

LISTADO DE SECUENCIAS

<110> Solicitante: MITSUBISHI TANABE PHARMA CORPORATION
 OSAKA UNIVERSITY
 5 NATIONAL UNIVERSITY CORPORATION CHIBA UNIVERSITY

<120> Título de la invención: PROTEÍNA DE UNIÓN A RGMA Y SU USO

<130> Número de referencia: A16005-16140

10 <140> Número de solicitud actual: PCT/JP2016/063166
 <141> Fecha de presentación actual: 2016-04-27

<150> Número de solicitud previa: JP2015-091095
 15 <151> Fecha de presentación de la solicitud previa: 2015-04-28

<160> Números de secuencias: 46

<170> Software: PatentIn versión 3.5

20 <210> SEQ ID NO: 1
 <211> Longitud: 450
 <212> Tipo: PRT
 <213> Organismo: Homo sapiens

25 <400> Secuencia: 1
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 Met Gly Met Gly Arg Gly Ala Gly Arg Ser Ala Leu Gly Phe Trp Pro
 20 25 30
 Thr Leu Ala Phe Leu Leu Cys Ser Phe Pro Ala Ala Thr Ser Pro Cys
 35 40 45
 Lys Ile Leu Lys Cys Asn Ser Glu Phe Trp Ser Ala Thr Ser Gly Ser
 50 55 60
 35 His Ala Pro Ala Ser Asp Asp Thr Pro Glu Phe Cys Ala Ala Leu Arg
 65 70 75 80
 Ser Tyr Ala Leu Cys Thr Arg Arg Thr Ala Arg Thr Cys Arg Gly Asp
 85 90 95
 Leu Ala Tyr His Ser Ala Val His Gly Ile Glu Asp Leu Met Ser Gln
 40 100 105 110
 His Asn Cys Ser Lys Asp Gly Pro Thr Ser Gln Pro Arg Leu Arg Thr
 115 120 125
 Leu Pro Pro Ala Gly Asp Ser Gln Glu Arg Ser Asp Ser Pro Glu Ile
 130 135 140
 45 Cys His Tyr Glu Lys Ser Phe His Lys His Ser Ala Thr Pro Asn Tyr
 145 150 155 160
 Thr His Cys Gly Leu Phe Gly Asp Pro His Leu Arg Thr Phe Thr Asp
 165 170 175
 Arg Phe Gln Thr Cys Lys Val Gln Gly Ala Trp Pro Leu Ile Asp Asn
 50 180 185 190
 Asn Tyr Leu Asn Val Gln Val Thr Asn Thr Pro Val Leu Pro Gly Ser
 195 200 205
 Ala Ala Thr Ala Thr Ser Lys Leu Thr Ile Ile Phe Lys Asn Phe Gln
 210 215 220

	Glu	Cys	Val	Asp	Gln	Lys	Val	Tyr	Gln	Ala	Glu	Met	Asp	Glu	Leu	Pro
	225					230					235					240
	Ala	Ala	Phe	Val	Asp	Gly	Ser	Lys	Asn	Gly	Gly	Asp	Lys	His	Gly	Ala
					245					250					255	
5	Asn	Ser	Leu	Lys	Ile	Thr	Glu	Lys	Val	Ser	Gly	Gln	His	Val	Glu	Ile
				260					265					270		
	Gln	Ala	Lys	Tyr	Ile	Gly	Thr	Thr	Ile	Val	Val	Arg	Gln	Val	Gly	Arg
			275				280						285			
10	Tyr	Leu	Thr	Phe	Ala	Val	Arg	Met	Pro	Glu	Glu	Val	Val	Asn	Ala	Val
		290					295					300				
	Glu	Asp	Trp	Asp	Ser	Gln	Gly	Leu	Tyr	Leu	Cys	Leu	Arg	Gly	Cys	Pro
	305					310					315					320
	Leu	Asn	Gln	Gln	Ile	Asp	Phe	Gln	Ala	Phe	His	Thr	Asn	Ala	Glu	Gly
					325					330					335	
15	Thr	Gly	Ala	Arg	Arg	Leu	Ala	Ala	Ala	Ser	Pro	Ala	Pro	Thr	Ala	Pro
				340				345						350		
	Glu	Thr	Phe	Pro	Tyr	Glu	Thr	Ala	Val	Ala	Lys	Cys	Lys	Glu	Lys	Leu
			355				360						365			
20	Pro	Val	Glu	Asp	Leu	Tyr	Tyr	Gln	Ala	Cys	Val	Phe	Asp	Leu	Leu	Thr
		370					375					380				
	Thr	Gly	Asp	Val	Asn	Phe	Thr	Leu	Ala	Ala	Tyr	Tyr	Ala	Leu	Glu	Asp
	385					390					395					400
	Val	Lys	Met	Leu	His	Ser	Asn	Lys	Asp	Lys	Leu	His	Leu	Tyr	Asp	Arg
					405					410					415	
25	Thr	Arg	Asp	Leu	Pro	Gly	Arg	Ala	Ala	Ala	Gly	Leu	Pro	Leu	Ala	Pro
				420				425						430		
	Arg	Pro	Leu	Leu	Gly	Ala	Leu	Val	Pro	Leu	Leu	Ala	Leu	Leu	Pro	Val
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30	Phe	Cys														
		450														

35 <210> SEQ ID NO: 2
 <211> Longitud: 454
 <212> Tipo: PRT
 <213> Organismo: Mus musculus

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 Met Gly Met Gly Arg Gly Ala Gly Arg Ser Ala Leu Gly Leu Trp Pro
 20 25 30
 Thr Leu Ala Phe Leu Leu Cys Ser Phe Pro Ala Ala Ile Ser Pro Cys
 35 40 45
 45 Lys Ile Leu Lys Cys Asn Ser Glu Phe Trp Ser Ala Thr Ser Ser Gly
 50 55 60
 Ser His Ala Pro Ala Ser Asp Asp Val Pro Glu Phe Cys Ala Ala Leu
 65 70 75 80
 50 Arg Thr Tyr Ala Leu Cys Thr Arg Arg Thr Ala Arg Thr Cys Arg Gly
 85 90 95
 Asp Leu Ala Tyr His Ser Ala Val His Gly Ile Glu Asp Leu Met Ser
 100 105 110
 Gln His Asn Cys Ser Lys Asp Gly Pro Thr Ser Gln Pro Arg Val Arg
 115 120 125

	Thr	Leu	Pro	Pro	Ala	Gly	Asp	Ser	Gln	Glu	Arg	Ser	Asp	Ser	Pro	Glu
	130						135					140				
	Ile	Cys	His	Tyr	Glu	Lys	Ser	Phe	His	Lys	His	Ser	Ala	Ala	Pro	Asn
	145					150					155					160
5	Tyr	Thr	His	Cys	Gly	Leu	Phe	Gly	Asp	Pro	His	Leu	Arg	Thr	Phe	Thr
					165					170					175	
	Asp	His	Phe	Gln	Thr	Cys	Lys	Val	Gln	Gly	Ala	Trp	Pro	Leu	Ile	Asp
				180					185					190		
10	Asn	Asn	Tyr	Leu	Asn	Val	Gln	Val	Thr	Asn	Thr	Pro	Val	Leu	Pro	Gly
			195					200					205			
	Ser	Ala	Ala	Thr	Ala	Thr	Ser	Lys	Leu	Thr	Ile	Ile	Phe	Lys	Asn	Phe
		210					215					220				
	Gln	Glu	Cys	Val	Asp	Gln	Lys	Val	Tyr	Gln	Ala	Glu	Met	Asp	Glu	Leu
	225					230					235					240
15	Pro	Ser	Ala	Phe	Ala	Asp	Gly	Ser	Lys	Asn	Gly	Gly	Asp	Lys	His	Gly
					245					250					255	
	Ala	Asn	Ser	Leu	Lys	Ile	Thr	Glu	Lys	Val	Ser	Gly	Gln	His	Val	Glu
				260					265					270		
20	Ile	Gln	Ala	Lys	Tyr	Ile	Gly	Thr	Thr	Ile	Val	Val	Arg	Gln	Val	Gly
		275						280					285			
	Arg	Tyr	Leu	Thr	Phe	Ala	Val	Arg	Met	Pro	Glu	Glu	Val	Val	Asn	Ala
		290					295					300				
	Val	Glu	Asp	Arg	Asp	Ser	Gln	Gly	Leu	Tyr	Leu	Cys	Leu	Arg	Gly	Cys
	305					310					315					320
25	Pro	Leu	Asn	Gln	Gln	Ile	Asp	Phe	Gln	Ala	Phe	Arg	Ala	Asn	Ala	Glu
					325					330					335	
	Ser	Pro	Arg	Arg	Pro	Ala	Ala	Ala	Ser	Pro	Ser	Pro	Val	Val	Pro	Glu
				340					345					350		
30	Thr	Phe	Pro	Tyr	Glu	Thr	Ala	Val	Ala	Lys	Cys	Lys	Glu	Lys	Leu	Pro
			355					360					365			
	Val	Glu	Asp	Leu	Tyr	Tyr	Gln	Ala	Cys	Val	Phe	Asp	Leu	Leu	Thr	Thr
		370					375					380				
	Gly	Asp	Val	Asn	Phe	Thr	Leu	Ala	Ala	Tyr	Tyr	Ala	Leu	Glu	Asp	Gly
	385					390					395					400
35	Lys	Met	Leu	His	Ser	Asn	Lys	Asp	Lys	Leu	His	Leu	Phe	Glu	Arg	Thr
					405					410					415	
	Arg	Glu	Leu	Pro	Gly	Ala	Val	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Thr	Thr
				420				425						430		
40	Phe	Pro	Leu	Ala	Pro	Gln	Ile	Leu	Leu	Gly	Thr	Ile	Pro	Leu	Leu	Val
		435						440					445			
	Leu	Leu	Pro	Val	Leu	Trp										
	450															

45 <210> SEQ ID NO: 3
 <211> Longitud: 449
 <212> Tipo: PRT
 <213> Organismo: Rattus norvegicus

50 <400> Secuencia: 3
 Met Gln Pro Pro Arg Glu Arg Leu Val Val Thr Gly Arg Ala Gly Trp
 1 5 10 15
 Met Gly Met Gly Arg Gly Ala Gly Arg Ser Ala Leu Gly Leu Trp Pro
 20 25 30

5	Thr	Leu	Ala	Phe	Leu	Leu	Cys	Ser	Phe	Pro	Ala	Ala	Ile	Ser	Pro	Cys
			35					40					45			
	Lys	Ile	Leu	Lys	Cys	Asn	Ser	Glu	Phe	Trp	Ser	Ala	Thr	Ser	Ser	Gly
		50					55					60				
10	Ser	His	Ala	Pro	Ala	Ser	Asp	Asp	Val	Pro	Glu	Phe	Cys	Ala	Ala	Leu
	65					70					75					80
	Arg	Thr	Tyr	Ala	Leu	Cys	Thr	Arg	Arg	Thr	Ala	Arg	Thr	Cys	Arg	Gly
					85					90					95	
15	Asp	Leu	Ala	Tyr	His	Ser	Ala	Val	His	Gly	Ile	Glu	Asp	Leu	Met	Ser
				100					105					110		
	Gln	His	Asn	Cys	Ser	Lys	Asp	Gly	Pro	Thr	Ser	Gln	Pro	Arg	Val	Arg
			115					120					125			
20	Thr	Leu	Pro	Pro	Ala	Gly	Asp	Ser	Gln	Glu	Arg	Ser	Asp	Ser	Pro	Glu
		130					135					140				
	Ile	Cys	His	Tyr	Glu	Lys	Ser	Phe	His	Lys	His	Ser	Ala	Ala	Pro	Asn
	145					150					155					160
25	Tyr	Thr	His	Cys	Gly	Leu	Phe	Gly	Asp	Pro	His	Leu	Arg	Thr	Phe	Thr
					165					170					175	
	Asp	His	Phe	Gln	Thr	Cys	Lys	Val	Gln	Gly	Ala	Trp	Pro	Leu	Ile	Asp
				180					185					190		
30	Asn	Asn	Tyr	Leu	Asn	Val	Gln	Val	Thr	Asn	Thr	Pro	Val	Leu	Pro	Gly
			195					200					205			
	Ser	Ala	Ala	Thr	Ala	Thr	Ser	Lys	Leu	Thr	Ile	Ile	Phe	Lys	Asn	Phe
		210					215					220				
35	Gln	Glu	Cys	Val	Asp	Gln	Lys	Val	Tyr	Gln	Ala	Glu	Met	Asp	Glu	Leu
	225					230					235					240
	Pro	Ser	Ala	Phe	Ala	Asp	Gly	Ser	Lys	Asn	Gly	Gly	Asp	Lys	His	Gly
					245					250					255	
40	Ala	Asn	Ser	Leu	Lys	Ile	Thr	Glu	Lys	Val	Ser	Gly	Gln	His	Val	Glu
				260					265					270		
	Ile	Gln	Ala	Lys	Tyr	Ile	Gly	Thr	Thr	Ile	Val	Val	Arg	Gln	Val	Gly
			275					280					285			
45	Arg	Tyr	Leu	Thr	Phe	Ala	Val	Arg	Met	Pro	Glu	Glu	Val	Val	Asn	Ala
		290					295					300				
	Val	Glu	Asp	Arg	Asp	Ser	Gln	Gly	Leu	Tyr	Leu	Cys	Leu	Arg	Gly	Cys
	305					310					315					320
50	Pro	Leu	Asn	Gln	Gln	Ile	Asp	Phe	Gln	Ala	Phe	Arg	Ala	Asn	Ala	Glu
					325					330					335	
	Ser	Pro	Arg	Arg	Pro	Ala	Ala	Ala	Ser	Pro	Ser	Pro	Val	Val	Pro	Glu
				340					345					350		
55	Thr	Phe	Pro	Tyr	Glu	Thr	Ala	Val	Ala	Lys	Cys	Lys	Glu	Lys	Leu	Pro
			355					360					365			
	Val	Glu	Asp	Leu	Tyr	Tyr	Gln	Ala	Cys	Val	Phe	Asp	Leu	Leu	Thr	Thr

<210> SEQ ID NO: 4
 <211> Longitud: 234
 <212> Tipo: PRT
 <213> Organismo: Mus musculus

<400> Secuencia: 4

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	1				5					10					15	
	Gly	Thr	Arg	Cys	Asp	Ile	Gln	Met	Thr	Gln	Thr	Thr	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			
15	Ile	Ser	Ser	Tyr	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Asp	Gly	Thr	Val
		50					55					60				
	Lys	Leu	Leu	Ile	Tyr	Tyr	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	Ser	Leu	Thr	Ile	Ser
20					85				90						95	
	Asn	Leu	Glu	Gln	Glu	Asp	Ile	Ala	Thr	Tyr	Phe	Cys	Gln	Gln	Leu	Asn
				100					105					110		
	Thr	Leu	Pro	Trp	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Arg
			115				120						125			
25	Ala	Asp	Ala	Ala	Pro	Thr	Val	Ser	Ile	Phe	Pro	Pro	Ser	Ser	Glu	Gln
		130					135					140				
	Leu	Thr	Ser	Gly	Gly	Ala	Ser	Val	Val	Cys	Phe	Leu	Asn	Asn	Phe	Tyr
	145					150					155				160	
	Pro	Lys	Asp	Ile	Asn	Val	Lys	Trp	Lys	Ile	Asp	Gly	Ser	Glu	Arg	Gln
30					165				170						175	
	Asn	Gly	Val	Leu	Asn	Ser	Trp	Thr	Asp	Gln	Asp	Ser	Lys	Asp	Ser	Thr
				180					185					190		
	Tyr	Ser	Met	Ser	Ser	Thr	Leu	Thr	Leu	Thr	Lys	Asp	Glu	Tyr	Glu	Arg
			195				200						205			
35	His	Asn	Ser	Tyr	Thr	Cys	Glu	Ala	Thr	His	Lys	Thr	Ser	Thr	Ser	Pro
		210					215					220				
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	225						230									

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 <211> Longitud: 471
 <212> Tipo: PRT
 <213> Organismo: Mus musculus

<400> Secuencia: 5

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	1				5					10					15	
	Val	Gln	Ser	Glu	Val	Lys	Leu	Glu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln
				20					25					30		
	Pro	Gly	Gly	Ser	Met	Lys	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe
			35				40						45			
	Ser	Asp	Ala	Trp	Met	Asp	Trp	Val	Arg	Gln	Ser	Pro	Glu	Lys	Gly	Leu
		50					55					60				

<210> SEQ ID NO: 6
 <211> Longitud: 238
 <212> Tipo: PRT
 <213> Organismo: Mus musculus

5

<400> Secuencia: 6

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	1				5					10					15	
10	Ser	Ser	Ser	Asp	Val	Val	Met	Thr	Gln	Thr	Pro	Leu	Ser	Leu	Pro	Val
				20					25					30		
	Ser	Leu	Gly	Asp	Gln	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu
			35					40					45			
	Val	His	Ser	Asn	Gly	Asn	Thr	Tyr	Leu	His	Trp	Tyr	Leu	Gln	Arg	Pro
		50					55					60				
15	Gly	Gln	Ser	Pro	Lys	Leu	Leu	Ile	Tyr	Lys	Val	Ser	Asn	Arg	Phe	Ser
	65					70					75					80
	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr
					85					90					95	
	Leu	Lys	Ile	Ser	Arg	Val	Glu	Ala	Glu	Asp	Leu	Gly	Leu	Tyr	Phe	Cys
20				100					105					110		
	Ser	Gln	Ser	Thr	His	Val	Pro	Tyr	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Leu
			115					120					125			
	Glu	Ile	Lys	Arg	Ala	Asp	Ala	Ala	Pro	Thr	Val	Ser	Ile	Phe	Pro	Pro
		130					135					140				
25	Ser	Ser	Glu	Gln	Leu	Thr	Ser	Gly	Gly	Ala	Ser	Val	Val	Cys	Phe	Leu
	145					150					155					160
	Asn	Asn	Phe	Tyr	Pro	Lys	Asp	Ile	Asn	Val	Lys	Trp	Lys	Ile	Asp	Gly
					165					170					175	
	Ser	Glu	Arg	Gln	Asn	Gly	Val	Leu	Asn	Ser	Trp	Thr	Asp	Gln	Asp	Ser
30				180					185					190		
	Lys	Asp	Ser	Thr	Tyr	Ser	Met	Ser	Ser	Thr	Leu	Thr	Leu	Thr	Lys	Asp
			195					200					205			
	Glu	Tyr	Glu	Arg	His	Asn	Ser	Tyr	Thr	Cys	Glu	Ala	Thr	His	Lys	Thr
		210					215					220				
35	Ser	Thr	Ser	Pro	Ile	Val	Lys	Ser	Phe	Asn	Arg	Asn	Glu	Cys		
	225					230					235					

<210> SEQ ID NO: 7
 <211> Longitud: 466
 <212> Tipo: PRT
 <213> Organismo: Mus musculus

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<400> Secuencia: 7

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

	Ser	Leu	Lys	Asn	Arg	Ile	Ser	Ile	Thr	Arg	Asp	Thr	Ser	Lys	Asn	Gln
				85						90				95		
	Phe	Phe	Leu	Arg	Leu	Asn	Ser	Val	Thr	Thr	Glu	Asp	Thr	Ala	Thr	Tyr
				100					105					110		
5	Tyr	Cys	Ala	Gly	Ser	Phe	Gly	Tyr	Ser	Gln	Gly	Thr	Leu	Val	Thr	Val
			115				120						125			
	Ser	Ala	Ala	Lys	Thr	Thr	Pro	Pro	Ser	Val	Tyr	Pro	Leu	Ala	Pro	Gly
		130					135					140				
10	Cys	Gly	Asp	Thr	Thr	Gly	Ser	Ser	Val	Thr	Leu	Gly	Cys	Leu	Val	Lys
	145					150					155					160
	Gly	Tyr	Phe	Pro	Glu	Ser	Val	Thr	Val	Thr	Trp	Asn	Ser	Gly	Ser	Leu
				165						170					175	
	Ser	Ser	Ser	Val	His	Thr	Phe	Pro	Ala	Leu	Leu	Gln	Ser	Gly	Leu	Tyr
				180					185					190		
15	Thr	Met	Ser	Ser	Ser	Val	Thr	Val	Pro	Ser	Ser	Thr	Trp	Pro	Ser	Gln
			195					200					205			
	Thr	Val	Thr	Cys	Ser	Val	Ala	His	Pro	Ala	Ser	Ser	Thr	Thr	Val	Asp
		210					215						220			
20	Lys	Lys	Leu	Glu	Pro	Ser	Gly	Pro	Ile	Ser	Thr	Ile	Asn	Pro	Cys	Pro
	225					230					235					240
	Pro	Cys	Lys	Glu	Cys	His	Lys	Cys	Pro	Ala	Pro	Asn	Leu	Glu	Gly	Gly
				245						250					255	
	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Asn	Ile	Lys	Asp	Val	Leu	Met	Ile
				260					265					270		
25	Ser	Leu	Thr	Pro	Lys	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	Glu	Asp
			275					280					285			
	Asp	Pro	Asp	Val	Gln	Ile	Ser	Trp	Phe	Val	Asn	Asn	Val	Glu	Val	His
		290					295					300				
30	Thr	Ala	Gln	Thr	Gln	Thr	His	Arg	Glu	Asp	Tyr	Asn	Ser	Thr	Ile	Arg
	305					310					315					320
	Val	Val	Ser	Thr	Leu	Pro	Ile	Gln	His	Gln	Asp	Trp	Met	Ser	Gly	Lys
				325						330					335	
	Glu	Phe	Lys	Cys	Lys	Val	Asn	Asn	Lys	Asp	Leu	Pro	Ser	Pro	Ile	Glu
				340					345					350		
35	Arg	Thr	Ile	Ser	Lys	Ile	Lys	Gly	Leu	Val	Arg	Ala	Pro	Gln	Val	Tyr
			355					360					365			
	Ile	Leu	Pro	Pro	Pro	Ala	Glu	Gln	Leu	Ser	Arg	Lys	Asp	Val	Ser	Leu
		370					375					380				
40	Thr	Cys	Leu	Val	Val	Gly	Phe	Asn	Pro	Gly	Asp	Ile	Ser	Val	Glu	Trp
	385					390					395					400
	Thr	Ser	Asn	Gly	His	Thr	Glu	Glu	Asn	Tyr	Lys	Asp	Thr	Ala	Pro	Val
				405						410					415	
	Leu	Asp	Ser	Asp	Gly	Ser	Tyr	Phe	Ile	Tyr	Ser	Lys	Leu	Asn	Met	Lys
				420					425					430		
45	Thr	Ser	Lys	Trp	Glu	Lys	Thr	Asp	Ser	Phe	Ser	Cys	Asn	Val	Arg	His
			435					440					445			
	Glu	Gly	Leu	Lys	Asn	Tyr	Tyr	Leu	Lys	Lys	Thr	Ile	Ser	Arg	Ser	Pro
		450					455					460				
50	Gly	Lys														
	465															

<210> SEQ ID NO: 8
 <211> Longitud: 214

<212> Tipo: PRT
<213> Organismo: Secuencia Artificial

<220> Característica:

5 <223> Otra Información: cadena ligera de anticuerpo quimérico

<400> Secuencia: 8

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15
10 Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Ser Tyr
20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45
15 Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80
Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Leu Asn Thr Leu Pro Trp
85 90 95
20 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala
100 105 110
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140
25 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
30 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
35 210

<210> SEQ ID NO: 9

<211> Longitud: 446

40 <212> Tipo: PRT

<213> Organismo: Secuencia Artificial

<220> Característica:

45 <223> Otra Información: cadena pesada de anticuerpo quimérico

<400> Secuencia: 9

Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
50 Ser Met Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Ala
20 25 30
Trp Met Asp Trp Val Arg Gln Ser Pro Glu Lys Gly Leu Glu Trp Val
35 40 45
Ala Glu Ile Arg Ser Lys Ala Asn Asn His Ala Thr Tyr Tyr Ala Glu
50 55 60

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

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<210> SEQ ID NO: 10
 <211> Longitud: 1461
 <212> Tipo: PRT
 <213> Organismo: Homo sapiens

<400> Secuencia: 10

	Met	Ala	Ala	Glu	Arg	Gly	Ala	Arg	Arg	Leu	Leu	Ser	Thr	Pro	Ser	Phe
	1				5					10					15	
5	Trp	Leu	Tyr	Cys	Leu	Leu	Leu	Leu	Gly	Arg	Arg	Ala	Pro	Gly	Ala	Ala
				20					25					30		
	Ala	Ala	Arg	Ser	Gly	Ser	Ala	Pro	Gln	Ser	Pro	Gly	Ala	Ser	Ile	Arg
			35				40					45				
10	Thr	Phe	Thr	Pro	Phe	Tyr	Phe	Leu	Val	Glu	Pro	Val	Asp	Thr	Leu	Ser
		50					55					60				
	Val	Arg	Gly	Ser	Ser	Val	Ile	Leu	Asn	Cys	Ser	Ala	Tyr	Ser	Glu	Pro
	65					70				75					80	
	Ser	Pro	Lys	Ile	Glu	Trp	Lys	Lys	Asp	Gly	Thr	Phe	Leu	Asn	Leu	Val
				85					90					95		
15	Ser	Asp	Asp	Arg	Arg	Gln	Leu	Leu	Pro	Asp	Gly	Ser	Leu	Phe	Ile	Ser
				100					105					110		
	Asn	Val	Val	His	Ser	Lys	His	Asn	Lys	Pro	Asp	Glu	Gly	Tyr	Tyr	Gln
			115				120						125			
20	Cys	Val	Ala	Thr	Val	Glu	Ser	Leu	Gly	Thr	Ile	Ile	Ser	Arg	Thr	Ala
		130					135					140				
	Lys	Leu	Ile	Val	Ala	Gly	Leu	Pro	Arg	Phe	Thr	Ser	Gln	Pro	Glu	Pro
	145					150				155					160	
	Ser	Ser	Val	Tyr	Ala	Gly	Asn	Asn	Ala	Ile	Leu	Asn	Cys	Glu	Val	Asn
					165				170					175		
25	Ala	Asp	Leu	Val	Pro	Phe	Val	Arg	Trp	Glu	Gln	Asn	Arg	Gln	Pro	Leu
				180					185					190		
	Leu	Leu	Asp	Asp	Arg	Val	Ile	Lys	Leu	Pro	Ser	Gly	Met	Leu	Val	Ile
			195				200						205			
30	Ser	Asn	Ala	Thr	Glu	Gly	Asp	Gly	Gly	Leu	Tyr	Arg	Cys	Val	Val	Glu
		210					215					220				
	Ser	Gly	Gly	Pro	Pro	Lys	Tyr	Ser	Asp	Glu	Val	Glu	Leu	Lys	Val	Leu
	225					230				235					240	
	Pro	Asp	Pro	Glu	Val	Ile	Ser	Asp	Leu	Val	Phe	Leu	Lys	Gln	Pro	Ser
					245				250					255		
35	Pro	Leu	Val	Arg	Val	Ile	Gly	Gln	Asp	Val	Val	Leu	Pro	Cys	Val	Ala
				260					265					270		
	Ser	Gly	Leu	Pro	Thr	Pro	Thr	Ile	Lys	Trp	Met	Lys	Asn	Glu	Glu	Ala
			275				280						285			
40	Leu	Asp	Thr	Glu	Ser	Ser	Glu	Arg	Leu	Val	Leu	Leu	Ala	Gly	Gly	Ser
		290					295					300				
	Leu	Glu	Ile	Ser	Asp	Val	Thr	Glu	Asp	Asp	Ala	Gly	Thr	Tyr	Phe	Cys
	305					310				315					320	
	Ile	Ala	Asp	Asn	Gly	Asn	Glu	Thr	Ile	Glu	Ala	Gln	Ala	Glu	Leu	Thr
					325				330					335		
45	Val	Gln	Ala	Gln	Pro	Glu	Phe	Leu	Lys	Gln	Pro	Thr	Asn	Ile	Tyr	Ala
				340					345					350		
	His	Glu	Ser	Met	Asp	Ile	Val	Phe	Glu	Cys	Glu	Val	Thr	Gly	Lys	Pro
			355				360						365			
50	Thr	Pro	Thr	Val	Lys	Trp	Val	Lys	Asn	Gly	Asp	Met	Val	Ile	Pro	Ser
		370					375					380				
	Asp	Tyr	Phe	Lys	Ile	Val	Lys	Glu	His	Asn	Leu	Gln	Val	Leu	Gly	Leu
	385					390				395					400	
	Val	Lys	Ser	Asp	Glu	Gly	Phe	Tyr	Gln	Cys	Ile	Ala	Glu	Asn	Asp	Val
					405				410					415		

	Gly	Asn	Ala	Gln	Ala	Gly	Ala	Gln	Leu	Ile	Ile	Leu	Glu	His	Ala	Pro
				420					425					430		
	Ala	Thr	Thr	Gly	Pro	Leu	Pro	Ser	Ala	Pro	Arg	Asp	Val	Val	Ala	Ser
			435					440					445			
5	Leu	Val	Ser	Thr	Arg	Phe	Ile	Lys	Leu	Thr	Trp	Arg	Thr	Pro	Ala	Ser
		450				455						460				
	Asp	Pro	His	Gly	Asp	Asn	Leu	Thr	Tyr	Ser	Val	Phe	Tyr	Thr	Lys	Glu
	465					470					475					480
10	Gly	Ile	Ala	Arg	Glu	Arg	Val	Glu	Asn	Thr	Ser	His	Pro	Gly	Glu	Met
				485						490					495	
	Gln	Val	Thr	Ile	Gln	Asn	Leu	Met	Pro	Ala	Thr	Val	Tyr	Ile	Phe	Arg
				500					505					510		
	Val	Met	Ala	Gln	Asn	Lys	His	Gly	Ser	Gly	Glu	Ser	Ser	Ala	Pro	Leu
			515					520					525			
15	Arg	Val	Glu	Thr	Gln	Pro	Glu	Val	Gln	Leu	Pro	Gly	Pro	Ala	Pro	Asn
		530					535					540				
	Leu	Arg	Ala	Tyr	Ala	Ala	Ser	Pro	Thr	Ser	Ile	Thr	Val	Thr	Trp	Glu
	545					550					555					560
20	Thr	Pro	Val	Ser	Gly	Asn	Gly	Glu	Ile	Gln	Asn	Tyr	Lys	Leu	Tyr	Tyr
				565						570					575	
	Met	Glu	Lys	Gly	Thr	Asp	Lys	Glu	Gln	Asp	Val	Asp	Val	Ser	Ser	His
				580					585					590		
	Ser	Tyr	Thr	Ile	Asn	Gly	Leu	Lys	Lys	Tyr	Thr	Glu	Tyr	Ser	Phe	Arg
			595				600						605			
25	Val	Val	Ala	Tyr	Asn	Lys	His	Gly	Pro	Gly	Val	Ser	Thr	Pro	Asp	Val
		610					615					620				
	Ala	Val	Arg	Thr	Leu	Ser	Asp	Val	Pro	Ser	Ala	Ala	Pro	Gln	Asn	Leu
	625					630					635					640
30	Ser	Leu	Glu	Val	Arg	Asn	Ser	Lys	Ser	Ile	Met	Ile	His	Trp	Gln	Pro
				645						650					655	
	Pro	Ala	Pro	Ala	Thr	Gln	Asn	Gly	Gln	Ile	Thr	Gly	Tyr	Lys	Ile	Arg
				660					665					670		
	Tyr	Arg	Lys	Ala	Ser	Arg	Lys	Ser	Asp	Val	Thr	Glu	Thr	Leu	Val	Ser
			675				680						685			
35	Gly	Thr	Gln	Leu	Ser	Gln	Leu	Ile	Glu	Gly	Leu	Asp	Arg	Gly	Thr	Glu
		690				695						700				
	Tyr	Asn	Phe	Arg	Val	Ala	Ala	Leu	Thr	Ile	Asn	Gly	Thr	Gly	Pro	Ala
	705					710					715					720
40	Thr	Asp	Trp	Leu	Ser	Ala	Glu	Thr	Phe	Glu	Ser	Asp	Leu	Asp	Glu	Thr
				725						730					735	
	Arg	Val	Pro	Glu	Val	Pro	Ser	Ser	Leu	His	Val	Arg	Pro	Leu	Val	Thr
				740					745					750		
	Ser	Ile	Val	Val	Ser	Trp	Thr	Pro	Pro	Glu	Asn	Gln	Asn	Ile	Val	Val
			755				760						765			
45	Arg	Gly	Tyr	Ala	Ile	Gly	Tyr	Gly	Ile	Gly	Ser	Pro	His	Ala	Gln	Thr
		770				775						780				
	Ile	Lys	Val	Asp	Tyr	Lys	Gln	Arg	Tyr	Tyr	Thr	Ile	Glu	Asn	Leu	Asp
	785					790					795					800
50	Pro	Ser	Ser	His	Tyr	Val	Ile	Thr	Leu	Lys	Ala	Phe	Asn	Asn	Val	Gly
				805						810					815	
	Glu	Gly	Ile	Pro	Leu	Tyr	Glu	Ser	Ala	Val	Thr	Arg	Pro	His	Thr	Asp
				820					825					830		
	Thr	Ser	Glu	Val	Asp	Leu	Phe	Val	Ile	Asn	Ala	Pro	Tyr	Thr	Pro	Val
			835					840					845			

	Pro	Asp	Pro	Thr	Pro	Met	Met	Pro	Pro	Val	Gly	Val	Gln	Ala	Ser	Ile
		850					855					860				
	Leu	Ser	His	Asp	Thr	Ile	Arg	Ile	Thr	Trp	Ala	Asp	Asn	Ser	Leu	Pro
	865					870					875					880
5	Lys	His	Gln	Lys	Ile	Thr	Asp	Ser	Arg	Tyr	Tyr	Thr	Val	Arg	Trp	Lys
					885					890					895	
	Thr	Asn	Ile	Pro	Ala	Asn	Thr	Lys	Tyr	Lys	Asn	Ala	Asn	Ala	Thr	Thr
				900					905					910		
10	Leu	Ser	Tyr	Leu	Val	Thr	Gly	Leu	Lys	Pro	Asn	Thr	Leu	Tyr	Glu	Phe
			915					920					925			
	Ser	Val	Met	Val	Thr	Lys	Gly	Arg	Arg	Ser	Ser	Thr	Trp	Ser	Met	Thr
			930				935					940				
	Ala	His	Gly	Thr	Thr	Phe	Glu	Leu	Val	Pro	Thr	Ser	Pro	Pro	Lys	Asp
	945					950					955					960
15	Val	Thr	Val	Val	Ser	Lys	Glu	Gly	Lys	Pro	Lys	Thr	Ile	Ile	Val	Asn
					965					970					975	
	Trp	Gln	Pro	Pro	Ser	Glu	Ala	Asn	Gly	Lys	Ile	Thr	Gly	Tyr	Ile	Ile
				980					985					990		
20	Tyr	Tyr	Ser	Thr	Asp	Val	Asn	Ala	Glu	Ile	His	Asp	Trp	Val	Ile	Glu
			995					1000					1005			
	Pro	Val	Val	Gly	Asn	Arg	Leu	Thr	His	Gln	Ile	Gln	Glu	Leu	Thr	
		1010					1015					1020				
	Leu	Asp	Thr	Pro	Tyr	Tyr	Phe	Lys	Ile	Gln	Ala	Arg	Asn	Ser	Lys	
		1025					1030					1035				
25	Gly	Met	Gly	Pro	Met	Ser	Glu	Ala	Val	Gln	Phe	Arg	Thr	Pro	Lys	
		1040					1045					1050				
	Ala	Asp	Ser	Ser	Asp	Lys	Met	Pro	Asn	Asp	Gln	Ala	Ser	Gly	Ser	
		1055					1060					1065				
30	Gly	Gly	Lys	Gly	Ser	Arg	Leu	Pro	Asp	Leu	Gly	Ser	Asp	Tyr	Lys	
		1070					1075					1080				
	Pro	Pro	Met	Ser	Gly	Ser	Asn	Ser	Pro	His	Gly	Ser	Pro	Thr	Ser	
		1085					1090					1095				
	Pro	Leu	Asp	Ser	Asn	Met	Leu	Leu	Val	Ile	Ile	Val	Ser	Val	Gly	
		1100					1105					1110				
35	Val	Ile	Thr	Ile	Val	Val	Val	Val	Ile	Ile	Ala	Val	Phe	Cys	Thr	
		1115					1120					1125				
	Arg	Arg	Thr	Thr	Ser	His	Gln	Lys	Lys	Lys	Arg	Ala	Ala	Cys	Lys	
		1130					1135					1140				
	Ser	Val	Asn	Gly	Ser	His	Lys	Tyr	Lys	Gly	Asn	Ser	Lys	Asp	Val	
40		1145					1150					1155				
	Lys	Pro	Pro	Asp	Leu	Trp	Ile	His	His	Glu	Arg	Leu	Glu	Leu	Lys	
		1160					1165					1170				
	Pro	Ile	Asp	Lys	Ser	Pro	Asp	Pro	Asn	Pro	Ile	Met	Thr	Asp	Thr	
		1175					1180					1185				
45	Pro	Ile	Pro	Arg	Asn	Ser	Gln	Asp	Ile	Thr	Pro	Val	Asp	Asn	Ser	
		1190					1195					1200				
	Met	Asp	Ser	Asn	Ile	His	Gln	Arg	Arg	Asn	Ser	Tyr	Arg	Gly	His	
		1205					1210					1215				
	Glu	Ser	Glu	Asp	Ser	Met	Ser	Thr	Leu	Ala	Gly	Arg	Arg	Gly	Met	
50		1220					1225					1230				
	Arg	Pro	Lys	Met	Met	Met	Pro	Phe	Asp	Ser	Gln	Pro	Pro	Gln	Pro	
		1235					1240					1245				
	Val	Ile	Ser	Ala	His	Pro	Ile	His	Ser	Leu	Asp	Asn	Pro	His	His	
		1250					1255					1260				

	His	Phe	His	Ser	Ser	Ser	Leu	Ala	Ser	Pro	Ala	Arg	Ser	His	Leu
		1265					1270					1275			
	Tyr	His	Pro	Gly	Ser	Pro	Trp	Pro	Ile	Gly	Thr	Ser	Met	Ser	Leu
		1280					1285					1290			
5	Ser	Asp	Arg	Ala	Asn	Ser	Thr	Glu	Ser	Val	Arg	Asn	Thr	Pro	Ser
		1295					1300					1305			
	Thr	Asp	Thr	Met	Pro	Ala	Ser	Ser	Ser	Gln	Thr	Cys	Cys	Thr	Asp
		1310					1315					1320			
10	His	Gln	Asp	Pro	Glu	Gly	Ala	Thr	Ser	Ser	Ser	Tyr	Leu	Ala	Ser
		1325					1330					1335			
	Ser	Gln	Glu	Glu	Asp	Ser	Gly	Gln	Ser	Leu	Pro	Thr	Ala	His	Val
		1340					1345					1350			
	Arg	Pro	Ser	His	Pro	Leu	Lys	Ser	Phe	Ala	Val	Pro	Ala	Ile	Pro
		1355					1360					1365			
15	Pro	Pro	Gly	Pro	Pro	Thr	Tyr	Asp	Pro	Ala	Leu	Pro	Ser	Thr	Pro
		1370					1375					1380			
	Leu	Leu	Ser	Gln	Gln	Ala	Leu	Asn	His	His	Ile	His	Ser	Val	Lys
		1385					1390					1395			
20	Thr	Ala	Ser	Ile	Gly	Thr	Leu	Gly	Arg	Ser	Arg	Pro	Pro	Met	Pro
		1400					1405					1410			
	Val	Val	Val	Pro	Ser	Ala	Pro	Glu	Val	Gln	Glu	Thr	Thr	Arg	Met
		1415					1420					1425			
	Leu	Glu	Asp	Ser	Glu	Ser	Ser	Tyr	Glu	Pro	Asp	Glu	Leu	Thr	Lys
		1430					1435					1440			
25	Glu	Met	Ala	His	Leu	Glu	Gly	Leu	Met	Lys	Asp	Leu	Asn	Ala	Ile
		1445					1450					1455			
	Thr	Thr	Ala												
		1460													

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<210> SEQ ID NO: 11
 <211> Longitud: 446
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

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<220> Característica:
 <223> Otra Información: cadena pesada de anticuerpo humanizado HA

40 <400> Secuencia: 11

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

				115				120					125			
	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu
		130					135					140				
5	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly
	145					150					155					160
	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser
				165						170					175	
	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu
			180						185					190		
10	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr
			195					200					205			
	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr
		210					215					220				
15	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe
	225					230					235					240
	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
				245						250					255	
	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val
			260					265						270		
20	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
			275					280					285			
	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
		290					295					300				
25	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
	305					310					315					320
	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser
				325						330					335	
	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
			340					345						350		
30	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
			355					360					365			
	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
		370					375					380				
35	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	385					390					395					400
	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
				405						410					415	
	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
			420					425					430			
40	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys		
			435					440					445			

45 <210> SEQ ID NO: 12
 <211> Longitud: 446
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

50 <220> Característica:
 <223> Otra Información: cadena pesada de anticuerpo humanizado HB

<400> Secuencia: 12
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

	Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Asp	Ala	
			20						25					30			
	Trp	Met	Asp	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	
			35					40					45				
5	Ala	Glu	Ile	Arg	Ser	Lys	Ala	Asn	Asn	His	Ala	Thr	Tyr	Tyr	Ala	Glu	
		50					55					60					
	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Ser	Ile	
	65					70					75					80	
10	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Thr	Glu	Asp	Thr	Ala	Leu	Tyr	
				85						90					95		
	Tyr	Cys	Thr	Arg	Arg	Asp	Gly	Ala	Tyr	Trp	Gly	Lys	Gly	Thr	Thr	Val	
				100					105					110			
	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	
			115					120					125				
15	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	
		130					135					140					
	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	
	145					150					155					160	
20	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	
				165						170					175		
	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	
				180					185					190			
	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	
			195					200					205				
25	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	
		210					215					220					
	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	
	225					230					235					240	
30	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	
				245						250					255		
	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	
			260					265					270				
	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	
			275					280					285				
35	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	
		290					295					300					
	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	
	305					310					315					320	
40	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	
				325						330					335		
	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	
			340					345						350			
	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	
			355					360					365				
45	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	
		370					375					380					
	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	
	385					390					395					400	
50	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	
				405						410					415		
	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	
			420					425					430				
	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys			
			435					440					445				

<210> SEQ ID NO: 13
 <211> Longitud: 446
 5 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

<220> Característica:
 <223> Otra Información: cadena pesada de anticuerpo humanizado HC

10 <400> Secuencia: 13
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Asp Ala
 15 20 25 30
 Trp Met Asp Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Glu Ile Arg Ser Lys Ala Asn Asn His Ala Thr Tyr Tyr Ala Glu
 50 55 60
 20 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65 70 75 80
 Val Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Leu Tyr
 85 90 95
 Tyr Cys Thr Arg Arg Asp Gly Ala Tyr Trp Gly Lys Gly Thr Thr Val
 100 105 110
 25 Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
 115 120 125
 Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu
 130 135 140
 30 Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly
 145 150 155 160
 Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser
 165 170 175
 Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu
 180 185 190
 35 Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr
 195 200 205
 Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
 210 215 220
 40 Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
 225 230 235 240
 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
 245 250 255
 Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
 260 265 270
 45 Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
 275 280 285
 Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
 290 295 300
 50 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
 305 310 315 320
 Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
 325 330 335
 Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro

				340					345				350			
	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
			355					360					365			
5	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
		370					375					380				
	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	385					390					395				400	
	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
				405						410					415	
10	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
				420					425				430			
	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys		
			435					440					445			

15

<210> SEQ ID NO: 14
 <211> Longitud: 446
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

20

<220> Característica:
 <223> Otra Información: cadena pesada de anticuerpo humanizado HD

<400> Secuencia: 14

25	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5					10				15		
	Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Asp	Ala
			20					25					30			
30	Trp	Met	Asp	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35				40						45			
	Ala	Glu	Ile	Arg	Ser	Lys	Ala	Asn	Asn	His	Ala	Thr	Tyr	Tyr	Ala	Glu
	50					55					60					
	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Ser	Ile
	65				70					75				80		
35	Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Thr	Glu	Asp	Thr	Ala	Leu	Tyr
				85					90					95		
	Tyr	Cys	Thr	Arg	Arg	Asp	Gly	Ala	Tyr	Trp	Gly	Lys	Gly	Thr	Thr	Val
			100				105						110			
40	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala
			115				120						125			
	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu
	130					135					140					
	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly
	145				150					155					160	
45	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser
				165					170					175		
	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu
			180					185					190			
50	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr
		195				200							205			
	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr
	210					215					220					
	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe
	225				230					235					240	

	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
					245					250					255	
	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val
				260					265					270		
5	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
			275					280					285			
	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
		290					295					300				
10	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
	305					310					315					320
	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser
				325						330					335	
	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
				340					345					350		
15	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
			355					360					365			
	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
		370					375					380				
20	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	385					390					395					400
	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
				405						410					415	
	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
				420					425				430			
25	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys		
			435					440					445			

30 <210> SEQ ID NO: 15
 <211> Longitud: 446
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

35 <220> Característica:
 <223> Otra Información: cadena pesada de anticuerpo humanizado HE

<400> Secuencia: 15

	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1			5					10					15		
40	Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Asp	Ala
			20					25					30			
	Trp	Met	Asp	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35				40						45			
45	Ala	Glu	Ile	Arg	Ser	Lys	Ala	Asn	Asn	His	Ala	Thr	Tyr	Tyr	Ala	Glu
		50				55				60						
	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Ser	Ile
	65				70					75				80		
	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Thr	Glu	Asp	Thr	Ala	Leu	Tyr
				85				90					95			
50	Tyr	Cys	Thr	Arg	Arg	Asp	Gly	Ala	Tyr	Trp	Gly	Lys	Gly	Thr	Thr	Val
			100				105						110			
	Thr	Val	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	
			115				120					125				
	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu

		130				135				140						
	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly
	145					150					155					160
5	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser
					165					170						175
	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu
				180					185					190		
	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr
		195						200					205			
10	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr
		210					215					220				
	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe
	225					230					235					240
15	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
					245					250						255
	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val
				260				265						270		
	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
			275					280					285			
20	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
		290					295					300				
	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
	305					310					315					320
25	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser
					325					330						335
	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
				340				345						350		
	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
			355					360						365		
30	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
		370					375					380				
	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	385					390					395					400
35	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
					405					410						415
	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
				420					425					430		
	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys		
			435					440					445			

40

<210> SEQ ID NO: 16

<211> Longitud: 446

<212> Tipo: PRT

45 <213> Organismo: Secuencia Artificial

<220> Característica:

<223> Otra Información: cadena pesada de anticuerpo humanizado HF

50 <400> Secuencia: 16

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

1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Asp Ala

20 25 30

	Trp	Met	Asp	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
	Ala	Glu	Ile	Arg	Ser	Lys	Ala	Asn	Asn	His	Ala	Thr	Tyr	Tyr	Ala	Glu
		50					55					60				
5	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Ser	Ile
	65					70					75				80	
	Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys	Thr	Glu	Asp	Thr	Ala	Val	Tyr
					85					90					95	
10	Tyr	Cys	Thr	Arg	Arg	Asp	Gly	Ala	Tyr	Trp	Gly	Lys	Gly	Thr	Thr	Val
				100					105					110		
	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala
			115					120					125			
	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu
		130					135					140				
15	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly
	145					150					155					160
	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser
					165					170					175	
20	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu
				180					185					190		
	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr
			195					200					205			
	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr
		210					215					220				
25	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe
	225					230					235					240
	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
					245					250					255	
30	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val
				260					265					270		
	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
			275					280					285			
	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
		290					295					300				
35	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
	305					310					315					320
	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser
					325					330					335	
40	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
				340					345					350		
	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
			355					360					365			
	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
		370					375					380				
45	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	385					390					395					400
	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
					405					410					415	
50	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
				420					425					430		
	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys		
			435					440					445			

<210> SEQ ID NO: 17
 <211> Longitud: 446
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

5

<220> Característica:
 <223> Otra Información: cadena pesada de anticuerpo humanizado HG

<400> Secuencia: 17

10	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
	1				5				10					15		
	Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Asp	Ala
				20					25					30		
15	Trp	Met	Asp	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35					40					45			
	Ala	Glu	Ile	Arg	Ser	Lys	Ala	Asn	Asn	His	Ala	Thr	Tyr	Tyr	Ala	Glu
		50					55				60					
	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser	Lys	Ser	Ile
	65					70					75					80
20	Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys	Thr	Glu	Asp	Thr	Ala	Leu	Tyr
					85					90					95	
	Tyr	Cys	Thr	Arg	Arg	Asp	Gly	Ala	Tyr	Trp	Gly	Lys	Gly	Thr	Thr	Val
				100					105					110		
25	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala
				115				120					125			
	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu
		130					135					140				
	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly
	145					150					155					160
30	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser
					165					170					175	
	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu
				180					185					190		
35	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr
			195					200					205			
	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr
		210					215					220				
	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe
	225					230					235					240
40	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro
					245					250					255	
	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val
				260				265						270		
45	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
			275					280					285			
	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
		290					295					300				
	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
	305					310					315					320
50	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser
					325					330					335	
	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
				340					345					350		
	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val

				355				360					365			
	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
		370					375					380				
5	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	385					390					395					400
	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
					405					410					415	
	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
				420					425				430			
10	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys		
			435					440					445			

15 <210> SEQ ID NO: 18
 <211> Longitud: 446
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

20 <220> Característica:
 <223> Otra Información: cadena pesada de anticuerpo humanizado HH

25 <400> Secuencia: 18
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Asp Ala
 20 25 30
 Trp Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Glu Ile Arg Ser Lys Ala Asn Asn His Ala Thr Tyr Tyr Ala Glu
 50 55 60
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile
 65 70 75 80
 Ala Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 35 Tyr Cys Thr Arg Arg Asp Gly Ala Tyr Trp Gly Lys Gly Thr Thr Val
 100 105 110
 Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
 115 120 125
 40 Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu
 130 135 140
 Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly
 145 150 155 160
 Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser
 165 170 175
 45 Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu
 180 185 190
 Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr
 195 200 205
 50 Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
 210 215 220
 Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
 225 230 235 240
 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
 245 250 255

	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val
				260					265					270		
	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr
			275					280					285			
5	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val
		290					295					300				
	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys
	305					310					315					320
10	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser
				325						330					335	
	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro
			340					345						350		
	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val
			355					360					365			
15	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly
		370					375					380				
	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp
	385					390					395					400
20	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp
				405						410					415	
	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His
				420					425				430			
	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys		
			435					440					445			

25

<210> SEQ ID NO: 19

<211> Longitud: 214

<212> Tipo: PRT

30 <213> Organismo: Secuencia Artificial

<220> Característica:

<223> Otra Información: cadena ligera de anticuerpo humanizado KA

35 <400> Secuencia: 19

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

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

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

		35				40				45					
Tyr	Tyr	Thr	Ser	Arg	Leu	His	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55				60					

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

				70				75							80
Glu	Asp	Phe	Ala	Ser	Tyr	Phe	Cys	Gln	Gln	Leu	Asn	Thr	Leu	Pro	Trp
				85				90					95		

Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Met	Glu	Arg	Thr	Val	Ala	Ala
			100					105					110		

50 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

						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
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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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
5      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
10

<210> SEQ ID NO: 20
<211> Longitud: 214
<212> Tipo: PRT
15 <213> Organismo: Secuencia Artificial

<220> Característica:
<223> Otra Información: cadena ligera de anticuerpo humanizado KB

20 <400> Secuencia: 20
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1      5      10      15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Ser Tyr
          20      25      30
25 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
          35      40      45
Tyr Tyr 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
30 65      70      75      80
Glu Asp Phe Ala Ser Tyr Phe Cys Gln Gln Leu Asn Thr Leu Pro Trp
          85      90      95
Thr Phe Gly Gly Gly Thr Lys Val Glu Met Glu Arg Thr Val Ala Ala
          100     105     110
35 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
40 145     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
45 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

50
<210> SEQ ID NO: 21
<211> Longitud: 214
<212> Tipo: PRT
<213> Organismo: Secuencia Artificial

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<220> Característica:

<223> Otra Información: cadena ligera de anticuerpo humanizado KC

5 <400> Secuencia: 21

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

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

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

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

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Met Glu Arg Thr Val Ala Ala
100 105 110

20 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

25 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

30 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

35

<210> SEQ ID NO: 22

<211> Longitud: 214

<212> Tipo: PRT

<213> Organismo: Secuencia Artificial

40

<220> Característica:

<223> Otra Información: cadena ligera de anticuerpo humanizado KD

<400> Secuencia: 22

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

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

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

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

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

	Glu	Asp	Phe	Ala	Thr	Tyr	Phe	Cys	Gln	Gln	Leu	Asn	Thr	Leu	Pro	Trp
					85					90					95	
	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Met	Glu	Arg	Thr	Val	Ala	Ala
				100					105					110		
5	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				
10	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		
15	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													

20

<210> SEQ ID NO: 23
 <211> Longitud: 214
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

25

<220> Característica:
 <223> Otra Información: cadena ligera de anticuerpo humanizado KE

<400> Secuencia: 23

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

5
<210> SEQ ID NO: 24
<211> Longitud: 214
<212> Tipo: PRT
<213> Organismo: Secuencia Artificial

10
<220> Característica:
<223> Otra Información: cadena ligera de anticuerpo humanizado KF

<400> Secuencia: 24
15 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Ser Tyr
20 20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Val Lys Leu Leu Ile
20 35 40 45
Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
25 Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Leu Asn Thr Leu Pro Trp
85 90 95
Thr Phe Gly Gly Gly Thr Lys Val Glu Met Glu Arg Thr Val Ala Ala
100 105 110
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
30 115 120 125
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
35 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
40 195 200 205
Phe Asn Arg Gly Glu Cys
210

45
<210> SEQ ID NO: 25
<211> Longitud: 214
<212> Tipo: PRT
<213> Organismo: Secuencia Artificial

50
<220> Característica:
<223> Otra Información: cadena ligera de anticuerpo humanizado KG

<400> Secuencia: 25
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly

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

30 <210> SEQ ID NO: 26
 <211> Longitud: 14
 <212> Tipo: PRT
 <213> Organismo: Mus musculus

35 <400> Secuencia: 26

Glu	Glu	Val	Val	Asn	Ala	Val	Glu	Asp	Trp	Asp	Ser	Gln	Gly
1				5					10				

40 <210> SEQ ID NO: 27
 <211> Longitud: 14
 <212> Tipo: PRT
 <213> Organismo: Mus musculus

45 <400> Secuencia: 27

Asn	Gln	Gln	Ile	Asp	Phe	Gln	Ala	Phe	His	Thr	Asn	Ala	Glu
1				5					10				

50 <210> SEQ ID NO: 28
 <211> Longitud: 11
 <212> Tipo: PRT

<213> Organismo: Mus musculus

<400> Secuencia: 28

5 Pro Thr Ala Pro Glu Thr Phe Pro Tyr Glu Thr
1 5 10

<210> SEQ ID NO: 29

10 <211> Longitud: 11

<212> Tipo: PRT

<213> Organismo: Mus musculus

<400> Secuencia: 29

15 Lys Leu Pro Val Glu Asp Leu Tyr Tyr Gln Ala
1 5 10

<210> SEQ ID NO: 30

<211> Longitud: 11

<212> Tipo: PRT

<213> Organismo: Mus musculus

25 <400> Secuencia: 30

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

30 <210> SEQ ID NO: 31
<211> Longitud: 7

<212> Tipo: PRT

<213> Organismo: Mus musculus

35 <400> Secuencia: 31

Tyr Thr Ser Arg Leu His Ser
1 5

40 <210> SEQ ID NO: 32
<211> Longitud: 7

<212> Tipo: PRT

45 <213> Organismo: Mus musculus

<400> Secuencia: 32

50 Gln Gln Leu Asn Thr Leu Pro
1 5

<210> SEQ ID NO: 33

<211> Longitud: 5

<212> Tipo: PRT
<213> Organismo: Mus musculus

<400> Secuencia: 33

5

Asp Ala Trp Met Asp
1 5

10 <210> SEQ ID NO: 34
<211> Longitud: 19
<212> Tipo: PRT
<213> Organismo: Mus musculus

15 <400> Secuencia: 34

Glu Ile Arg Ser Lys Ala Asn Asn His Ala Thr Tyr Tyr Ala Glu Ser
1 5 10 15

20

Val Lys Gly

25 <210> SEQ ID NO: 35
<211> Longitud: 5
<212> Tipo: PRT
<213> Organismo: Mus musculus

30 <400> Secuencia: 35

Arg Asp Gly Ala Tyr
1 5

35

<210> SEQ ID NO: 36
<211> Longitud: 16
<212> Tipo: PRT
<213> Organismo: Mus musculus

40

<400> Secuencia: 36

Arg Ser Ser Gln Ser Leu Val His Ser Asn Gly Asn Thr Tyr Leu His
1 5 10 15

45

<210> SEQ ID NO: 37
<211> Longitud: 7
<212> Tipo: PRT
<213> Organismo: Mus musculus

50

<400> Secuencia: 37

Lys Val Ser Asn Arg Phe Ser

1 5

5 <210> SEQ ID NO: 38
<211> Longitud: 7
<212> Tipo: PRT
<213> Organismo: Mus musculus

10 <400> Secuencia: 38
Ser Gln Ser Thr His Val Pro
1 5

15 <210> SEQ ID NO: 39
<211> Longitud: 6
<212> Tipo: PRT
<213> Organismo: Mus musculus

20 <400> Secuencia: 39
Thr Ser Tyr Tyr Trp Asn
1 5

25 <210> SEQ ID NO: 40
<211> Longitud: 16
<212> Tipo: PRT
<213> Organismo: Mus musculus

30 <400> Secuencia: 40
Tyr Ile Ser Tyr Asp Gly Thr Asn Asn Tyr Asn Pro Ser Leu Lys Asn
1 5 10 15

35 <210> SEQ ID NO: 41
<211> Longitud: 116
<212> Tipo: PRT
40 <213> Organismo: Secuencia Artificial

<220> Característica:
<223> Otra Información: cadena pesada de anticuerpo humanizado

45 <400> Secuencia: 41
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Asp Ala
20 25 30
50 Trp Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ala Glu Ile Arg Ser Lys Ala Asn Asn His Ala Thr Tyr Tyr Ala Glu
50 55 60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile

	65		70		75		80									
	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Thr	Glu	Asp	Thr	Ala	Leu	Tyr
				85					90						95	
	Tyr	Cys	Thr	Arg	Arg	Asp	Gly	Ala	Tyr	Trp	Gly	Lys	Gly	Thr	Thr	Val
5				100					105						110	
	Thr	Val	Ser	Ser												
				115												

10 <210> SEQ ID NO: 42
 <211> Longitud: 107
 <212> Tipo: PRT
 <213> Organismo: Secuencia Artificial

15 <220> Característica:
 <223> Otra Información: cadena ligera de anticuerpo humanizado

<400> Secuencia: 42

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

35 <210> SEQ ID NO: 43
 <211> Longitud: 348
 <212> Tipo: ADN
 <213> Organismo: Secuencia Artificial

40 <220> Característica:
 <223> Otra Información: un gen que codifica cadena pesada de anticuerpo humanizado

<400> Secuencia: 43

45	gaagtgcagc	tgggtggaatc	tggcgggcgga	ctggtgcagc	ctggcagatc	cctgagactg	60
	tctgtaccg	cctccggctt	caccttctcc	gacgcctgga	tggattgggt	gcgacaggct	120
	cctggcaagg	gcctggaatg	ggtggccgag	atccgggtcca	aggccaacaa	ccacgccacc	180
	tactacgccg	agtctgtgaa	gggcccgttc	accatctccc	gggacgactc	caagtccatc	240
	gtgtacctgc	agatgaactc	cctgcggacc	gaggacaccg	ccctgtacta	ctgcaccaga	300
50	agggacggcg	cctactgggg	caagggcacc	acagtgcacg	tgtcctcc		348

<210> SEQ ID NO: 44
 <211> Longitud: 321

<212> Tipo: ADN
<213> Organismo: Secuencia Artificial

<220> Característica:

5 <223> Otra Información: un gen que codifica cadena ligera de anticuerpo humanizado

<400> Secuencia: 44

10 gacatccaga tgacccagtc cccctcctcc gtgtctgctt ccgtggggcga cagagtgacc 60
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ggcaaggccc ccaagctgct gatctactac acctcccggc tgcactccgg cgtgccctct 180
agattttccg gctctggctc cggcaccgac tttaccctga ccatctccag cctgcagccc 240
gaggacttcg cctcctactt ctgtcagcag ctgaacaccc tgccctggac ctttggcgga 300
ggcaccaagg tggaaatgga a 321

15

<210> SEQ ID NO: 45

<211> Longitud: 13

<212> Tipo: PRT

20 <213> Organismo: Secuencia Artificial

<220> Característica:

<223> Otra Información: PLP139-151

25 <400> Secuencia: 45

His Ser Leu Gly Lys Trp Leu Gly His Pro Asp Lys Phe
1 5 10

<210> SEQ ID NO: 46

30 <211> Longitud: 4

<212> Tipo: PRT

<213> Organismo: Secuencia Artificial

<220> Característica:

35 <223> Otra Información: espaciador

<400> Secuencia: 46

Ser Gly Ser Gly
1