

JOSE LLOREDA CAMACHO & CO.

ABOGADOS

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SM

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 12-124175- -00006-0000

Fecha: 2014-01-14 15:59:08 Dep. 2020 DIR.NUEVASCR
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 329 CTOINFORMACION Folios: 3

Señor

SUPERINTENDENTE DE INDUSTRIA Y COMERCIO

DIVISION DE NUEVAS CREACIONES

E. _____ S. _____ D. _____

Re: PI.-GLAXO GROUP LIMITED.-Solicitud de Patente de Invención en
Fase Nacional para "PROTEÍNAS DE ENLACE A CD 127".-Clase
C07K 16/28.-Expediente número 12-124.175.-

1. Me refiero a mi memorial de 25 de junio de 2013.
2. Dando alcance a mi memorial de 25 de junio de 2013, me permito anexar el listado de secuencias (formato digital) así como también el anexo explicativo que contiene el soporte de las correcciones hechas a dicho listado.
3. Ruego a usted tomar atenta nota de lo anterior y proceder de conformidad.

Señor Superintendente,

ALICIA LLOREDA RICAURTE

T.P.53.215

Dirección para Notificaciones: notificacionespatentes@lloredacamacho.com

 Industria y Comercio SUPERINTENDENCIA	PLANILLA DE RADICACIÓN - DIGITALIZACIÓN DIARIA RELACIÓN DE ANEXOS		
Dependencia: 2020	Fecha: 2014 / 01 / 14 / AAAA MM DD		Recorrido:
Tipo de Radicación: Entrada: ☒ Salida: ☐ Traslado: ☐ Convenio: ☐			
Radicador:			Planilla:

ID	No. Radicación	Consecutivo	Item
1	12-124175	6	7
2			
3			
4			
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13			
14			
15			
16			
17			

Item	Unidad de Conservación
1	Bolsa
2	Caja
3	Libro
4	Sobre
5	Tomo
6	Otro
Item	Soporte Documental
☒	CD
8	Disquete
9	DVD
10	Folleto
11	Foto
12	Periódico
13	Plano
14	Publicación Periódica
15	USB
16	Otro

Observaciones: Folio # 2 es CD. El CD ANEXO contiene un total de 1 Archivo 1 Archivo en formato PDF el cual fue procesado Yenny
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ANEXO

Las páginas 84/85 de la publicación PCT indican la secuencia de 1A11V_H. Las CDRs se encuentran marcadas en negrilla. La primera línea de la página 85 indica por lo tanto que la CDRH3 de 1A11 es:

-G-D-G-N-Y-W-Y-F-D-V-

Esto es consistente con la tabla 6 en la página 97, que muestra el diseño/resultados de la mutagénesis de CDRH3.

También puede notarse a partir de las páginas 84/85 que la CDRH3 de todos los constructos de 1A11 V_H está inmediatamente precedida por el motivo de tres aminoácidos **-C-A-R-**. Es de esperarse la existencia del motivo **-C-A-R-** dado que éste se encuentra en la secuencia de célula germinal IGVH1-2, en la cual se basan todos los constructos humanizados 1A11 V_H (como es evidente a partir de la secuencia de IGVH1-2 en las páginas 84/85, así como en la información disponible de manera pública).

Por lo tanto, el motivo **-C-A-R-** y CDRH3 resultan en la siguiente secuencia (en donde las letras resaltadas son un indicativo de los residuos CDRH3):

-C-A-R-G-D-G-N-Y-W-Y-F-D-V-

Sin embargo, al realizar una comparación con el listado de secuencias electrónico, es evidente que los constructos de cadena pesada derivados de los CDRs de 1A11 en el marco IGVH1-2 (ID de SEQ Nos.: 8, 10 – 17, 28, 114, 118, 121, 123, 125, 127, 129 & 131 en el listado de secuencias electrónico) no tienen el residuo alanina (A) del motivo **-C-A-R-**, y además el primer residuo de glicina (G) de CDHR3. Por lo tanto, la región correspondiente de aquellas secuencias V_H en el listado de secuencia electrónico es:

-C-R-D-G-N-Y-W-Y-F-D-V-

En reemplazo del listado de secuencias electrónicas, los residuos de alanina y glicina omitidos han sido insertados (ver el ejemplo 1 que se muestra en el **Panel 1** más abajo).

Adicionalmente, es evidente que existen inconsistencias similares en los constructos humanizados V_H derivados del anticuerpo 6A3. El listado de secuencias de reemplazo modifica estas secuencias de conformidad con aquellas secuencias en la descripción (ID de SEQ Nos.: 45, 47 – 68 & 73).

Debe notarse que las secuencias con ID de SEQ Nos.: 114 y 118 en el listado de secuencias electrónico contiene residuos omitidos en los dominios constantes de anticuerpo. Esto habría sido inmediatamente evidente para la persona versada en la materia, y los residuos omitidos han sido insertados en el listado de secuencias de reemplazo (ver el ejemplo que se muestra en el **Panel 2**, más abajo)

Listado de Secuencias

<110> Glaxo Group Limited
Alexander H. TAYLOR
Yu XUE

<120> CD127 Proteínas de unión

<130> PB64061 WO

<150> 61/299010

<151> 2010-01-28

<160> 138

<170> FastSEQ for windows Version 4.0

<210> 1

<211> 455

<212> PRT

<213> Homo Sapiens

<220>

<223> human CD127

<400> 1

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

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441952.FA1															
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Pro	Asp	His	Lys	Lys	Thr	Leu	Glu	His	Leu	Cys	Lys	Lys	Pro	Arg	Lys
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His	Arg	Val	Asp	Asp	Ile	Gln	Ala	Arg	Asp	Glu	Val	Glu	Gly	Phe	Leu
Gln	Asp	Thr	Phe	Pro	Gln	Gln	Leu	Glu	Glu	Ser	Glu	Lys	Gln	Arg	Leu
Gly	Gly	Asp	Val	Gln	Ser	Pro	Asn	Cys	Pro	Ser	Glu	Asp	Val	Val	Val
Thr	Pro	Glu	Ser	Phe	Gly	Arg	Asp	Ser	Ser	Leu	Thr	Cys	Leu	Ala	Gly
Asn	Val	Ser	Ala	Cys	Asp	Ala	Pro	Ile	Leu	Ser	Ser	Ser	Arg	Ser	Leu
Asp	Cys	Arg	Glu	Ser	Gly	Lys	Asn	Gly	Pro	His	Val	Tyr	Gln	Asp	Leu
Leu	Leu	Ser	Leu	Gly	Thr	Thr	Asn	Ser	Thr	Leu	Pro	Pro	Pro	Phe	Ser
Leu	Gln	Ser	Gly	Ile	Leu	Thr	Leu	Asn	Pro	Val	Ala	Gln	Gly	Gln	Pro
Ile	Leu	Thr	Ser	Leu	Gly	Ser	Asn	Gln	Glu	Glu	Ala	Tyr	Val	Thr	Met
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 Thr Met Asn Trp Val Lys Gln Ser His Gly Lys Asn Leu Glu Trp Ile
 35 40 45
 Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
 50 55 60
 Lys Gly Lys Ala Thr Leu Thr Val Ala Lys Ser Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
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 Thr Thr Val Thr Val Ser Ser
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<210> 9

<211> 105

<212> PRT

<213> Mus musculus

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<223> 1A11 vk

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 His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Pro Trp Ile Tyr
 35 40 45
 Glu Ile Ser Lys Leu Ala Ser Gly Val Pro Val Arg Phe Ser Gly Ser
 50 55 60
 Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Met Glu Ala Glu
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 85 90 95
 Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

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<211> 119

<212> PRT

<213> Secuencia Artificial

<220>

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

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		115											

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 <223> 1A11.H1 VH

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

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<220>
 <223> 1A11.H2 VH

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

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

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

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

<210> 21
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<220>
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20 25 30
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35 40 45
Glu Ile Ser Lys Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser
50 55 60
Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
65 70 75 80
Asp Phe Ala Val Tyr Tyr Cys Gln Glu Trp Asn Tyr Pro Tyr Thr Phe
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<223> 1A11.L4 vk

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

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<212> PRT

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<223> 1A11.L5 vk

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

<210> 24

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<223> 1A11.L6 vk

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

441952.TXT

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 100 105

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 <212> PRT
 <213> Secuencia Artificial

<223> 1A11.L7 vk

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

<210> 26
 <211> 105
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 1A11.L8 vk

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

<210> 27
 <211> 105
 <212> PRT

<213> Secuencia Artificial

<220>

<223> 1A11.L9 vk

<400> 27

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

<210> 28

<211> 119

<212> PRT

<213> Secuencia Artificial

<220>

<223> 1A11c VH

<400> 28

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

<210> 29

<211> 105

<212> PRT

<213> Secuencia Artificial

<220>

<223> 1A11c vk

<400> 29

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

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

<210> 30
 <211> 357
 <212> DNA
 <213> Secuencia Artificial
 <220>
 <223> secuencia de polinucleótidos que codifica 1A11.H1 VH

<400> 30
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaagggtg 60
 agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagtg gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcag ggtgaccatg accgtggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 31
 <211> 357
 <212> DNA
 <213> Secuencia Artificial
 <220>
 <223> secuencia de polinucleótidos que codifica 1A11.H1 VH

<400> 31
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaagggtg 60
 agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagtg gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcaa ggtgaccatg accagggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 32
 <211> 357
 <212> DNA
 <213> Secuencia Artificial
 <220>
 <223> secuencia de polinucleótidos que codifica 1A11.H3 VH

<400> 32
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaagggtg 60
 agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagtg gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcag ggtgaccctg accagggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

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<210> 33
 <211> 357
 <212> DNA
 <213> Secuencia Artificial
 <220>
 <223> secuencia de polinucleótidos que codifica 1A11.H4 VH

<400> 33
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaaggtg 60
 agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagt gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcaa ggtgaccatg accgtggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 34
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 1A11.H5 VH

<400> 34
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaaggtg 60
 agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagt gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcaa ggtgaccctg accgtggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 35
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 1A11.H6 VH

<400> 35
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaaggtg 60
 agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagt gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcaa ggtgaccctg accgtggata agagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 36
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 1A11.H7 VH

<400> 36
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaaggtg 60
 agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagt gatgggcctg atcaaccctt acaacggcgt gaccagctac 180

441952.TXT

aaccagaagt tcaagggcaa ggtgaccctg accgtggcca agagcatcag caccgcttac 240
atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
ggcaactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 37

<211> 357

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 1A11c VH

<400> 37

gaggtgcagc tgcagcagag cggccccgaa ctgctgaagc ccggcgctag catgaagatc 60
agctgcaagg ccagcggcta cagcttcacc ggctacacca tgaactgggt caagcagtcc 120
cacggcaaga acctggagt gatcggcctg atcaaccctt acaacggcgt gacctcctac 180
aaccagaagt tcaagggcaa ggccaccctc acagtggcca aaagcagcag caccgcctac 240
atggaactgc tgagcctgac cagcgaggac agcgccgtgt actattgcgc caggggcgac 300
ggcaattact ggtacttcga cgtgtggggc gccggaacca ccgtgaccgt gtctagc 357

<210> 38

<211> 315

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 1A11c Vκ

<400> 38

gagatcgtgc tgaccagag ccccgcaatt accgccgcca gcctgggcca gaaggtgacc 60
atcacctgca gcgcaagcag cagcgtgacc tacatgcact ggtaccagca gaagagcggc 120
accagcccca agccctggat ctacgagatc tccaagctcg cctctggagt ccctgtgagg 180
ttcagcggca gcggcagcgg cactagctac tactgacca tcagcagcat ggaggccgaa 240
gacgccgcca tctattactg ccaggagtgg aactaccctt acaccttcgg cggcggcacc 300
aaactggaga tcaag 315

<210> 39

<211> 6

<212> PRT

<213> Mus musculus

<220>

<223> 6A3 CDR H1

<400> 39

Thr Asp Tyr Ala Trp Asn
1 5

<210> 40

<211> 16

<212> PRT

<213> Mus musculus

<220>

<223> 6A3 CDR H2

<400> 40

Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu Lys Ser
1 5 10 15

<210> 41
 <211> 11
 <212> PRT
 <213> Mus musculus

<220>
 <223> 6A3 CDR H3

<400> 41
 Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp
 1 5 10

<210> 42
 <211> 7
 <212> PRT
 <213> Mus musculus

<220>
 <223> 6A3 CDR L1

<400> 42
 Leu Ala Ser Gln Thr Ile Gly
 1 5

<210> 43
 <211> 7
 <212> PRT
 <213> Mus musculus

<220>
 <223> 6A3 CDR L2

<400> 43
 Ala Ala Thr Arg Leu Ala Asp
 1 5

<210> 44
 <211> 9
 <212> PRT
 <213> Mus musculus

<220>
 <223> 6A3 CDR L3

<400> 44
 Gln Gln Phe Phe Ser Thr Pro Trp Thr
 1 5

<210> 45
 <211> 119
 <212> PRT
 <213> Mus musculus

<220>
 <223> 6A3 VH

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

<210> 46
 <211> 107
 <212> PRT
 <213> Mus musculus

<220>
 <223> 6A3 vk

<400> 46
 Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly
 1 5 10 15
 Glu Ser Val Thr Ile Thr Cys Leu Ala Ser Gln Thr Ile Gly Ala Trp
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Gln Leu Leu Ile
 35 40 45
 Tyr Ala Ala Thr Arg Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala
 65 70 75 80
 Glu Asp Phe Val Ser Tyr Tyr Cys Gln Gln Phe Phe Ser Thr Pro Trp
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 47
 <211> 119
 <212> PRT
 <213> secuencia Artificial

<220>
 <223> 6A3.IGHV4_61.H0 VH

<400> 47
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Thr Asp

[illegible]

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<210> 48
<211> 119
<212> PRT
<213> Secuencia Artificial
<220>
<223> 6A3.IGHV4_61.H1 VH
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<400> 48															
Gln 1	Val	Gln	Leu	Gln 5	Glu	Ser	Gly	Pro	Gly 10	Leu	Val	Lys	Pro	Ser 15	Glu
Thr	Leu	Ser	Leu 20	Thr	Cys	Thr	Val	Ser 25	Gly	Gly	Ser	Val	Ser 30	Thr	Asp
Tyr	Ala	Trp 35	Asn	Trp	Ile	Arg	Gln 40	Pro	Pro	Gly	Lys	Gly 45	Leu	Glu	Trp
Ile	Gly 50	Tyr	Ile	Phe	Tyr	Ser 55	Gly	Ser	Thr	Thr	Tyr 60	Thr	Pro	Ser	Leu
Lys 65	Ser	Arg	Val	Thr	Ile 70	Ser	Arg	Asp	Thr	Ser 75	Lys	Asn	Gln	Phe	Ser 80
Leu	Lys	Leu	Ser	Ser 85	Val	Thr	Ala	Ala	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Gly	Gly 100	Tyr	Asp	Val	Asn	Tyr 105	Phe	Asp	Tyr	Trp	Gly 110	Gln	Gly
Thr	Thr	Val 115	Thr	Val	Ser	Ser									

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<210> 49
<211> 119
<212> PRT
<213> Secuencia Artificial

<220>
<223> 6A3.IGHV4_61.H2 VH
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<400> 49															
Gln 1	Val	Gln	Leu	Gln 5	Glu	Ser	Gly	Pro	Gly 10	Leu	Val	Lys	Pro	Ser 15	Glu
Thr	Leu	Ser	Leu 20	Thr	Cys	Thr	Val	Ser 25	Gly	Tyr	Ser	Val	Ser 30	Thr	Asp
Tyr	Ala	Trp 35	Asn	Trp	Ile	Arg	Gln 40	Pro	Pro	Gly	Lys	Gly 45	Leu	Glu	Trp
Ile	Gly 50	Tyr	Ile	Phe	Tyr	Ser 55	Gly	Ser	Thr	Thr	Tyr 60	Thr	Pro	Ser	Leu
Lys 65	Ser	Arg	Val	Thr	Ile 70	Ser	Val	Asp	Thr	Ser 75	Lys	Asn	Gln	Phe	Ser 80
Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys

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Ala	Arg	Gly	Gly	85	Tyr	Asp	Val	Asn	Tyr	90	Phe	Asp	Tyr	Trp	Gly	95	Gln	Gly
			100						105						110			
Thr	Thr	Val	Thr	Val	Ser	Ser												
			115															

<210> 50
 <211> 119
 <212> PRT
 <213> Secuencia Artificial
 <220>
 <223> 6A3.IGHV4_61.H3 VH

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

<210> 51
 <211> 119
 <212> PRT
 <213> Secuencia Artificial
 <220>
 <223> 6A3.IGHV4_61.H4 VH

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

<210> 52

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

<220>
 <223> 6A3.IGHV4_61.H5 VH

<400> 52
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Thr Asp
 20 25 30
 Tyr Ala Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Met Gly Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 53
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV4_61.H6 VH

<400> 53
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Val Ser Thr Asp
 20 25 30
 Tyr Ala Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Ile Gly Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
 50 55 60
 Lys Ser Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Phe Ser
 65 70 75 80
 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 54
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV4_61.H7 VH

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<400> 54
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1      5      10      15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Val Thr Thr Asp
      20      25      30
Tyr Ala Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
      35      40      45
Ile Gly Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
      50      55      60
Lys Ser Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Phe Ser
      65      70      75      80
Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
      100      105      110
Thr Thr Val Thr Val Ser Ser
      115

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

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<220>
<223> 6A3.IGHV4_61.H8 VH

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

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<210> 56
<211> 119
<212> PRT
<213> Secuencia Artificial

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<220>
<223> 6A3.IGHV4_61.H9 VH

```

```

<400> 56
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1      5      10      15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Val Thr Thr Asp
      20      25      30
Tyr Ala Trp Asn Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp

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441952.TXT

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

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<210> 57
 <211> 119
 <212> PRT
 <213> secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H0 VH

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<400> 57
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
  1      5      10      15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Asp
      20      25      30
Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
      35      40      45
Val Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
      50      55      60
Lys Ser Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
      65      70      75      80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
      100      105      110
Thr Thr Val Thr Val Ser Ser
      115

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<210> 58
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H1 VH

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<400> 58
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
  1      5      10      15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Ser Thr Asp
      20      25      30
Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
      35      40      45
Val Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
      50      55      60
Lys Ser Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
      65      70      75      80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85      90      95

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441952.TXT

Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 59
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H2 VH

<400> 59
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Thr Thr Asp
 20 25 30
 Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Val Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
 50 55 60
 Lys Ser Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 60
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H3 VH

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

<210> 61

<211> 119
 <212> PRT
 <213> secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H4 VH

<400> 61
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ile Ser Thr Asp
 20 25 30
 Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Val Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
 50 55 60
 Lys Ser Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 62
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H5 VH

<400> 62
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Asp
 20 25 30
 Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Val Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
 50 55 60
 Lys Ser Arg Ile Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 63
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H6 VH

441952.TXT

<400> 63

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

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<210> 64

<211> 119

<212> PRT

<213> secuencia Artificial

<220>

<223> 6A3.IGHV3-33.H7 VH

<400> 64

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

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<210> 65

<211> 119

<212> PRT

<213> Secuencia Artificial

<220>

<223> 6A3.IGHV3-33.H8 VH

<400> 65

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

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441952.TXT

```

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

```

<210> 66
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H9 VH

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<400> 66
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
  1      5      10      15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Asp
      20      25      30
Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
      35      40      45
Val Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
      50      55      60
Lys Ser Arg Phe Ser Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
      65      70      75      80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
      100      105      110
Thr Thr Val Thr Val Ser Ser
      115

```

<210> 67
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H10 VH

```

<400> 67
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
  1      5      10      15
Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Thr Phe Ser Thr Asp
      20      25      30
Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
      35      40      45
Val Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
      50      55      60
Lys Ser Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
      65      70      75      80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85      90      95

```

441952.TXT

Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 68
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.IGHV3-33.H11 VH

<400> 68
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Asp
 20 25 30
 Tyr Ala Trp Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 35 40 45
 Met Ala Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
 50 55 60
 Lys Ser Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 69
 <211> 107
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 6A3.L0 vk

<400> 69
 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 Leu Ala Ser Gln Thr Ile Gly Ala Trp
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Ala Ala Thr Arg Leu Ala Asp 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 Val Tyr Tyr Cys Gln Gln Phe Phe Ser Thr Pro Trp
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 70
 <211> 107
 <212> PRT

<213> Secuencia Artificial

<220>

<223> 6A3.L1 vk

<400> 70

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

<210> 71

<211> 107

<212> PRT

<213> Secuencia Artificial

<220>

<223> 6A3.L2 vk

<400> 71

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

<210> 72

<211> 107

<212> PRT

<213> Secuencia Artificial

<220>

<223> 6A3.L3 vk

<400> 72

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	Leu	Ala	Ser	Gln	Thr	Ile	Gly	Ala	Trp
		20					25			30					

441952.TXT

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

<210> 73
 <211> 119
 <212> PRT
 <213> Mus musculus

<220>
 <223> 6A3c VH

<400> 73
 Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Ser Leu Ser Leu Thr Cys Thr Val Thr Gly Tyr Ser Ile Thr Thr Asp
 20 25 30
 Tyr Ala Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Glu Trp
 35 40 45
 Met Gly Tyr Ile Phe Tyr Ser Gly Ser Thr Thr Tyr Thr Pro Ser Leu
 50 55 60
 Lys Ser Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Phe Phe
 65 70 75 80
 Leu Gln Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Val Asn Tyr Phe Asp Tyr Trp Gly Gln Gly
 100 105 110
 Thr Thr Leu Thr Val Ser Ser
 115

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

<220>
 <223> 6A3c vk

<400> 74
 Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Gln Ser Ala Ser Leu Gly
 1 5 10 15
 Glu Ser Val Thr Ile Thr Cys Leu Ala Ser Gln Thr Ile Gly Ala Trp
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Gln Leu Leu Ile
 35 40 45
 Tyr Ala Ala Thr Arg Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Lys Phe Ser Phe Lys Ile Ser Ser Leu Gln Ala
 65 70 75 80
 Glu Asp Phe Val Ser Tyr Tyr Cys Gln Gln Phe Phe Ser Thr Pro Trp
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys

100

105

<210> 75
 <211> 357
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H0
 VH

<400> 75
 caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
 acctgcacag tgagcggcgg ctccgtgagc accgactacg cttggaactg gatcaggcag 120
 cctcccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
 acccccagcc tcaagtccag ggtgaccatc agcgtcgaca ccagcaagaa ccagttcagc 240
 ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcgc caggggagggc 300
 tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357

<210> 76
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H1
 VH

<400> 76
 caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
 acctgcacag tgagcggcgg ctccgtgagc accgactacg cttggaactg gatcaggcag 120
 cctcccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
 acccccagcc tcaagtccag ggtgaccatc agcagggaca ccagcaagaa ccagttcagc 240
 ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcgc caggggagggc 300
 tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357

<210> 77
 <211> 357
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H2
 VH

<400> 77
 caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
 acctgcacag tgagcggcga ctccgtgagc accgactacg cttggaactg gatcaggcag 120
 cctcccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
 acccccagcc tcaagtccag ggtgaccatc agcgtcgaca ccagcaagaa ccagttcagc 240
 ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcgc caggggagggc 300
 tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357

<210> 78
 <211> 357
 <212> DNA
 <213> secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H3
VH

<400> 78
caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
acctgcacag tgagcggcgg ctccgtgacc accgactacg cttggaactg gatcaggcag 120
cctcccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
acccccagcc tcaagtccag ggtgaccatc agcgtcgaca ccagcaagaa ccagttcagc 240
ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcgc cagggggaggc 300
tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357

<210> 79
<211> 357
<212> DNA
<213> Secuencia Artificial

<220>
<223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H4
VH

<400> 79
caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
acctgcacag tgagcggcgg ctccgtgacc accgactacg cttggaactg gatcaggcag 120
cctcccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
acccccagcc tcaagtccag gatcaccatc agcgtcgaca ccagcaagaa ccagttcagc 240
ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcgc cagggggaggc 300
tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357

<210> 80
<211> 357
<212> DNA
<213> Secuencia Artificial

<220>
<223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H5
VH

<400> 80
caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
acctgcacag tgagcggcgg ctccgtgagc accgactacg cttggaactg gatcaggcag 120
cctcccggca agggcctgga gtggatgggc tacatcttct acagcggcag caccacctac 180
acccccagcc tcaagtccag ggtgaccatc agcgtcgaca ccagcaagaa ccagttcagc 240
ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcgc cagggggaggc 300
tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357

<210> 81
<211> 357
<212> DNA
<213> Secuencia Artificial

<220>
<223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H6
VH

<400> 81
caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
acctgcacag tgagcggccta ctccgtgagc accgactacg cttggaactg gatcaggcag 120

441952.TXT

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cctccccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
acccccagcc tcaagtccag ggtgaccatc agcagggaca ccagcaagaa ccagttcagc 240
ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcg cagggggaggc 300
tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357
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<210> 82
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H7
 VH

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<400> 82
caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
acctgcacag tgagcggcta ctccgtgacc accgactacg cttggaactg gatcaggcag 120
cctccccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
acccccagcc tcaagtccag ggtgaccatc agcagggaca ccagcaagaa ccagttcagc 240
ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcg cagggggaggc 300
tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357
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<210> 83
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H8
 VH

```
<400> 83
caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
acctgcacag tgagcggcgg ctccgtgagc accgactacg cttggaactg gatcaggcag 120
cctccccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
acccccagcc tcaagtccag ggtgaccatc agcgtcgaca ccagcaagaa ccagttcagc 240
ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcg cagggggaggc 300
tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357
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<210> 84
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV4_61.H9
 VH

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<400> 84
caggtgcagc tgcaggagag cggacccggc ctggtgaaac ccagcgagac cctgagcctg 60
acctgcacag tgagcggcta ctccgtgacc accgactacg cttggaactg gatcaggcag 120
cctccccggca agggcctgga gtggatcggc tacatcttct acagcggcag caccacctac 180
acccccagcc tcaagtccag gatcaccatc agcagggaca ccagcaagaa ccagttcagc 240
ctgaagctga gcagcgtgac cgccgccgat accgccgtgt actactgcg cagggggaggc 300
tacgacgtga actacttcga ctactggggc cagggcacca cctatactgt gagcagc 357
```

<210> 85
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H0
VH

<400> 85

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	ccagcggatt	caccttcagc	accgactacg	cctggaattg	ggtgaggcag	120
gcccccgga	agggcctgga	gtgggtcgcc	tacatcttct	acagcggcag	caccacctac	180
acccccagcc	tgaagagcag	gttcaccatc	agcagggaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	attactgcgc	tagggggggc	300
tacgacgtga	actacttcga	ctactggggc	cagggcacaa	ccgtgaccgt	gagcagc	357

<210> 86

<211> 357

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H1
VH

<400> 86

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	ccagcggata	caccttcagc	accgactacg	cctggaattg	ggtgaggcag	120
gcccccgga	agggcctgga	gtgggtcgcc	tacatcttct	acagcggcag	caccacctac	180
acccccagcc	tgaagagcag	gttcaccatc	agcagggaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	attactgcgc	tagggggggc	300
tacgacgtga	actacttcga	ctactggggc	cagggcacaa	ccgtgaccgt	gagcagc	357

<210> 87

<211> 357

<212> DNA

<213> secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H2
VH

<400> 87

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	ccagcggatt	caccttcacc	accgactacg	cctggaattg	ggtgaggcag	120
gcccccgga	agggcctgga	gtgggtcgcc	tacatcttct	acagcggcag	caccacctac	180
acccccagcc	tgaagagcag	gttcaccatc	agcagggaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	attactgcgc	tagggggggc	300
tacgacgtga	actacttcga	ctactggggc	cagggcacaa	ccgtgaccgt	gagcagc	357

<210> 88

<211> 357

<212> DNA

<213> secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H3
VH

<400> 88

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	ccagcggatt	cagcttcagc	accgactacg	cctggaattg	ggtgaggcag	120

441952.TXT

```

gcccccgga agggcctgga gtgggtcgcc tacatcttct acagcggcag caccacctac 180
acccccagcc tgaagagcag gtccaccatc agcagggaca acagcaagaa caccctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt attactgcgc taggggggggc 300
tacgacgtga actacttcga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

```

<210> 89
 <211> 357
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H4
 VH

```

<400> 89
caggtgcagc tgggtggagag cggcggcggc gtgggtgcagc ccggcaggag cctgaggctc 60
tcttgcgccg ccagcggatt caccatcagc accgactacg cctggaattg ggtgaggcag 120
gcccccgga agggcctgga gtgggtcgcc tacatcttct acagcggcag caccacctac 180
acccccagcc tgaagagcag gtccaccatc agcagggaca acagcaagaa caccctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt attactgcgc taggggggggc 300
tacgacgtga actacttcga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

```

<210> 90
 <211> 357
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H5
 VH

```

<400> 90
caggtgcagc tgggtggagag cggcggcggc gtgggtgcagc ccggcaggag cctgaggctc 60
tcttgcgccg ccagcggatt caccatcagc accgactacg cctggaattg ggtgaggcag 120
gcccccgga agggcctgga gtgggtcgcc tacatcttct acagcggcag caccacctac 180
acccccagcc tgaagagcag gatcaccatc agcagggaca acagcaagaa caccctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt attactgcgc taggggggggc 300
tacgacgtga actacttcga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

```

<210> 91
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H6
 VH

```

<400> 91
caggtgcagc tgggtggagag cggcggcggc gtgggtgcagc ccggcaggag cctgaggctc 60
tcttgcgccg ccagcggatt caccatcagc accgactacg cctggaattg ggtgaggcag 120
gcccccgga agggcctgga gtgggtcgcc tacatcttct acagcggcag caccacctac 180
acccccagcc tgaagagcag gtccaccatc agcagggaca ccagcaagaa caccctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt attactgcgc taggggggggc 300
tacgacgtga actacttcga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

```

<210> 92
 <211> 357
 <212> DNA
 <213> secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H7
VH

<400> 92

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	ccagcggatt	caccttcagc	accgactacg	cctggaattg	ggtgaggcag	120
gcccccgga	agggcctgga	gtgggtcgcc	tacatcttct	acagcggcag	caccacctac	180
acccccagcc	tgaagagcag	gttcaccatc	agcagggaca	acagcaagaa	caccttctac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	attactgcgc	tagggggggc	300
tacgacgtga	actacttcga	ctactggggc	cagggcacaa	ccgtgaccgt	gagcagc	357

<210> 93

<211> 357

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H8
VH

<400> 93

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	ccagcggatt	caccttcagc	accgactacg	cctggaattg	ggtgaggcag	120
gcccccgga	agggcctgga	gtgggtcgcc	tacatcttct	acagcggcag	caccacctac	180
acccccagcc	tgaagagcag	gttcaccatc	agcagggaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	attactgcgc	tagggggggc	300
tacgacgtga	actacttcga	ctactggggc	cagggcacaa	ccgtgaccgt	gagcagc	357

<210> 94

<211> 357

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H9
VH

<400> 94

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	ccagcggatt	caccttcagc	accgactacg	cctggaattg	ggtgaggcag	120
gcccccgga	agggcctgga	gtgggtcgcc	tacatcttct	acagcggcag	caccacctac	180
acccccagcc	tgaagagcag	gttcagcatc	agcagggaca	acagcaagaa	caccctgtac	240
ctgcagatga	acagcctgag	ggccgaggac	accgccgtgt	attactgcgc	tagggggggc	300
tacgacgtga	actacttcga	ctactggggc	cagggcacaa	ccgtgaccgt	gagcagc	357

<210> 95

<211> 357

<212> DNA

<213> secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H10
VH

<400> 95

caggtgcagc	tggtggagag	cggcggcggc	gtggtgcagc	ccggcaggag	cctgaggctc	60
tcttgcgccg	tgagcggatt	caccttcagc	accgactacg	cctggaattg	ggtgaggcag	120

441952.TXT

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gcccccgga agggcctgga gtgggtcgcc tacatcttct acagcggcag caccacctac 180
acccccagcc tgaagagcag gtccaccatc agcagggaca acagcaagaa caccctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt attactgcgc taggggggggc 300
tacgacgtga actacttcga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

```

<210> 96
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.IGHV3_33.H11
 VH

```

<400> 96
caggtgcagc tgggtggagag cggcggcggc gtgggtgcagc ccggcaggag cctgaggctc 60
tcttgcgccg ccagcggatt caccctcagc accgactacg cctggaattg ggtgaggcag 120
gcccccgga agggcctgga gtggatggcc tacatcttct acagcggcag caccacctac 180
acccccagcc tgaagagcag gtccaccatc agcagggaca acagcaagaa caccctgtac 240
ctgcagatga acagcctgag ggccgaggac accgccgtgt attactgcgc taggggggggc 300
tacgacgtga actacttcga ctactggggc cagggcacaa ccgtgaccgt gagcagc 357

```

<210> 97
 <211> 321
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.L0 vk

```

<400> 97
gacatccaga tgacccagag ccccagctcc ctgagcgcca gcgtgggcga tagggtgacc 60
atcacctgcc tggccagcca gaccattggc gcctggctgg cctggtacca gcagaagccc 120
ggcaaggccc ccaaactgct gatctacgcc gcaactaggc tcgccgacgg cgtgccctct 180
aggttttagcg gcagcgggaag cggcaccgac ttaccctga ccatcagcag cctgcagccc 240
gaggacttcg ccacctacta ctgccagcag ttcttcagca cccctggac cttcggcggg 300
ggcacaaagg tggagatcaa g

```

<210> 98
 <211> 321
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> secuencia de polinucleótidos que codifica 6A3.L1 vk

```

<400> 98
gacatccaga tgacccagag ccccagctcc ctgagcgcca gcgtgggcga tagggtgacc 60
atcacctgcc tggccagcca gaccattggc gcctggctgg cctggtacca gcagaagccc 120
ggcaaggccc cccagctgct gatctacgcc gcaactaggc tcgccgacgg cgtgccctct 180
aggttttagcg gcagcgggaag cggcaccgac ttaccctga ccatcagcag cctgcagccc 240
gaggacttcg ccacctacta ctgccagcag ttcttcagca cccctggac cttcggcggg 300
ggcacaaagg tggagatcaa g

```

<210> 99
 <211> 321
 <212> DNA
 <213> secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.L2 vk

<400> 99

```
gacatccaga tgacccagag cccagctcc ctgagcgcca gcgtgggcga tagggtgacc 60
atcacctgcc tggccagcca gaccattggc gcctggctgg cctgggtacca gcagaagccc 120
ggcaaggccc ccaaactgct gatctacgcc gcaactaggc tcgccgacgg cgtgccctct 180
aggttttagcg gcagcgggaag cggcaccaag ttcaccctga ccatcagcag cctgcagccc 240
gaggacttcg ccacctacta ctgccagcag ttcttcagca cccctggac cttcggcggg 300
ggcacaaagg tggagatcaa g                                     321
```

<210> 100

<211> 321

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3.L3 vk

<400> 100

```
gacatccaga tgacccagag cccagctcc ctgagcgcca gcgtgggcga tagggtgacc 60
atcacctgcc tggccagcca gaccattggc gcctggctgg cctgggtacca gcagaagccc 120
ggcaaggccc cccagctgct gatctacgcc gcaactaggc tcgccgacgg cgtgccctct 180
aggttttagcg gcagcgggaag cggcaccaag ttcaccctga ccatcagcag cctgcagccc 240
gaggacttcg ccacctacta ctgccagcag ttcttcagca cccctggac cttcggcggg 300
ggcacaaagg tggagatcaa g                                     321
```

<210> 101

<211> 357

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3c VH

<400> 101

```
gacgtccagc tgcaggagag cggccccggg ctggtgaagc cctctcagag cctgagcctg 60
acctgcaccg tgaccggcta cagcatcacc accgactacg cctggaactg gatcaggcag 120
ttccccggca acaagctgga gtggatgggc tacatcttct acagcggcag caccacctat 180
acccccagcc tcaagagcag gatcagcatc accagggaca cctccaagaa ccagttcttc 240
ctgcagctga acagcgtgac cacagaggac accgccacct actactgcgc caggggcgga 300
tacgacgtga actacttcga ctactggggc cagggcacca ctctgaccgt gagcagc 357
```

<210> 102

<211> 321

<212> DNA

<213> Secuencia Artificial

<220>

<223> secuencia de polinucleótidos que codifica 6A3c vk

<400> 102

```
gacatccaga tgacccagag ccccgccagc cagagcgccct ctctgggcga gagcgtgaca 60
atcacctgcc tggccagcca gaccattggc gcttggctgg cctgggtacca gcagaagccc 120
ggcaagagcc cccagctgct gatctacgcc gccactaggc tggccgacgg cgtgccagc 180
aggttttagcg gcagcggcag cggcaccaag ttcagcttca agatcagcag cctgcaggcc 240
gaggacttcg tgtcctacta ctgccagcag ttcttcagca cccctggac cttcggcggc 300
ggaaccaaac tcgagatcaa g                                     321
```

<210> 103

441952.TXT

<211> 357
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> secuencia de ácido nucleico que codifica 1A11.H0

<400> 103
 caggtgcagc tgggtgcagag cggagccgag gtgaagaagc ccggagccag cgtgaagggtg 60
 agctgcaaag cctccggcta caccitcacc ggctacacca tgaactgggt caggcaggct 120
 cccggccagg gcctggagtg gatgggcctg atcaacccct acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcag ggtgaccatg accagggaca ccagcatcag caccgcctac 240
 atggaactga gcaggctgag gagcgacgac accgccgtgt attactgcgc caggggagc 300
 ggaactact ggtacttcga cgtatggggc caggggaacaa ccgtgaccgt gagcagc 357

<210> 104
 <211> 315
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11.L0

<400> 104
 gagatcgtgc tgacacagag ccccgccacc ctgtctctga gccctggcga gagggccacc 60
 ctgagctgca gcgccagcag cagcgtgacc tacatgcact ggtaccagca gaaacccggc 120
 caggccccctc gcctgctgat ctacgagatc tctaagctgg ccagcggcat tcccgcctagg 180
 ttcagcggca gcggtctcagg caccgacttc accctcacca tcagcagcct ggagccccgaa 240
 gacttcgccg tctactactg ccaggagtgg aactaccctc ataccttcgg cggcgggacc 300
 aaggtggaga tcaag 315

<210> 105
 <211> 315
 <212> DNA
 <213> Secuencia artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11.L1

<400> 105
 gagatcgtgc tgactcagag ccccgccacc ctgagcctga gccccggcga aaggggccaca 60
 ctgagctgca gcgctagcag cagcgtgacc tacatgcact ggtaccagca gaagccccggc 120
 caggcccccta ggctgtggat ctacgagatc agcaagctgg ccagcggcat tcccgccagg 180
 ttctcaggca gcggaagcgg caccgacttc accctcacca tcagctctct ggagccccgag 240
 gacttcgccg tctactactg ccaggagtgg aactaccctc ataccttcgg cggcgggacc 300
 aaggtggaga tcaag 315

<210> 106
 <211> 315
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11.L2

<400> 106
 gagatcgtgc tgaccagag ccccgcaacc ctgagcctca gccctggcga gagggccact 60
 ctgagctgct ctgccagcag cagcgtgacc tacatgcact ggtaccagca gaagccccgga 120
 caggccccca ggctgctgat ctacgagatc agcaagctgg cctctggcat tcccgccagg 180

441952.TXT

```
ttcagcggct caggcagcgg caccgactac accctgacca tcagcagcct ggaacccgag 240
gacttcgccg tctactactg ccaggagtgg aactatccct acaccttcgg cggcggcacc 300
aaggtggaga tcaag 315
```

<210> 107
 <211> 315
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11.L3

```
<400> 107
gagatcgtgc tgacccagag ccccgccaca ctgtcactgt ctcccggcga aagggccacc 60
ctgagctgca ggcctctag cagcgtgacc tacatgcact ggtaccagca gaagcccggc 120
caggctccca ggctgtggat ctacgagatc agcaagctgg ccagcggcat ccctgccagg 180
ttcagcggca gcggcagcgg caccgactat accctgacca tcagcagcct cgagcccagag 240
gacttcgccg tctactactg ccaggagtgg aactaccctt acaccttcgg cggcgggacc 300
aaagtggaga tcaag 315
```

<210> 108
 <211> 315
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11.L4

```
<400> 108
gaaattgtgc tgacccagag ccccgccacc ctgagcctgt caccaggcga gagggcaact 60
ctgagctgca ggcgccagctc tagcgtgacc tacatgcact ggtaccagca gaaacccgga 120
caggccccc ggccctgat ctacgagatc tccaagctgg ccagcggcat ccccgccagg 180
tttagcggca gcggcagcgg caccgacttc accctgacca tcagcagcct cgagcccagag 240
gacttcgccg tgtattactg ccaggagtgg aactaccctt acaccttcgg cggcggcacc 300
aaggtggaga tcaag 315
```

<210> 109
 <211> 315
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11.L5

```
<400> 109
gaaatcgtgc tgacccagag ccccgcaacc ctgagcctga gccccggaga gagggccact 60
ctgagctgca ggcgccagcag cagcgtgacc tacatgcact ggtaccagca gaagcccggc 120
caggcccca ggccctggat ctacgagatt agcaagctgg cctccggcat ccctgccagg 180
ttcagcggct caggcagcgg caccgactat accctcacca tcagcagcct ggagcccagag 240
gacttcgccg tctactactg ccaggagtgg aactaccctt acaccttcgg cggcggcacc 300
aaggtggaga tcaag 315
```

<210> 110
 <211> 315
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11.L6

441952.TXT

```
<400> 110
gagatcgtgc tgacccagtc acccgcaaca ctgagcctga gcccaggaga gagggccacc 60
ctgagctgca gcgcctctag ctccgtgacc tacatgcact ggtaccagca gaagcccggc 120
caggccccca gaccctggat ctacgagatc agcaagctcg ccagcggcgt ccccgccagg 180
ttcagcggaa gcggcagcgg gaccgactac accctgacca tcagcagcct ggaacccgag 240
gacttcgccg tgtattactg ccaggagtgg aactaccctt acaccttcgg cggcggcacc 300
aaggtggaga tcaag 315
```

```
<210> 111
<211> 315
<212> DNA
<213> secuencia Artificial
```

```
<220>
<223> Una secuencia de ácido nucleico que codifica 1A11.L7
```

```
<400> 111
gaaattgtgc tgacccagag ccccgccacc ctgagcctgt caccaggcga gagggcaact 60
ctgagctgca gcgccagctc tagcgtgacc tacatgcact ggtaccagca gaaacccgga 120
caggccccca agccctggat ctacgagatc tccaagctgg ccagcggcgt gcccggcagg 180
tttagcggca gcggcagcgg caccgactac accctgacca tcagcagcct cgagcccagag 240
gacttcgccg tgtattactg ccaggagtgg aactaccctt acaccttcgg cggcggcacc 300
aaggtggaga tcaag 315
```

```
<210> 112
<211> 315
<212> DNA
<213> Secuencia Artificial
```

```
<220>
<223> Una secuencia de ácido nucleico que codifica 1A11.L8
```

```
<400> 112
gaaatcgtgc tgacccagag ccccgcaacc ctgagcctga gcccgggaga gagggccact 60
ctgagctgca gcgccagcag cagcgtgacc tacatgcact ggtaccagca gaagcccggc 120
caggccccca agccctggat ctacgagatt agcaagctgg cctccggcgt ccctgccagg 180
ttcagcggct caggcagcgg cacctcctat accctcacca tcagcagcct ggagcccagag 240
gacttcgccg tctactactg ccaggagtgg aactaccctt acaccttcgg cggcggcacc 300
aaggtggaga tcaag 315
```

```
<210> 113
<211> 315
<212> DNA
<213> Secuencia Artificial
```

```
<220>
<223> Una secuencia de ácido nucleico que codifica 1A11.L9
```

```
<400> 113
gagatcgtgc tgacccagtc acccgcaaca ctgagcctga gcccaggaga gagggccacc 60
ctgagctgca gcgcctctag ctccgtgacc tacatgcact ggtaccagca gaagcccggc 120
caggccccca agccctggat ctacgagatc agcaagctcg ccagcggcgt ccccgctcagg 180
ttcagcggaa gcggcagcgg gaccagctac accctgacca tcagcagcct ggaacccgag 240
gacttcgccg tgtattactg ccaggagtgg aactaccctt acaccttcgg cggcggcacc 300
aaggtggaga tcaag 315
```

```
<210> 114
<211> 449
```

<212> PRT

<213> Secuencia Artificial

<220>

<223> 1A11.H3FL (Full length)

<400> 114

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

435 440 445
Lys

<210> 115
<211> 212
<212> PRT
<213> Secuencia Artificial

<220>
<223> 1A11.L4FL (Full length)

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

<210> 116
<211> 117
<212> PRT
<213> Homo Sapiens

<220>
<223> secuencia de gen V (líder más región V) de cadena pesada
de inmunoglobulina humana IGHV1-2.

<400> 116
Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
1 5 10 15
Ala His 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 Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu

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50 55 60
 Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala
 65 70 75 80
 Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser
 85 90 95
 Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Arg
 115

<210> 117
 <211> 113
 <212> PRT
 <213> Homo Sapiens

<220>
 <223> Secuencia de gen V (líder más región V) de cadena ligera
 kappa de inmunoglobulina humana IGKV3-11

<400> 117
 Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
 1 5 10 15
 Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser
 20 25 30
 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
 35 40 45
 Val Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
 50 55 60
 Arg Leu Leu Ile Tyr Asp Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe
 65 70 75 80
 Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 85 90 95
 Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp
 100 105 110
 Pro

<210> 118
 <211> 449
 <212> PRT
 <213> secuencia artificial

<220>
 <223> 1A11_H3-Fc (FULL LENGTH)

<400> 118
 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 Gly Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
 50 55 60
 Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Asp Gly Asn Tyr Trp Tyr Phe Asp Val Trp Gly Gln Gly

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

<210> 119

<211> 1407

<212> DNA

<213> secuencia artificial

<220>

<223> 1A11_VH3-Fc ADN (Completa, con señal de secuencia)

<400> 119

atgggctggt	cctgcatcat	cctgtttctg	gtggccaccg	ccaccggtgt	gcacagccag	60
gtgcagctgg	tgcagagcgg	agccgaggtg	aagaaacccg	gagccagcgt	gaagggtgagc	120
tgcaaggcca	gcggttacac	cttcaccggc	tacaccatga	actgggtgag	gcaggccccc	180
ggccagggac	tcgagtggat	gggcctgata	aacccttaca	acggcgtgac	cagctacaac	240
cagaagtcca	agggcagggt	gaccctgacc	agggatacca	gcatcagcac	cgcttacatg	300

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gaactgagca ggctgaggtc cgacgacacc gccgtgtatt actgcgccag gggcgacggc 360
aactactggt acttcgatgt gtggggccag ggcaccaccg tcacagttag cagcgccagc 420
accaagggcc ccagcgtggt ccccttgccg ccagcagca agagcaccag cggcggcaca 480
gccgccctgg gctgcctggt gaaggactac ttccccgagc cagtgaccgt gtcctggaac 540
agcggagccc tgaccagcgg cgtgcacacc ttcccagctg tcctgcagag cagcggcctg 600
tacagcctga gcagcgtggt gaccgtgccc agcagcagcc tgggcaccca gacctacatc 660
tgtaacgtga accacaagcc cagcaacacc aaggtggaca agaaggtgga gcccgaagagc 720
tgtgacaaga cccacacctg cccccctgc cctgcccccg agctggccgg agccccagc 780
gtgttcctgt tccccccaa gcctaaggac accctgatga tcagcagaac ccccgagggtg 840
acctgtgtgg ttggtggatgt gagccacgag gaccctgagg tgaagttcaa ctggtacgtg 900
gacggcgtgg aggtgcacaa tgccaagacc aagcccaggg aggagcagta caacagcacc 960
taccgggtgg tgtccgtgct gaccgtgctg caccaggatt ggctgaacgg caaggagtac 1020
aagtgtgaagg tgtccaacaa ggccctgcct gcccttatcg agaaaacat cagcaaggcc 1080
aagggccagc ccagagagcc ccaggtgtac accctgcccc ctagcagaga tgagctgacc 1140
aagaaccagg tgtccctgac ctgcctgggtg aagggcttct accccagcga catcgccgtg 1200
gagtgggaga gcaacggcca gcccgagaac aactacaaga ccaccccccc tgtgctggac 1260
agcgatggca gcttcttctt gtacagcaag ctgaccgtgg acaagagcag atggcagcag 1320
ggcaacgtgt tcagctgctc cgtgatgcac gagggccctgc acaatcacta caccagaag 1380
agcctgagcc tgtcccctgg caagtga 1407

```

<210> 120
 <211> 357
 <212> DNA
 <213> secuencia artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11 VH3 N98D

```

<400> 120
caggtgcagc ttggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaagggtg 60
agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
cccggccagg gactcgagtg gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
aaccagaagt tcaagggcag ggtgaccctg accagggata ccagcatcag caccgcttac 240
atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggagcag 300
ggcgactact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

```

<210> 121
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 1A11 VH3 N98D

```

<400> 121
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 Gly Tyr
20     25     30
Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35     40     45
Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
50     55     60
Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65     70     75     80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85     90     95
Ala Arg Gly Asp Gly Asp Tyr Trp Tyr Phe Asp Val Trp Gly Gln Gly
100    105    110
Thr Thr Val Thr Val Ser Ser
115

```

<210> 122
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11 VH3 N98E

<400> 122
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaaggtg 60
 agctgcaagg ccagcggcta caccttcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagtg gatgggcctg atcaacccct acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcag ggtgaccctg accaggggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcgagtact ggtacttcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 123
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 1A11 VH3 N98E

<400> 123
 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 Gly Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
 50 55 60
 Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Asp Gly Glu Tyr Trp Tyr Phe Asp Val Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 124
 <211> 357
 <212> DNA
 <213> secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica 1A11 VH3 F100bE

<400> 124
 caggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaaggtg 60
 agctgcaagg ccagcggcta caccttcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagtg gatgggcctg atcaacccct acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcag ggtgaccctg accaggggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtacgagga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 125
 <211> 119
 <212> PRT
 <213> Secuencia Artificial

<220>
 <223> 1A11 VH3 F100bE

<400> 125
 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 Gly Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
 50 55 60
 Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Asp Gly Asn Tyr Trp Tyr Glu Asp Val Trp Gly Gln Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 126
 <211> 357
 <212> DNA
 <213> Secuencia Artificial

<220>
 <223> Una secuencia de ácido nucleico que codifica

<400> 126
 cagggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaagggtg 60
 agctgcaagg ccagcggcta caccttcacc ggctacacca tgaactgggt gaggcaggcc 120
 cccggccagg gactcgagt gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
 aaccagaagt tcaagggcag ggtgaccctg accaggggata ccagcatcag caccgcttac 240
 atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
 ggcaactact ggtaccacga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 127
 <211> 119
 <212> PRT
 <213> secuencia Artificial

<220>
 <223> 1A11 VH3 F100bH

<400> 127
 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 Gly Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
 50 55 60

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

<210> 128
<211> 357
<212> DNA
<213> secuencia Artificial

<220>
<223> Una secuencia de ácido nucleico que codifica VH3 F100bI

<400> 128
cagggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaagggtg 60
agctgcaagg ccagcggcta caccttcacc ggctacacca tgaactgggt gaggcaggcc 120
cccggccagg gactcgagt gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
aaccagaagt tcaagggcag ggtgaccctg accagggata ccagcatcag caccgcttac 240
atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcgc caggggcgac 300
ggcaactact ggtacatcga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357

<210> 129
<211> 119
<212> PRT
<213> Secuencia Artificial

<220>
<223> VH3 F100bI

<400> 129
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 Gly Tyr
20 25 30
Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45
Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
50 55 60
Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Gly Asp Gly Asn Tyr Trp Tyr Ile Asp Val Trp Gly Gln Gly
100 105 110
Thr Thr Val Thr Val Ser Ser
115

<210> 130
<211> 357
<212> DNA
<213> Secuencia Artificial

<220>
<223> Una secuencia de ácido nucleico que codifica VH3 F100bv

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```
<400> 130
cagggtgcagc tgggtgcagag cggagccgag gtgaagaaac ccggagccag cgtgaagggtg 60
agctgcaagg ccagcggcta caccctcacc ggctacacca tgaactgggt gaggcaggcc 120
cccggccagg gactcgagt gatgggcctg atcaaccctt acaacggcgt gaccagctac 180
aaccagaagt tcaagggcag ggtgaccctg accagggata ccagcatcag caccgcttac 240
atggaactga gcaggctgag gtccgacgac accgccgtgt attactgcg caggggcgac 300
ggcaactact ggtacgtgga tgtgtggggc cagggcacca ccgtcacagt gagcagc 357
```

```
<210> 131
<211> 119
<212> PRT
<213> Secuencia Artificial
```

```
<220>
<223> VH3 F100bv
```

```
<400> 131
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 Gly Tyr
20          25          30
Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35          40          45
Gly Leu Ile Asn Pro Tyr Asn Gly Val Thr Ser Tyr Asn Gln Lys Phe
50          55          60
Lys Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65          70          75          80
Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85          90          95
Ala Arg Gly Asp Gly Asn Tyr Trp Tyr Val Asp Val Trp Gly Gln Gly
100         105         110
Thr Thr Val Thr Val Ser Ser
115
```

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<211> 10
<212> PRT
<213> Secuencia Artificial
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```
<400> 132
Gly Asp Gly Asp Tyr Trp Tyr Phe Asp Val
1          5          10
```

```
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Gly Asp Gly Glu Tyr Trp Tyr Phe Asp Val
1          5          10
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 1 5 10

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 Gly Asp Gly Asn Tyr Trp Tyr His Asp Val
 1 5 10

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 <211> 10
 <212> PRT
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 Gly Asp Gly Asn Tyr Trp Tyr Ile Asp Val
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<400> 137
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 1 5 10

<210> 138
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 <212> PRT
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<220>

<223> 6A3.L27 vk

<400> 138

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