaactcccag	540
gagagcgtga ccgagcagga cagcaaggac agcacctaca gcctgagcag caccctgacc	600
ctgagcaaag ccgactacga gaagcacaag gtgtacgcct gcgaggtgac ccaccagggc	660
ctgagctccc ccgtcaccaa gagcttcaac aggggggaggt gt	702

<210> 42

<211> 107

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región ariable de la cadena liviana del anticuerpo humanizado hL2

<400> 42

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

LIST SEC

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

<210> 43
 <211> 321
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Anticuerpo humanizado

<220>
 <221> misc_feature
 <223> Secuencia de nucleótidos que codifica la región variable de la cadena liviana del anticuerpo humanizado hL2

<400> 43	
gacatccaga tgaccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc	60
atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaaaccc	120
ggcaaggccg tgaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc	180

LIST SEC

```

agattttctg gcagcggctc tggcacccac tacaccctga caatcagcag cctgcagccc      240
gaggacttcg ccacctacta ctgccagcag ggctaccccc tgccttggac atttggccag      300
ggcaccaagg tggaaatcaa g                                              321

```

```

<210> 44
<211> 234
<212> PRT
<213> Secuencia artificial

```

```

<220>
<223> Anticuerpo humanizado

```

```

<220>
<221> MISC_FEATURE
<223> Secuencia de aminoácidos de la cadena liviana del anticuerpo humanizado hL3

```

```

<400> 44

```

```

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
1           5           10           15

```

```

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

```

```

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp
35           40           45

```

```

Ile Asn Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gly Ala Val
50           55           60

```

```

Lys Leu Leu Ile Tyr Phe Thr Ser Arg Leu His Ser Gly Val Pro Ser
65           70           75           80

```

```

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser
85           90           95

```

```

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Tyr
100          105          110

```

LIST SEC

Pro Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
 145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
 165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
 180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
 195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
 210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 45

<211> 702

<212> ADN

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la cadena liviana del anticuerpo humanizado hL3

LIST SEC

```

<400> 45
atggtgctgc agaccaggt gttcatctcc ctgctgctgt ggatctccgg cgcgtacggc      60
gacatccaga tgaccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc      120
atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaaaccc      180
ggcggagccg tgaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc      240
agattttctg gcagcggctc cggcaccgac tacaccctga caatcagcag cctgcagccc      300
gaggacttcg ccacctacta ctgccagcag ggctaccccc tgccttggaac atttggcggc      360
ggaacaaagg tggaaatcaa gcgtacggtg gccgccccct ccgtgttcat cttccccccc      420
tccgacgagc agctgaagtc cggcaccgcc tccgtggtgt gcctgctgaa taacttctac      480
cccagagagg ccaaggtgca gtggaaggtg gacaacgccc tgcagtccgg gaactcccag      540
gagagcgtga ccgagcagga cagcaaggac agcacctaca gcctgagcag caccctgacc      600
ctgagcaaag ccgactacga gaagcacaag gtgtacgcct gcgaggtgac ccaccagggc      660
ctgagctccc ccgtcaccaa gagcttcaac aggggggaggt gt                          702

```

```

<210> 46
<211> 107
<212> PRT
<213> Secuencia artificial

```

```

<220>
<223> Anticuerpo humanizado

```

```

<220>
<221> MISC_FEATURE
<223> Secuencia de aminoácidos de la región variable de la cadena liviana del
anticuerpo humanizado hL3

```

```

<400> 46
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1           5           10           15

```

```

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

```

LIST SEC

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

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

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

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

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

<210> 47

<211> 321

<212> ADN

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la región variable de la cadena liviana del anticuerpo humanizado hL3

<400> 47

gacatccaga tgacccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc 60

atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaaaccc 120

ggcggagccg tgaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc 180

agattttctg gcagcggctc cggcaccgac tacaccctga caatcagcag cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag ggctaccccc tgccctggac atttggcggc 300

ggaacaaagg tggaaatcaa g 321

LIST SEC

<210> 48
 <211> 234
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Anticuerpo humanizado

<220>
 <221> MISC_FEATURE
 <223> Secuencia de aminoácidos de la cadena liviana del anticuerpo humanizado hL4

<400> 48

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
 1 5 10 15

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

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp
 35 40 45

Ile Asn Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gly Ala Val
 50 55 60

Lys Leu Leu Ile Tyr Phe Thr Ser Arg Leu His Ser Gly Val Pro Ser
 65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser
 85 90 95

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Asn
 100 105 110

Thr Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 115 120 125

LIST SEC

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230

<210> 49
<211> 702
<212> ADN
<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> misc_feature
<223> Secuencia de nucleótidos que codifica la cadena liviana del anticuerpo humanizado hL4

<400> 49
atggtgctgc agaccaggt gttcatctcc ctgctgctgt ggatctccgg cgcgtacggc 60
gacatccaga tgaccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc 120

LIST SEC

atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaaaccc 180
 ggcggagccg tgaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc 240
 agattttctg gcagcggctc cggcaccgac tacaccctga caatcagcag cctgcagccc 300
 gaggacttcg ccacctacta ctgccagcag ggcaacaccc tgccttgac atttggcgga 360
 ggcaccaagg tggaaatcaa gcgtacggtg gccgccccct ccgtgttcat cttccccccc 420
 tccgacgagc agctgaagtc cggcaccgcc tccgtggtgt gcctgctgaa taacttctac 480
 cccagagagg ccaaggtgca gtggaagggtg gacaacgccc tgcagtccgg gaactcccag 540
 gagagcgtga ccgagcagga cagcaaggac agcacctaca gcctgagcag caccctgacc 600
 ctgagcaaag ccgactacga gaagcacaag gtgtacgcct gcgaggtgac ccaccagggc 660
 ctgagctccc ccgtcaccaa gagcttcaac agggggggagt gt 702

<210> 50

<211> 107

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena liviana del anticuerpo humanizado hL4

<400> 50

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

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

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

LIST SEC

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

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

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

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

<210> 51

<211> 321

<212> ADN

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la región variable de la cadena liviana del anticuerpo humanizado hL4

<400> 51

gacatccaga tgaccagag ccctagcagc ctgagcgcca gcgtgggcga cagagtgacc 60

atcacctgta gagccagcca ggacatcaac aactacctga actggtatca gcagaaaccc 120

ggcggagccg tgaagctgct gatctacttc accagcagac tgcacagcgg cgtgcccagc 180

agattttctg gcagcggctc cggcaccgac tacaccctga caatcagcag cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag ggcaacaccc tgccttgac atttggcgga 300

ggcaccaagg tggaaatcaa g 321

<210> 52

<211> 471

<212> PRT

LIST SEC

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena pesada del anticuerpo humanizado hH1

<400> 52

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
1 5 10 15

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

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

Thr Glu Tyr Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
50 55 60

Glu Trp Met Gly Gly Val Asn Pro Asn Ser Gly Asp Thr Ser Tyr Ala
65 70 75 80

Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Ser
85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr
130 135 140

LIST SEC

Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser
145 150 155 160

Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu
165 170 175

Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
180 185 190

Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser
195 200 205

Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys
210 215 220

Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu
225 230 235 240

Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
245 250 255

Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
260 265 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
275 280 285

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
290 295 300

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
305 310 315 320

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
325 330 335

LIST SEC

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
340 345 350

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
355 360 365

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
370 375 380

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
385 390 395 400

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
405 410 415

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
420 425 430

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
435 440 445

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
450 455 460

Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 53
<211> 1413
<212> ADN
<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> misc_feature
<223> Secuencia de nucleótidos que codifica la cadena pesada del anticuerpo

LIST SEC

humanizado hH1

<400> 53

atgaaacacc tgtggttctt cctcctgctg gtggcagctc ccagatgggt gctgagccag	60
gtgcagctgg tgcagtctgg cgccgaagtg aagaaaccag gcgccagcgt gaaggtgtcc	120
tgcaaggcca gcggtacac ctttaccgag tacacatgc actgggtgcg ccaggctcca	180
ggccagggac tggaatggat gggcggcgtg aacccaaca gcggcgatac aagctacgcc	240
cagaaattcc agggcagagt gaccatcacc gccgacacca gcacctccac cgcctacatg	300
gaactgagca gcctgcggag cgaggacacc gccgtgtact actgtgctag acctggcggc	360
tacgacgtgg gctactacgc catggattac tggggccagg gcacctcgt gaccgtcagc	420
tcagcctcca ccaagggccc aagcgtcttc cccctggcac cctcctcaa gagcacctct	480
ggcggcacag ccgccctggg ctgcctggtc aaggactact tccccgaacc cgtgaccgtg	540
agctggaact caggcgccct gaccagcggc gtgcacacct tccccgtgt cctgcagtcc	600
tcaggactct actccctcag cagcgtggtg accgtgccct ccagcagctt gggcacccag	660
acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gagagttgag	720
cccaaattctt gtgacaaaac tcacacatgc ccacctgcc cagcacctga agccgcgggg	780
ggacctcag tcttctctt cccccaaaa cccaaggaca ccctcatgat ctcccgacc	840
cctgaggtca catgcgtggt ggtggacgtg agccacgaag accctgaggt caagttcaac	900
tggtagctgg acggcgtgga ggtgcataat gccaagacaa agccccggga ggagcagtac	960
aacagcacgt accgggtggt cagcgtcctc accgtcctgc accaggactg gctgaatggc	1020
aaggagtaca agtgcaaggt ctccaacaaa gccctcccag ccccatcga gaaaaccatc	1080
tccaaagcca aaggccagcc ccgggaacca caggtgtaca ccctgcccc atcccgggag	1140
gagatgacca agaaccaggt cagcctgacc tgcttggtca aaggcttcta tcccagcgac	1200
atcgccgtgg agtgggagag caatggccag cccgagaaca actacaagac caccctccc	1260
gtgctggact ccgacggctc cttcttcctc tacagcaagc tcaccgtgga caagagcagg	1320
tggcagcagg gcaacgtctt ctcatgctcc gtgatgcatg aggtcttgca caaccactac	1380

LIST SEC

accagaaga gcctctccct gtctcccggc aaa

1413

<210> 54

<211> 122

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena pesada del anticuerpo humanizado hH1

<400> 54

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	Glu	Tyr
			20					25					30		

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

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

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

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

Ala	Arg	Pro	Gly	Gly	Tyr	Asp	Val	Gly	Tyr	Tyr	Ala	Met	Asp	Tyr	Trp
			100					105					110		

LIST SEC

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

<210> 55
<211> 366
<212> ADN
<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> misc_feature
<223> Secuencia de nucleótidos que codifica la región variable de la cadena pesada del anticuerpo humanizado hH1

<400> 55
cagggtgcagc tgggtgcagtc tggcgccgaa gtgaagaaac caggcgccag cgtgaaggtg 60
tcctgcaagg ccagcggcta cacctttacc gagtacacca tgcactgggt gcgccaggct 120
ccaggccagg gactggaatg gatgggcggc gtgaacccca acagcggcga tacaagctac 180
gcccgaaaat tccagggcag agtgaccatc accgccgaca ccagcacctc caccgcctac 240
atggaactga gcagcctgcg gagcgaggac accgccgtgt actactgtgc tagacctggc 300
ggctacgacg tgggctacta cgccatggat tactggggcc agggcaccct cgtgaccgtc 360
agctca 366

<210> 56
<211> 471
<212> PRT
<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> MISC_FEATURE
<223> Secuencia de aminoácidos de la cadena pesada del anticuerpo humanizadohH2
<400> 56

LIST SEC

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
1 5 10 15

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

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe
35 40 45

Thr Glu Tyr Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Ser Leu
50 55 60

Glu Trp Met Gly Gly Val Asn Pro Asn Ser Gly Asp Thr Ser Tyr Ala
65 70 75 80

Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Ser
85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr
130 135 140

Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser
145 150 155 160

Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu
165 170 175

Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
180 185 190

LIST SEC

Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser
195 200 205

Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys
210 215 220

Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu
225 230 235 240

Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
245 250 255

Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
260 265 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
275 280 285

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
290 295 300

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
305 310 315 320

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
325 330 335

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
340 345 350

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
355 360 365

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
370 375 380

LIST SEC

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
385 390 395 400

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
405 410 415

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
420 425 430

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
435 440 445

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
450 455 460

Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 57
<211> 1413
<212> ADN
<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> misc_feature
<223> Secuencia de nucleótidos que codifica la cadena pesada del anticuerpo humanizado hH2

<400> 57
atgaaacacc tgtggttctt cctcctgctg gtggcagctc ccagatgggt gctgagcgaa 60
gtgcagctgg tgcagtctgg cgccgaagtg aagaaaccag gcgccagcgt gaaggtgtcc 120
tgcaagacca gcggttacac ctttaccgag tacaccatgc actgggtgcg ccaggcccct 180
ggcaagagcc tggaatggat gggcggcgtg aacccaaca gcggcgatac aagctacgcc 240
cagaaattcc agggcagagt gaccatcacc gccgacacca gcacctccac cgcctacatg 300

LIST SEC

gaactgagca gcctgcggag cgaggacacc gccgtgtact actgtgctag acctggcggc	360
tacgacgtgg gctactacgc catggattac tggggccagg gcaccctcgt gaccgtcagc	420
tcagcctcca ccaagggccc aagcgtcttc cccctggcac cctcctccaa gagcacctct	480
ggcggcacag ccgccctggg ctgcctggtc aaggactact tccccgaacc cgtgaccgtg	540
agctggaact caggcgcctt gaccagcggc gtgcacacct tccccgctgt cctgcagtcc	600
tcaggactct actccctcag cagcgtggtg accgtgccct ccagcagctt gggcaccag	660
acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gagagttgag	720
cccaaattctt gtgacaaaac tcacacatgc ccaccctgcc cagcacctga agccgcgggg	780
ggaccctcag tcttcctctt cccccaaaa cccaaggaca ccctcatgat ctcccggacc	840
cctgagggtca catgcgtggg ggtggacgtg agccacgaag accctgaggt caagttcaac	900
tggtacgtgg acggcgtgga ggtgcataat gccaaagaaa agccccggga ggagcagtac	960
aacagcacgt accgggtggg cagcgtcctc accgtcctgc accaggactg gctgaatggc	1020
aaggagtaca agtgcaaggt ctccaacaaa gccctcccag ccccatcga gaaaaccatc	1080
tccaaagcca aaggccagcc ccgggaacca caggtgtaca ccctgcccc atcccgggag	1140
gagatgacca agaaccaggt cagcctgacc tgcttgggtca aaggcttcta tcccagcgac	1200
atcgccgtgg agtgggagag caatggccag ccgagaaca actacaagac caccctccc	1260
gtgctggact ccgacggctc cttcttcctc tacagcaagc tcaccgtgga caagagcagg	1320
tggcagcagg gcaacgtctt ctcatgtctc gtgatgcatg aggtcttgca caaccactac	1380
accagaaga gcctctccct gtctcccggc aaa	1413

<210> 58

<211> 122

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

LIST SEC

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena pesada del anticuerpo humanizado hH2

<400> 58

Glu	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	Thr	Ser	Gly	Tyr	Thr	Phe	Thr	Glu	Tyr
			20					25					30		

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

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

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

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

Ala	Arg	Pro	Gly	Gly	Tyr	Asp	Val	Gly	Tyr	Tyr	Ala	Met	Asp	Tyr	Trp
			100					105					110		

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

<210> 59

<211> 366

<212> ADN

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

LIST SEC

<220>

<221> misc_feature

<223> Secuencia de nucleótidos que codifica la región variable de la cadena pesada del anticuerpo humanizado hH2

<400> 59

gaagtgcagc tgggtgcagtc tggcgccgaa gtgaagaaac caggcgccag cgtgaagggtg	60
tcctgcaaga ccagcggcta cacctttacc gagtacacca tgcactgggt gcgccaggcc	120
cctggcaaga gcctggaatg gatgggcggc gtgaacccca acagcggcga tacaagctac	180
gccagaaaat tccagggcag agtgaccatc accgccgaca ccagcacctc caccgcctac	240
atggaactga gcagcctgcg gagcgaggac accgccgtgt actactgtgc tagacctggc	300
ggctacgacg tgggctacta cgccatggat tactggggcc agggcacct cgtgaccgtc	360
agctca	366

<210> 60

<211> 471

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena pesada del anticuerpo humanizado hH3

<400> 60

Met	Lys	His	Leu	Trp	Phe	Phe	Leu	Leu	Leu	Val	Ala	Ala	Pro	Arg	Trp
1			5						10					15	

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

Pro	Gly	Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Thr	Ser	Gly	Tyr	Thr	Phe
		35					40					45			

LIST SEC

Thr Glu Tyr Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
50 55 60

Glu Trp Met Gly Gly Val Asn Pro Asn Ser Gly Asp Thr Ser Tyr Ala
65 70 75 80

Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Lys Ser Thr Ser
85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr
130 135 140

Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser
145 150 155 160

Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu
165 170 175

Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
180 185 190

Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser
195 200 205

Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys
210 215 220

Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu
225 230 235 240

LIST SEC

Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
245 250 255

Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
260 265 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
275 280 285

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
290 295 300

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
305 310 315 320

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
325 330 335

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
340 345 350

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
355 360 365

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
370 375 380

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
385 390 395 400

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
405 410 415

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
420 425 430

LIST SEC

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
 435 440 445

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
 450 455 460

Leu Ser Leu Ser Pro Gly Lys
 465 470

<210> 61
 <211> 1413
 <212> ADN
 <213> Secuencia artificial

<220>
 <223> Anticuerpo humanizado

<220>
 <221> misc_feature
 <223> Secuencia de nucleótidos que codifica la cadena pesada del anticuerpo humanizado hH3

<400> 61
 atgaaacacc tgtggttctt cctcctgctg gtggcagctc ccagatgggt gctgagcgaa 60
 gtgcagctgg tgcagtctgg cgccgaagtg aagaaaccag gcgccagcgt gaaggtgtcc 120
 tgcaagacca gcggctacac ctttaccgag tacaccatgc actgggtgcg ccaggctcca 180
 ggccagggac tggaatggat gggcggcgtg aacccaaca gcggcgatac aagctacgcc 240
 cagaaaattcc agggcagagt gaccctgacc gtggacaaga gcaccagcac cgcctacatg 300
 gaactgagca gcctgcggag cgaggacacc gccgtgtact actgtgctag acctggcggc 360
 tacgacgtgg gctactacgc catggattac tggggccagg gcaccctcgt gaccgtcagc 420
 tcagcctcca ccaagggccc aagcgtcttc cccttggcac cctcctccaa gagcacctct 480
 ggcggcacag ccgccctggg ctgcctggtc aaggactact tccccgaacc cgtgaccgtg 540
 agctggaact caggcgcctt gaccagcggc gtgcacacct tccccgctgt cctgcagtcc 600

LIST SEC

tcaggactct actccctcag cagcgtggtg accgtgccct ccagcagctt gggcacccag	660
acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gagagttgag	720
cccaaattctt gtgacaaaac tcacacatgc ccaccctgcc cagcacctga agccgcgggg	780
ggaccctcag tcttcctctt cccccaaaa cccaaggaca ccctcatgat ctcccggacc	840
cctgagggtca catgcgtggt ggtggacgtg agccacgaag accctgaggt caagttcaac	900
tggtacgtgg acggcgtgga ggtgcataat gccaaagaaa agccccggga ggagcagtac	960
aacagcacgt accgggtggt cagcgtcctc accgtcctgc accaggactg gctgaatggc	1020
aaggagtaca agtgcaaggt ctccaacaaa gccctcccag ccccatcga gaaaaccatc	1080
tccaaagcca aaggccagcc ccgggaacca caggtgtaca ccctgcccc atcccgggag	1140
gagatgacca agaaccaggt cagcctgacc tgcttggtca aaggcttcta tcccagcgac	1200
atcgccgtgg agtgggagag caatggccag cccgagaaca actacaagac caccctccc	1260
gtgctggact ccgacggctc cttcttctc tacagcaagc tcaccgtgga caagagcagg	1320
tggcagcagg gcaacgtctt ctcatgtctc gtgatgcatg aggtcttgca caaccactac	1380
accagaaga gcctctccct gtctcccggc aaa	1413

<210> 62

<211> 122

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la región variable de la cadena pesada del anticuerpo humanizado hH3

<400> 62

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

LIST SEC

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Glu Tyr
20 25 30

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

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

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

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

Ala Arg Pro Gly Gly Tyr Asp Val Gly Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

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

<210> 63
<211> 366
<212> ADN
<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> misc_feature
<223> Secuencia de nucleótidos que codifica la region variable de la cadena pesada del anticuerpo humanizado hH3

<400> 63
gaagtgcagc tgggtgcagtc tggcgccgaa gtgaagaaac caggcgccag cgtgaagggtg 60
tcctgcaaga ccagcggcta cacctttacc gagtacacca tgcactgggt gcgccaggct 120

LIST SEC

ccaggccagg gactggaatg gatgggcggc gtgaacccca acagcggcga tacaagctac 180
 gccagaaaat tccagggcag agtgaccctg accgtggaca agagcaccag caccgcctac 240
 atggaactga gcagcctgcg gagcgaggac accgccgtgt actactgtgc tagacctggc 300
 ggctacgacg tgggctacta cgccatggat tactggggcc agggcaccct cgtgaccgtc 360
 agctca 366

<210> 64
 <211> 214
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Anticuerpo humanizado

<220>
 <221> MISC_FEATURE
 <223> Secuencia de aminoácidos de la cadena liviana del Trastuzuma

<400> 64

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

Ser Arg 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 Thr Thr Pro Pro
 85 90 95

LIST SEC

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

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

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

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

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

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

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

Phe Asn Arg Gly Glu Cys
 210

<210> 65

<211> 450

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena pesada del Trastuzumab

<400> 65

LIST SEC

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

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

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

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

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

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

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

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

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

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

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

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

LIST SEC

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

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

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

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

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

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

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

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

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

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

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

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

LIST SEC

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

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

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

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

Gly Lys
450

<210> 66

<211> 234

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena liviana del anticuerpo anti-LPS
(h#1G5-H1L1)

<400> 66

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
1 5 10 15

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

Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ala Ser Glu Asn
35 40 45

LIST SEC

Val Gly Asn Ser Val Ser Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
50 55 60

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

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
85 90 95

Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gly Gln Ser Tyr
100 105 110

Ser Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230

LIST SEC

<210> 67
 <211> 474
 <212> PRT
 <213> Secuencia artificial

<220>
 <223> Anticuerpo humanizado

<220>
 <221> MISC_FEATURE
 <223> Secuencia de aminoácidos de la cadena pesada del anticuerpo anti-LPS
 (h#1G5-H1L1)

<400> 67

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
 1 5 10 15

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

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
 35 40 45

Thr Ser Tyr Trp Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
 50 55 60

Glu Trp Met Gly Asn Ile Tyr Pro Gly Ser Ser Ser Ile Asn Tyr Asn
 65 70 75 80

Glu Lys Phe Lys Ser Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Ser
 85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
 100 105 110

Tyr Tyr Cys Ala Arg Thr Ile Tyr Asn Tyr Gly Ser Ser Gly Tyr Asn
 115 120 125

LIST SEC

Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135 140

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
145 150 155 160

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
165 170 175

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
180 185 190

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
195 200 205

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
210 215 220

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
225 230 235 240

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
245 250 255

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
260 265 270

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
275 280 285

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
290 295 300

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
305 310 315 320

LIST SEC

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
325 330 335

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
340 345 350

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
355 360 365

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
370 375 380

Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
385 390 395 400

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
405 410 415

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
420 425 430

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
435 440 445

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
450 455 460

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 68

<211> 234

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

LIST SEC

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena liviana del anticuerpo anti-TR0P2 (hRS7)

<400> 68

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
1 5 10 15

Gly Ala Tyr Gly Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser
20 25 30

Ala Ser Val Gly Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp
35 40 45

Val Ser Ile Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
50 55 60

Lys Leu Leu Ile Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
85 90 95

Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Tyr
100 105 110

Ile Thr Pro Leu Thr Phe Gly Ala Gly Thr Lys Val Glu Ile Lys Arg
115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145 150 155 160

LIST SEC

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230

<210> 69

<211> 470

<212> PRT

<213> Secuencia artificial

<220>

<223> humanized antibody

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena pesada del anticuerpo anti-TROP2 (hRS7)

<400> 69

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
1 5 10 15

Val Leu Ser Gln Val Gln Leu Gln Gln Ser Gly Ser Glu Leu Lys Lys
20 25 30

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

LIST SEC

Thr Asn Tyr Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu
50 55 60

Lys Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Thr
65 70 75 80

Asp Asp Phe Lys Gly Arg Phe Ala Phe Ser Leu Asp Thr Ser Val Ser
85 90 95

Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Asp Asp Thr Ala Val
100 105 110

Tyr Phe Cys Ala Arg Gly Gly Phe Gly Ser Ser Tyr Trp Tyr Phe Asp
115 120 125

Val Trp Gly Gln Gly Ser Leu Val Thr Val Ser Ser Ala Ser Thr Lys
130 135 140

Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly
145 150 155 160

Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
165 170 175

Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr
180 185 190

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
195 200 205

Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn
210 215 220

Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro
225 230 235 240

LIST SEC

Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
245 250 255

Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
260 265 270

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
275 280 285

Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
290 295 300

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
305 310 315 320

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
325 330 335

Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
340 345 350

Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
355 360 365

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn
370 375 380

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
385 390 395 400

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
405 410 415

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
420 425 430

LIST SEC

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
435 440 445

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
450 455 460

Ser Leu Ser Pro Gly Lys
465 470

<210> 70

<211> 240

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena liviana del anticuerpo anti-CD98 (hM23-H1L1)

<400> 70

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
1 5 10 15

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

Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser
35 40 45

Leu Leu Tyr Ser Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln
50 55 60

Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
65 70 75 80

LIST SEC

Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95

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

Tyr Cys Gln Arg Tyr Tyr Gly Tyr Pro Trp Thr Phe Gly Gln Gly Thr
115 120 125

Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe
130 135 140

Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys
145 150 155 160

Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val
165 170 175

Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln
180 185 190

Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser
195 200 205

Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His
210 215 220

Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235 240

<210> 71

<211> 465

<212> PRT

<213> Secuencia artificial

<220>

<223> Anticuerpo humanizado

LIST SEC

<220>

<221> MISC_FEATURE

<223> Secuencia de aminoácidos de la cadena pesada del anticuerpo anti-CD98 (hM23-H1L1)

<400> 71

Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
1 5 10 15

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

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe
35 40 45

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

Glu Trp Met Gly Val Ile Asn Pro Gly Ser Gly Val Thr Asn Tyr Asn
65 70 75 80

Glu Lys Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Ser
85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Ala Glu Ala Trp Phe Ala Tyr Trp Gly Gln Gly
115 120 125

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

Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
145 150 155 160

LIST SEC

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

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
180 185 190

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
195 200 205

Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
210 215 220

Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys Ser Cys Asp Lys
225 230 235 240

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro
245 250 255

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
260 265 270

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
275 280 285

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
290 295 300

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
305 310 315 320

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
325 330 335

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

LIST SEC

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
355 360 365

Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr
370 375 380

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
385 390 395 400

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
405 410 415

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
420 425 430

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
435 440 445

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
450 455 460

Lys
465

<210> 72
<211> 702
<212> ADN
<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> misc_feature
<223> Secuencia de nucleótidos que codifica la cadena liviana mutante del Trastuzumab

<400> 72

LIST SEC

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atggtgctgc agaccaggt gttcatctcc ctgctgctgt ggatctccgg cgcgtacggc      60
gacatccaga tgacacagag ccctagcagc ctgtctgcca gcgtgggaga cagagtgacc      120
atcacctgta gagccagcca ggacgtgaac acagccgtgg cttggtatca gcagaagcct      180
ggcaaggccc ctaagctgct gatctacagc gccagctttc tgtacagcgg cgtgcccagc      240
agattcagcg gctctagaag cggcaccgac ttcaccctga ccataagcag tctgcagccc      300
gaggacttcg ccacctacta ctgtcagcag cactacacca cacctccaac ctttggccag      360
ggcaccaagg tggaaatcaa gcgtacggtg gccgccccct ccgtgttcat cttccccccc      420
tccgacgagc agctgaagtc cggcaccgcc tccgtggtgt gcctgctgaa taacttctac      480
cccagagagg ccaaggtgca gtggaaggtg gacaacgccc tgcagtccgg gaactcccag      540
gagagcgtga ccgagcagga cagcaaggac agcacctaca gcctgagcag caccctgacc      600
ctgagcaaag ccgactacga gaagcacaag gtgtacgcct gcgaggtgac ccaccagggc      660
ctgagctccc ccgtcaccaa gagcttcaac agggggggagt gt                          702

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<210> 73
<211> 234
<212> PRT
<213> Secuencia artificial

```

```

<220>
<223> Anticuerpo humanizado

```

```

<220>
<221> MISC_FEATURE
<223> Secuencia de aminoácidos de la cadena liviana mutante del Trastuzumab

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```

<400> 73

```

```

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
1           5           10          15

```

```

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

```

LIST SEC

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp
35 40 45

Val Asn Thr Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
50 55 60

Lys Leu Leu Ile Tyr Ser Ala Ser Phe Leu Tyr Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
85 90 95

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His Tyr
100 105 110

Thr Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
210 215 220

LIST SEC

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230

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<213> Secuencia artificial

<220>
<223> Anticuerpo humanizado

<220>
<221> misc_feature
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LIST SEC

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acgtaccggg tggtcagcgt cctcaccgtc ctgcaccagg actgggtgaa tggcaaggag      1020
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<220>
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<400> 75

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Met Lys His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
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```

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Val Leu Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
          20           25           30

```

```

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile
          35           40           45

```

```

Lys Asp Thr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
          50           55           60

```

LIST SEC

Glu Trp Val Ala Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr Ala
65 70 75 80

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser Lys Asn
85 90 95

Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr Ala Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
130 135 140

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
145 150 155 160

Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
165 170 175

Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
180 185 190

Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
195 200 205

Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
210 215 220

Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
225 230 235 240

Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala
245 250 255

LIST SEC

Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
260 265 270

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
275 280 285

Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
290 295 300

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
305 310 315 320

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
325 330 335

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
340 345 350

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
355 360 365

Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln
370 375 380

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
385 390 395 400

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
405 410 415

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
420 425 430

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
435 440 445

LIST SEC

Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser
	450					455					460				

Leu	Ser	Pro	Gly	Lys
465				