

SEQUENCE LISTING

<110> ELECTRA THERAPEUTICS, INC.

<120> SIRP ALPHA, SIRP BETA 1, AND SIRP GAMMA ANTIBODIES AND USES
THEREOF

<130> ELTH-001/01WO 336159-2004

<140> PCT/US2021/031605

<141> 2021-05-10

<150> US 63/022,309

<151> 2020-05-08

<160> 175

<170> PatentIn version 3.5

<210> 1

<211> 504

<212> PRT

<213> Homo sapiens

<400> 1

Met Glu Pro Ala Gly Pro Ala Pro Gly Arg Leu Gly Pro Leu Leu Cys
1 5 10 15

Leu Leu Leu Ala Ala Ser Cys Ala Trp Ser Gly Val Ala Gly Glu Glu
20 25 30

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

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

Pro Ile Gln Trp Phe Arg Gly Ala Gly Pro Gly Arg Glu Leu Ile Tyr
65 70 75 80

Asn Gln Lys Glu Gly His Phe Pro Arg Val Thr Thr Val Ser Asp Leu
85 90 95

Thr Lys Arg Asn Asn Met Asp Phe Ser Ile Arg Ile Gly Asn Ile Thr
100 105 110

Pro Ala Asp Ala Gly Thr Tyr Tyr Cys Val Lys Phe Arg Lys Gly Ser
115 120 125

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

Arg	Ala	Lys	Pro	Ser	Ala	Pro	Val	Val	Ser	Gly	Pro	Ala	Ala	Arg	Ala
145					150					155					160

Thr	Pro	Gln	His	Thr	Val	Ser	Phe	Thr	Cys	Glu	Ser	His	Gly	Phe	Ser
				165					170					175	

Pro	Arg	Asp	Ile	Thr	Leu	Lys	Trp	Phe	Lys	Asn	Gly	Asn	Glu	Leu	Ser
			180					185					190		

Asp	Phe	Gln	Thr	Asn	Val	Asp	Pro	Val	Gly	Glu	Ser	Val	Ser	Tyr	Ser
		195					200					205			

Ile	His	Ser	Thr	Ala	Lys	Val	Val	Leu	Thr	Arg	Glu	Asp	Val	His	Ser
	210					215					220				

Gln	Val	Ile	Cys	Glu	Val	Ala	His	Val	Thr	Leu	Gln	Gly	Asp	Pro	Leu
225					230					235					240

Arg	Gly	Thr	Ala	Asn	Leu	Ser	Glu	Thr	Ile	Arg	Val	Pro	Pro	Thr	Leu
				245					250					255	

Glu	Val	Thr	Gln	Gln	Pro	Val	Arg	Ala	Glu	Asn	Gln	Val	Asn	Val	Thr
			260					265					270		

Cys	Gln	Val	Arg	Lys	Phe	Tyr	Pro	Gln	Arg	Leu	Gln	Leu	Thr	Trp	Leu
		275					280					285			

Glu	Asn	Gly	Asn	Val	Ser	Arg	Thr	Glu	Thr	Ala	Ser	Thr	Val	Thr	Glu
	290					295					300				

Asn	Lys	Asp	Gly	Thr	Tyr	Asn	Trp	Met	Ser	Trp	Leu	Leu	Val	Asn	Val
305						310				315					320

Ser	Ala	His	Arg	Asp	Asp	Val	Lys	Leu	Thr	Cys	Gln	Val	Glu	His	Asp
				325					330					335	

Gly	Gln	Pro	Ala	Val	Ser	Lys	Ser	His	Asp	Leu	Lys	Val	Ser	Ala	His
			340					345					350		

Pro	Lys	Glu	Gln	Gly	Ser	Asn	Thr	Ala	Ala	Glu	Asn	Thr	Gly	Ser	Asn
		355					360					365			

Glu	Arg	Asn	Ile	Tyr	Ile	Val	Val	Gly	Val	Val	Cys	Thr	Leu	Leu	Val
370			375			380									

Ala	Leu	Leu	Met	Ala	Ala	Leu	Tyr	Leu	Val	Arg	Ile	Arg	Gln	Lys	Lys
385			390			395			400						

Ala	Gln	Gly	Ser	Thr	Ser	Ser	Thr	Arg	Leu	His	Glu	Pro	Glu	Lys	Asn
			405			410			415						

Ala	Arg	Glu	Ile	Thr	Gln	Asp	Thr	Asn	Asp	Ile	Thr	Tyr	Ala	Asp	Leu
			420			425			430						

Asn	Leu	Pro	Lys	Gly	Lys	Lys	Pro	Ala	Pro	Gln	Ala	Ala	Glu	Pro	Asn
435			440			445									

Asn	His	Thr	Glu	Tyr	Ala	Ser	Ile	Gln	Thr	Ser	Pro	Gln	Pro	Ala	Ser
450			455			460									

Glu	Asp	Thr	Leu	Thr	Tyr	Ala	Asp	Leu	Asp	Met	Val	His	Leu	Asn	Arg
465			470			475			480						

Thr	Pro	Lys	Gln	Pro	Ala	Pro	Lys	Pro	Glu	Pro	Ser	Phe	Ser	Glu	Tyr
			485			490			495						

Ala	Ser	Val	Gln	Val	Pro	Arg	Lys
500							

<210> 2
 <211> 507
 <212> PRT
 <213> Homo sapiens

<400> 2

Met	Glu	Pro	Ala	Gly	Pro	Ala	Pro	Gly	Arg	Leu	Gly	Pro	Leu	Leu	Cys
1	5			10			15								

Leu	Leu	Leu	Ala	Ala	Ser	Cys	Ala	Trp	Ser	Gly	Val	Ala	Gly	Glu	Glu
20			25			30									

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

Glu	Ser	Ala	Ile	Leu	His	Cys	Thr	Val	Thr	Ser	Leu	Ile	Pro	Val	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50	55	60
Pro Ile Gln Trp Phe Arg Gly Ala Gly Pro Ala Arg Glu Leu Ile Tyr		
65	70	75 80
Asn Gln Lys Glu Gly His Phe Pro Arg Val Thr Thr Val Ser Glu Ser		
	85	90 95
Thr Lys Arg Glu Asn Met Asp Phe Ser Ile Ser Ile Ser Asn Ile Thr		
	100	105 110
Pro Ala Asp Ala Gly Thr Tyr Tyr Cys Val Lys Phe Arg Lys Gly Ser		
	115	120 125
Pro Asp Thr Glu Phe Lys Ser Gly Ala Gly Thr Glu Leu Ser Val Arg		
	130	135 140
Ala Lys Pro Ser Ala Pro Val Val Ser Gly Pro Ala Ala Arg Ala Thr		
145	150	155 160
Pro Gln His Thr Val Ser Phe Thr Cys Glu Ser His Gly Phe Ser Pro		
	165	170 175
Arg Asp Ile Thr Leu Lys Trp Phe Lys Asn Gly Asn Glu Leu Ser Asp		
	180	185 190
Phe Gln Thr Asn Val Asp Pro Val Gly Glu Ser Val Ser Tyr Ser Ile		
	195	200 205
His Ser Thr Ala Lys Val Val Leu Thr Arg Glu Asp Val His Ser Gln		
	210	215 220
Val Ile Cys Glu Val Ala His Val Thr Leu Gln Gly Asp Pro Leu Arg		
225	230	235 240
Gly Thr Ala Asn Leu Ser Glu Thr Ile Arg Val Pro Pro Thr Leu Glu		
	245	250 255
Val Thr Gln Gln Pro Val Arg Ala Glu Asn Gln Val Asn Val Thr Cys		
	260	265 270
Gln Val Arg Lys Phe Tyr Pro Gln Arg Leu Gln Leu Thr Trp Leu Glu		
	275	280 285

Asn	Gly	Asn	Val	Ser	Arg	Thr	Glu	Thr	Ala	Ser	Thr	Val	Thr	Glu	Asn
290						295					300				

Lys	Asp	Gly	Thr	Tyr	Asn	Trp	Met	Ser	Trp	Leu	Leu	Val	Asn	Val	Ser
305					310					315					320

Ala	His	Arg	Asp	Asp	Val	Lys	Leu	Thr	Cys	Gln	Val	Glu	His	Asp	Gly
			325						330					335	

Gln	Pro	Ala	Val	Ser	Lys	Ser	His	Asp	Leu	Lys	Val	Ser	Ala	His	Pro
		340						345					350		

Lys	Glu	Gln	Gly	Ser	Asn	Thr	Ala	Ala	Glu	Asn	Thr	Gly	Ser	Asn	Glu
	355						360					365			

Arg	Asn	Ile	Tyr	Ile	Val	Val	Gly	Val	Val	Cys	Thr	Leu	Leu	Val	Ala
370						375					380				

Leu	Leu	Met	Ala	Ala	Leu	Tyr	Leu	Val	Arg	Ile	Arg	Gln	Lys	Lys	Ala
385					390					395					400

Gln	Gly	Ser	Thr	Ser	Ser	Thr	Arg	Leu	His	Glu	Pro	Glu	Lys	Asn	Ala
			405						410					415	

Arg	Glu	Ile	Thr	Gln	Val	Gln	Ser	Leu	Asp	Thr	Asn	Asp	Ile	Thr	Tyr
		420						425					430		

Ala	Asp	Leu	Asn	Leu	Pro	Lys	Gly	Lys	Lys	Pro	Ala	Pro	Gln	Ala	Ala
	435						440					445			

Glu	Pro	Asn	Asn	His	Thr	Glu	Tyr	Ala	Ser	Ile	Gln	Thr	Ser	Pro	Gln
450						455					460				

Pro	Ala	Ser	Glu	Asp	Thr	Leu	Thr	Tyr	Ala	Asp	Leu	Asp	Met	Val	His
465				470						475					480

Leu	Asn	Arg	Thr	Pro	Lys	Gln	Pro	Ala	Pro	Lys	Pro	Glu	Pro	Ser	Phe
			485						490					495	

Ser	Glu	Tyr	Ala	Ser	Val	Gln	Val	Pro	Arg	Lys
	500							505		

<210> 3

<211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Fc domain

<400> 3

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

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

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

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190

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

195	200	205
Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly		
210	215	220
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu		
225	230	235 240
Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr		
	245	250 255
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn		
	260	265 270
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe		
	275	280 285
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn		
	290	295 300
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr		
305	310	315 320
Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys		
	325	330
<210> 4		
<211> 330		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Fc domain		
<400> 4		
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys		
1	5	10 15
Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr		
	20	25 30
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser		
	35	40 45
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser		

50					55					60					
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65					70					75					80
Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
				85					90					95	
Lys	Ala	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
			100					105					110		
Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro
		115					120					125			
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys
	130					135					140				
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150					155					160
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
				165					170					175	
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180					185					190		
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn
		195					200					205			
Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
	210					215					220				
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225					230					235					240
Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr
				245					250					255	
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn
		260						265					270		
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe
	275						280					285			

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

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

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

<210> 5
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> CDR-L1

<400> 5

Gln	Ser	Leu	Leu	His	Gly	Asn	Gly	Phe	Asn	Tyr
1			5						10	

<210> 6
 <211> 508
 <212> PRT
 <213> Homo sapiens

<400> 6

Met	Glu	Pro	Ala	Gly	Pro	Ala	Pro	Gly	Arg	Leu	Gly	Pro	Leu	Leu	Cys
1				5					10					15	

Leu	Leu	Leu	Ala	Ala	Ser	Cys	Ala	Trp	Ser	Gly	Val	Ala	Gly	Glu	Glu
			20					25					30		

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

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

Pro	Ile	Gln	Trp	Phe	Arg	Gly	Ala	Gly	Pro	Gly	Arg	Glu	Leu	Ile	Tyr
65					70					75					80

Asn	Gln	Lys	Glu	Gly	His	Phe	Pro	Arg	Val	Thr	Thr	Val	Ser	Asp	Leu
			85					90						95	

Thr	Lys	Arg	Asn	Asn	Met	Asp	Phe	Ser	Ile	Arg	Ile	Gly	Asn	Ile	Thr
100					105					110					

Pro	Ala	Asp	Ala	Gly	Thr	Tyr	Tyr	Cys	Val	Lys	Phe	Arg	Lys	Gly	Ser
115					120					125					

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

Arg	Ala	Lys	Pro	Ser	Ala	Pro	Val	Val	Ser	Gly	Pro	Ala	Ala	Arg	Ala
145					150					155					160

Thr	Pro	Gln	His	Thr	Val	Ser	Phe	Thr	Cys	Glu	Ser	His	Gly	Phe	Ser
165					170					175					

Pro	Arg	Asp	Ile	Thr	Leu	Lys	Trp	Phe	Lys	Asn	Gly	Asn	Glu	Leu	Ser
180					185					190					

Asp	Phe	Gln	Thr	Asn	Val	Asp	Pro	Val	Gly	Glu	Ser	Val	Ser	Tyr	Ser
195					200					205					

Ile	His	Ser	Thr	Ala	Lys	Val	Val	Leu	Thr	Arg	Glu	Asp	Val	His	Ser
210					215					220					

Gln	Val	Ile	Cys	Glu	Val	Ala	His	Val	Thr	Leu	Gln	Gly	Asp	Pro	Leu
225					230					235					240

Arg	Gly	Thr	Ala	Asn	Leu	Ser	Glu	Thr	Ile	Arg	Val	Pro	Pro	Thr	Leu
245					250					255					

Glu	Val	Thr	Gln	Gln	Pro	Val	Arg	Ala	Glu	Asn	Gln	Val	Asn	Val	Thr
260					265					270					

Cys	Gln	Val	Arg	Lys	Phe	Tyr	Pro	Gln	Arg	Leu	Gln	Leu	Thr	Trp	Leu
275					280					285					

Glu	Asn	Gly	Asn	Val	Ser	Arg	Thr	Glu	Thr	Ala	Ser	Thr	Val	Thr	Glu
290					295					300					

Asn	Lys	Asp	Gly	Thr	Tyr	Asn	Trp	Met	Ser	Trp	Leu	Leu	Val	Asn	Val
305					310					315					320

Ser	Ala	His	Arg	Asp	Asp	Val	Lys	Leu	Thr	Cys	Gln	Val	Glu	His	Asp
325					330					335					

Gly	Gln	Pro	Ala	Val	Ser	Lys	Ser	His	Asp	Leu	Lys	Val	Ser	Ala	His
340					345					350					

Pro	Lys	Glu	Gln	Gly	Ser	Asn	Thr	Ala	Ala	Glu	Asn	Thr	Gly	Ser	Asn
355					360					365					

Glu	Arg	Asn	Ile	Tyr	Ile	Val	Val	Gly	Val	Val	Cys	Thr	Leu	Leu	Val
370					375					380					

Ala	Leu	Leu	Met	Ala	Ala	Leu	Tyr	Leu	Val	Arg	Ile	Arg	Gln	Lys	Lys	
385					390					395					400	

Ala	Gln	Gly	Ser	Thr	Ser	Ser	Thr	Arg	Leu	His	Glu	Pro	Glu	Lys	Asn
405					410					415					

Ala	Arg	Glu	Ile	Thr	Gln	Val	Gln	Ser	Leu	Asp	Thr	Asn	Asp	Ile	Thr
420					425					430					

Tyr	Ala	Asp	Leu	Asn	Leu	Pro	Lys	Gly	Lys	Lys	Pro	Ala	Pro	Gln	Ala
435					440					445					

Ala	Glu	Pro	Asn	Asn	His	Thr	Glu	Tyr	Ala	Ser	Ile	Gln	Thr	Ser	Pro
450					455					460					

Gln	Pro	Ala	Ser	Glu	Asp	Thr	Leu	Thr	Tyr	Ala	Asp	Leu	Asp	Met	Val	
465					470					475					480	

His	Leu	Asn	Arg	Thr	Pro	Lys	Gln	Pro	Ala	Pro	Lys	Pro	Glu	Pro	Ser
485					490					495					

Phe	Ser	Glu	Tyr	Ala	Ser	Val	Gln	Val	Pro	Arg	Lys
500					505						

<210> 7
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 7

Gln	Gly	Ile	Ser	Gly	Tyr
1		5			

<210> 8
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 8

Gln Asp Phe Ser Asn Tyr
1 5

<210> 9
<211> 398
<212> PRT
<213> Homo sapiens

<400> 9

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

Met Thr Leu Leu Leu Gly Arg Leu Thr Gly Val Ala Gly Glu Asp Glu
20 25 30

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

Ser Ala Thr Leu Arg Cys Ala Met Thr Ser Leu Ile Pro Val Gly Pro
50 55 60

Ile Met Trp Phe Arg Gly Ala Gly Ala Gly Arg Glu Leu Ile Tyr Asn
65 70 75 80

Gln Lys Glu Gly His Phe Pro Arg Val Thr Thr Val Ser Glu Leu Thr
85 90 95

Lys Arg Asn Asn Leu Asp Phe Ser Ile Ser Ile Ser Asn Ile Thr Pro
100 105 110

Ala Asp Ala Gly Thr Tyr Tyr Cys Val Lys Phe Arg Lys Gly Ser Pro
115 120 125

Asp Asp Val Glu Phe Lys Ser Gly Ala Gly Thr Glu Leu Ser Val Arg
130 135 140

Ala	Lys	Pro	Ser	Ala	Pro	Val	Val	Ser	Gly	Pro	Ala	Val	Arg	Ala	Thr
145					150					155					160

Pro	Glu	His	Thr	Val	Ser	Phe	Thr	Cys	Glu	Ser	His	Gly	Phe	Ser	Pro
				165					170					175	

Arg	Asp	Ile	Thr	Leu	Lys	Trp	Phe	Lys	Asn	Gly	Asn	Glu	Leu	Ser	Asp
			180					185						190	

Phe	Gln	Thr	Asn	Val	Asp	Pro	Ala	Gly	Asp	Ser	Val	Ser	Tyr	Ser	Ile
		195					200					205			

His	Ser	Thr	Ala	Arg	Val	Val	Leu	Thr	Arg	Gly	Asp	Val	His	Ser	Gln
	210						215				220				

Val	Ile	Cys	Glu	Ile	Ala	His	Ile	Thr	Leu	Gln	Gly	Asp	Pro	Leu	Arg
225					230						235				240

Gly	Thr	Ala	Asn	Leu	Ser	Glu	Ala	Ile	Arg	Val	Pro	Pro	Thr	Leu	Glu
				245					250						255

Val	Thr	Gln	Gln	Pro	Met	Arg	Ala	Glu	Asn	Gln	Ala	Asn	Val	Thr	Cys
				260					265					270	

Gln	Val	Ser	Asn	Phe	Tyr	Pro	Arg	Gly	Leu	Gln	Leu	Thr	Trp	Leu	Glu
				275				280						285	

Asn	Gly	Asn	Val	Ser	Arg	Thr	Glu	Thr	Ala	Ser	Thr	Leu	Ile	Glu	Asn
	290						295					300			

Lys	Asp	Gly	Thr	Tyr	Asn	Trp	Met	Ser	Trp	Leu	Leu	Val	Asn	Thr	Cys
305					310					315					320

Ala	His	Arg	Asp	Asp	Val	Val	Leu	Thr	Cys	Gln	Val	Glu	His	Asp	Gly
					325				330					335	

Gln	Gln	Ala	Val	Ser	Lys	Ser	Tyr	Ala	Leu	Glu	Ile	Ser	Ala	His	Gln
			340					345					350		

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

Ala	Pro	Leu	Leu	Val	Ala	Leu	Leu	Leu	Gly	Pro	Lys	Leu	Leu	Leu	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

370	375	380
Val Gly Val Ser Ala Ile Tyr Ile Cys Trp Lys Gln Lys Ala		
385	390	395
<210> 10		
<211> 387		
<212> PRT		
<213> Homo sapiens		
<400> 10		
Met Pro Val Pro Ala Ser Trp Pro His Pro Pro Gly Pro Phe Leu Leu		
1	5	10 15
Leu Thr Leu Leu Leu Gly Leu Thr Glu Val Ala Gly Glu Glu Glu Leu		
	20	25 30
Gln Met Ile Gln Pro Glu Lys Leu Leu Leu Val Thr Val Gly Lys Thr		
	35	40 45
Ala Thr Leu His Cys Thr Val Thr Ser Leu Leu Pro Val Gly Pro Val		
	50	55 60
Leu Trp Phe Arg Gly Val Gly Pro Gly Arg Glu Leu Ile Tyr Asn Gln		
65	70	75 80
Lys Glu Gly His Phe Pro Arg Val Thr Thr Val Ser Asp Leu Thr Lys		
	85	90 95
Arg Asn Asn Met Asp Phe Ser Ile Arg Ile Ser Ser Ile Thr Pro Ala		
	100	105 110
Asp Val Gly Thr Tyr Tyr Cys Val Lys Phe Arg Lys Gly Ser Pro Glu		
	115	120 125
Asn Val Glu Phe Lys Ser Gly Pro Gly Thr Glu Met Ala Leu Gly Ala		
	130	135 140
Lys Pro Ser Ala Pro Val Val Leu Gly Pro Ala Ala Arg Thr Thr Pro		
145	150	155 160
Glu His Thr Val Ser Phe Thr Cys Glu Ser His Gly Phe Ser Pro Arg		
	165	170 175

Asp	Ile	Thr	Leu	Lys	Trp	Phe	Lys	Asn	Gly	Asn	Glu	Leu	Ser	Asp	Phe
180				185				190							

Gln	Thr	Asn	Val	Asp	Pro	Thr	Gly	Gln	Ser	Val	Ala	Tyr	Ser	Ile	Arg
195				200				205							

Ser	Thr	Ala	Arg	Val	Val	Leu	Asp	Pro	Trp	Asp	Val	Arg	Ser	Gln	Val
210				215				220							

Ile	Cys	Glu	Val	Ala	His	Val	Thr	Leu	Gln	Gly	Asp	Pro	Leu	Arg	Gly
225				230				235				240			

Thr	Ala	Asn	Leu	Ser	Glu	Ala	Ile	Arg	Val	Pro	Pro	Thr	Leu	Glu	Val
245				250				255							

Thr	Gln	Gln	Pro	Met	Arg	Val	Gly	Asn	Gln	Val	Asn	Val	Thr	Cys	Gln
260				265				270							

Val	Arg	Lys	Phe	Tyr	Pro	Gln	Ser	Leu	Gln	Leu	Thr	Trp	Ser	Glu	Asn
275				280				285							

Gly	Asn	Val	Cys	Gln	Arg	Glu	Thr	Ala	Ser	Thr	Leu	Thr	Glu	Asn	Lys
290				295				300							

Asp	Gly	Thr	Tyr	Asn	Trp	Thr	Ser	Trp	Phe	Leu	Val	Asn	Ile	Ser	Asp
305				310				315				320			

Gln	Arg	Asp	Asp	Val	Val	Leu	Thr	Cys	Gln	Val	Lys	His	Asp	Gly	Gln
325				330				335							

Leu	Ala	Val	Ser	Lys	Arg	Leu	Ala	Leu	Glu	Val	Thr	Val	His	Gln	Lys
340				345				350							

Asp	Gln	Ser	Ser	Asp	Ala	Thr	Pro	Gly	Pro	Ala	Ser	Ser	Leu	Thr	Ala
355				360				365							

Leu	Leu	Leu	Ile	Ala	Val	Leu	Leu	Gly	Pro	Ile	Tyr	Val	Pro	Trp	Lys
370				375				380							

Gln	Lys	Thr
385		

<210>	11
<211>	6

<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 11

Asn Ile Gly Ser Lys Ser
1 5

<210> 12
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 12

Lys Leu Gly Asp Lys Tyr
1 5

<210> 13
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 13

Lys Leu Gly Asp Arg Tyr
1 5

<210> 14
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 14

Gln Asp Ile Ser Ser Trp
1 5

<210> 15
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 15

Gln Ser Val Ser Ser Asn
1 5

<210> 16
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 16

Gln Ser Val Ser Arg Asn
1 5

<210> 17
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 17

Gln Thr Val Leu Asn Ser Ser Asn Asn Lys Asn Tyr
1 5 10

<210> 18
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L1

<400> 18

Gln Asp Ile Asn Arg Tyr
1 5

<210> 19
<211> 330
<212> PRT
<213> Artificial Sequence

<220>

<223> IgG1 Fc domain

<400> 19

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

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

Lys Ala Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Ala Gly Pro Asp Val Phe Leu Phe Pro Pro
115 120 125

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

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
180 185 190

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

Lys Ala Leu Pro Ala Pro Glu Glu Lys Thr Ile Ser Lys Ala Lys Gly
210 215 220

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225					230					235					240

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

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

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

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

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

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

<210> 20
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG1 Fc domain

<220>
 <221> SITE
 <222> (98)..(98)
 <223> Xaa is Val or Ala

<400> 20

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65					70					75					80

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

Lys	Xaa	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
			100						105					110	

Pro	Ala	Pro	Glu	Leu	Leu	Ala	Gly	Pro	Asp	Val	Phe	Leu	Phe	Pro	Pro
			115						120				125		

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145						150					155				160

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
				165						170					175

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180						185					190	

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

Lys	Ala	Leu	Pro	Ala	Pro	Glu	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
		210					215					220			

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225						230					235				240

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

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

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

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

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

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

<210> 21
<211> 330
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG1 Fc domain

<220>
<221> SITE
<222> (98)..(98)
<223> Xaa is Val or Ala

<220>
<221> SITE
<222> (119)..(119)
<223> Xaa is Gly or Ala

<220>
<221> SITE
<222> (122)..(122)
<223> Xaa is Ser or Asp

<220>
<221> SITE
<222> (215)..(215)
<223> Xaa is Ile or Glu

<400> 21

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

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

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

Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50					55					60					
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65					70					75					80
Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
				85					90					95	
Lys	Xaa	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
			100					105					110		
Pro	Ala	Pro	Glu	Leu	Leu	Xaa	Gly	Pro	Xaa	Val	Phe	Leu	Phe	Pro	Pro
		115					120					125			
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys
	130					135					140				
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150					155					160
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
				165					170					175	
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180					185					190		
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn
		195					200					205			
Lys	Ala	Leu	Pro	Ala	Pro	Xaa	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
	210					215					220				
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225					230					235					240
Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr
				245					250					255	
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn
		260						265					270		
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe
	275						280					285			

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

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

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

<210> 22
<211> 330
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG1 Fc domain

<220>
<221> SITE
<222> (98)..(98)
<223> Xaa is Val or Ala

<400> 22

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65				70						75					80

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

Lys	Xaa	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
			100					105					110		

Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

115					120					125						
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	
130					135					140						
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	
145					150					155					160	
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	
165					170					175						
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	
180					185					190						
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	
195					200					205						
Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	
210					215					220						
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	
225					230					235					240	
Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	
245					250					255						
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	
260					265					270						
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	
275					280					285						
Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	
290					295					300						
Val	Phe	Ser	Cys	Ser	Val	Leu	His	Glu	Ala	Leu	His	Ser	His	Tyr	Thr	
305					310					315					320	
Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys							
325					330											

<213> Artificial Sequence

<220>

<223> CDR-L2

<400> 23

Leu Gly Ser

1

<210> 24

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L2

<400> 24

Ala Ala Ser

1

<210> 25

<211> 330

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG1 Fc domain

<220>

<221> SITE

<222> (98)..(98)

<223> Xaa is Val or Ala

<220>

<221> SITE

<222> (311)..(311)

<223> Xaa is Met or Leu

<220>

<221> SITE

<222> (317)..(317)

<223> Xaa is Asn or Ser

<400> 25

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys

1

5

10

15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr

20

25

30

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65				70				75				80			

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

Lys	Xaa	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
100				105				110							

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

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145				150				155				160			

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
165				170				175							

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
180				185				190							

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

Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
210				215				220							

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225				230				235				240			

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

Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	260	265	270												
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe
	275						280					285			
Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn
	290					295					300				
Val	Phe	Ser	Cys	Ser	Val	Xaa	His	Glu	Ala	Leu	His	Xaa	His	Tyr	Thr
305					310					315					320
Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys						
			325						330						

<210> 26
<211> 330
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG1 Fc domain

<220>
<221> SITE
<222> (97)..(97)
<223> Xaa is Lys or Arg

<220>
<221> SITE
<222> (239)..(239)
<223> Xaa is Asp or Glu

<220>
<221> SITE
<222> (241)..(241)
<223> Xaa is Leu or Met

<400> 26

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

50					55					60					
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65					70					75					80
Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
				85					90					95	
Xaa	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
			100					105					110		
Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro
	115					120						125			
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys
	130					135					140				
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150					155					160
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
				165					170					175	
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180					185					190		
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn
		195					200					205			
Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
	210					215					220				
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Xaa	Glu
225					230					235					240
Xaa	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr
				245					250					255	
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn
			260					265					270		
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe
	275						280					285			

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

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

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

<210> 27
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L2

<400> 27

Asp Asp Ser
1

<210> 28
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L2

<400> 28

His Asp Asp
1

<210> 29
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L2

<400> 29

Gln Asp Asp
1

<210> 30
<211> 3
<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L2

<400> 30

Gln Asp Thr

1

<210> 31

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L2

<400> 31

Gly Ala Ser

1

<210> 32

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L2

<400> 32

Trp Ala Ser

1

<210> 33

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L2

<400> 33

Arg Ala Asn

1

<210> 34

<211> 327

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG4 Fc domain

<400> 34

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr
65 70 75 80

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

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

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

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

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

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

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

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

Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg

210	215	220
Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys		
225	230	235 240
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp		
	245	250 255
Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys		
	260	265 270
Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser		
	275	280 285
Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser		
	290	295 300
Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser		
305	310	315 320
Leu Ser Leu Ser Leu Gly Lys		
	325	
<210> 35		
<211> 327		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> IgG4 Fc domain		
<400> 35		
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg		
1	5	10 15
Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr		
	20	25 30
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser		
	35	40 45
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser		
	50	55 60
Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr		

65		70		75		80
Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys						
	85		90		95	
Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro						
	100		105		110	
Glu Phe Glu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys						
	115		120		125	
Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val						
	130		135		140	
Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp						
145		150		155		160
Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe						
	165		170		175	
Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp						
	180		185		190	
Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu						
	195		200		205	
Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg						
	210		215		220	
Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys						
225		230		235		240
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp						
	245		250		255	
Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys						
	260		265		270	
Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser						
	275		280		285	
Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser						
	290		295		300	

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

Leu	Ser	Leu	Ser	Leu	Gly	Lys
					325	

<210> 36
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> CDR-L3

<400> 36

Met	Gln	Gly	Leu	Gln	Thr	Pro	Arg	Thr
1					5			

<210> 37
 <211> 327
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG4 Fc domain

<220>
 <221> SITE
 <222> (108)..(108)
 <223> Xaa is Ser or Pro

<220>
 <221> SITE
 <222> (115)..(115)
 <223> Xaa is Leu or Glu

<400> 37

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Lys	Thr
65					70					75					80

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Leu	Ser	Leu	Ser	Leu	Gly	Lys
325						

<210> 38
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L3

<400> 38

Gln	Gln	Phe	Thr	Ser	Asp	Leu	Ile	Thr
1		5						

<210> 39
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L3

<400> 39

Gln	Gln	Tyr	Asp	Asn	Leu	Pro	Tyr	Thr
1		5						

<210> 40
<211> 503
<212> PRT
<213> Homo sapiens

<400> 40

Met	Glu	Pro	Ala	Gly	Pro	Ala	Pro	Gly	Arg	Leu	Gly	Pro	Leu	Leu	Cys
1		5				10				15					

Leu	Leu	Leu	Ala	Ala	Ser	Cys	Ala	Trp	Ser	Gly	Val	Ala	Gly	Glu	Glu
20			25				30								

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

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

Pro	Ile	Gln	Trp	Phe	Arg	Gly	Ala	Gly	Pro	Gly	Arg	Glu	Leu	Ile	Tyr
65					70					75					80

Asn	Gln	Lys	Glu	Gly	His	Phe	Pro	Arg	Val	Thr	Thr	Val	Ser	Asp	Leu
			85						90					95	

Thr	Lys	Arg	Asn	Asn	Met	Asp	Phe	Ser	Ile	Arg	Ile	Gly	Asn	Ile	Thr
			100						105					110	

Pro	Ala	Asp	Ala	Gly	Thr	Tyr	Tyr	Cys	Val	Lys	Phe	Arg	Lys	Gly	Ser
		115						120				125			

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

Ala	Lys	Pro	Ser	Ala	Pro	Val	Val	Ser	Gly	Pro	Ala	Ala	Arg	Ala	Thr
145					150					155					160

Pro	Gln	His	Thr	Val	Ser	Phe	Thr	Cys	Glu	Ser	His	Gly	Phe	Ser	Pro
				165					170					175	

Arg	Asp	Ile	Thr	Leu	Lys	Trp	Phe	Lys	Asn	Gly	Asn	Glu	Leu	Ser	Asp
			180					185					190		

Phe	Gln	Thr	Asn	Val	Asp	Pro	Val	Gly	Glu	Ser	Val	Ser	Tyr	Ser	Ile
		195					200					205			

His	Ser	Thr	Ala	Lys	Val	Val	Leu	Thr	Arg	Glu	Asp	Val	His	Ser	Gln
	210					215					220				

Val	Ile	Cys	Glu	Val	Ala	His	Val	Thr	Leu	Gln	Gly	Asp	Pro	Leu	Arg
225					230					235					240

Gly	Thr	Ala	Asn	Leu	Ser	Glu	Thr	Ile	Arg	Val	Pro	Pro	Thr	Leu	Glu
			245						250					255	

Val	Thr	Gln	Gln	Pro	Val	Arg	Ala	Glu	Asn	Gln	Val	Asn	Val	Thr	Cys
			260					265					270		

Gln	Val	Arg	Lys	Phe	Tyr	Pro	Gln	Arg	Leu	Gln	Leu	Thr	Trp	Leu	Glu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

275	280	285
Asn Gly Asn Val Ser Arg Thr Glu Thr Ala Ser Thr Val Thr Glu Asn		
290	295	300
Lys Asp Gly Thr Tyr Asn Trp Met Ser Trp Leu Leu Val Asn Val Ser		
305	310	315
Ala His Arg Asp Asp Val Lys Leu Thr Cys Gln Val Glu His Asp Gly		
325	330	335
Gln Pro Ala Val Ser Lys Ser His Asp Leu Lys Val Ser Ala His Pro		
340	345	350
Lys Glu Gln Gly Ser Asn Thr Ala Ala Glu Asn Thr Gly Ser Asn Glu		
355	360	365
Arg Asn Ile Tyr Ile Val Val Gly Val Val Cys Thr Leu Leu Val Ala		
370	375	380
Leu Leu Met Ala Ala Leu Tyr Leu Val Arg Ile Arg Gln Lys Lys Ala		
385	390	395
Gln Gly Ser Thr Ser Ser Thr Arg Leu His Glu Pro Glu Lys Asn Ala		
405	410	415
Arg Glu Ile Thr Gln Asp Thr Asn Asp Ile Thr Tyr Ala Asp Leu Asn		
420	425	430
Leu Pro Lys Gly Lys Lys Pro Ala Pro Gln Ala Ala Glu Pro Asn Asn		
435	440	445
His Thr Glu Tyr Ala Ser Ile Gln Thr Ser Pro Gln Pro Ala Ser Glu		
450	455	460
Asp Thr Leu Thr Tyr Ala Asp Leu Asp Met Val His Leu Asn Arg Thr		
465	470	475
Pro Lys Gln Pro Ala Pro Lys Pro Glu Pro Ser Phe Ser Glu Tyr Ala		
485	490	495
Ser Val Gln Val Pro Arg Lys		
500		

<210> 41
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG1 Fc domain

<400> 41

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Leu Ala Gly Pro Asp Val Phe Leu Phe Pro Pro
 115 120 125

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

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190

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

Lys	Ala	Leu	Pro	Ala	Pro	Glu	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
210				215				220							

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225		230				235				240					

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

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

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

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

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

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

<210> 42
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> CDR-L3

<400> 42

Gln	Val	Trp	Asp	Ser	Ser	Ser	Asp	His	Tyr	Val
1	5				10					

<210> 43
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> CDR-L3

<400> 43

Gln Thr Trp Asp Ser Ser Thr Val Val
1 5

<210> 44

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L3

<400> 44

Gln Ala Trp Asp Ser Ser Thr Ala Val
1 5

<210> 45

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L3

<400> 45

Gln Ala Cys Asp Ser Ser Thr Ala Val
1 5

<210> 46

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L3

<400> 46

Gln Glu Ala Asn Ser Phe Pro Tyr Thr
1 5

<210> 47

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-L3

<400> 47

Gln Gln Tyr Asn Asn Trp Pro Tyr Thr
1 5

<210> 48
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L3

<400> 48

Gln Gln Tyr Tyr Asn Thr Pro Pro Trp Thr
1 5 10

<210> 49
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-L3

<400> 49

Leu Gln Tyr Asp Glu Phe Pro Phe Thr
1 5

<210> 50
<211> 330
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG1 Fc domain

<400> 50

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65					70					75					80

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

Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
			100					105					110		

Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Asp	Val	Phe	Leu	Phe	Pro	Pro
		115					120					125			

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150					155					160

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
				165					170					175	

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180					185					190		

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

Lys	Ala	Leu	Pro	Ala	Pro	Glu	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
	210					215					220				

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225					230					235					240

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

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

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

Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

290	295	300
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr		
305	310	315 320

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

<210> 51
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG1 Fc domain

<400> 51

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

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

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

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp

145	150	155	160
Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu			
	165	170	175
Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu			
	180	185	190
His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn			
	195	200	205
Lys Ala Leu Pro Ala Pro Glu Glu Lys Thr Ile Ser Lys Ala Lys Gly			
	210	215	220
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu			
225	230	235	240
Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr			
	245	250	255
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn			
	260	265	270
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe			
	275	280	285
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn			
	290	295	300
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr			
305	310	315	320
Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys			
	325	330	
<210>	52		
<211>	330		
<212>	PRT		
<213>	Artificial Sequence		
<220>			
<223>	IgG1 Fc domain		
<400>	52		
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys			

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

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

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

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

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

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

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

<210> 53
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG1 Fc domain

<400> 53

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65						70				75				80	

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

Lys	Ala	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
100				105				110							

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

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145				150				155				160			

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
165				170				175							

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
180				185				190							

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

Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
210				215				220							

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225				230				235				240			

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys

325

330

<210> 54

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H1

<400> 54

Gly Gly Ser Ile Ser Ser Ser Asn Trp

1 5

<210> 55

<211> 330

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG1 Fc domain

<400> 55

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys

1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr

20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser

35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser

50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr

65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys

85 90 95

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

100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro

115 120 125

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150					155					160

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
			165						170					175	

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180					185					190		

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

Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
	210					215					220				

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225					230					235					240

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

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

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

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

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

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

<210> 56

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H1

<400> 56

Asp Tyr Ser Ile Ser Ser Gly Tyr Tyr
1 5

<210> 57

<211> 330

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG1 Fc domain

<400> 57

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

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

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

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
165				170				175							

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
180				185				190							

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

Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
210				215				220							

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225				230				235				240			

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

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

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

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

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

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

<210> 58
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG1 Fc domain

<400> 58

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65					70				75						80

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

Lys	Ala	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
			100					105					110		

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

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150					155					160

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
			165						170					175	

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180					185					190		

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

Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
	210					215					220				

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225					230					235					240

Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	245	250	255
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn			
	260	265	270
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe			
	275	280	285
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn			
	290	295	300
Val Phe Ser Cys Ser Val Leu His Glu Ala Leu His Asn His Tyr Thr			
	305	310	315
			320

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

<210> 59
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H1

<400> 59

Gly Phe Thr Phe Ser Lys Phe Gly
1 5

<210> 60
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H1

<400> 60

Gly Gly Ser Phe Ser Gly Tyr Tyr
1 5

<210> 61
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H1

<400> 61

Gly Gly Ser Phe Ser Thr Tyr Tyr
1 5

<210> 62

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H1

<400> 62

Gly Phe Thr Phe Ser Ser Tyr Ala
1 5

<210> 63

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H1

<400> 63

Gly Phe Thr Phe Ser Ser Tyr Trp
1 5

<210> 64

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H1

<400> 64

Gly Phe Ile Phe Ser Asn Tyr Gly
1 5

<210> 65

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H1

<400> 65

Gly Tyr Thr Phe Arg Asn Phe Gly
1 5

<210> 66

<211> 330

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG1 Fc domain

<400> 66

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

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

Lys Ala Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

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

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

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
180				185				190							

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

Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
210				215				220							

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225				230				235				240			

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

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

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

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

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

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

<210> 67
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG1 Fc domain

<400> 67

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65				70				75				80			

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

Arg	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
				100				105				110			

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

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145				150				155				160			

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
				165				170				175			

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
				180				185				190			

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

Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
210				215				220							

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225				230				235				240			

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

Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	260	265	270
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe			
	275	280	285
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn			
	290	295	300
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr			
305	310	315	320
Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys			
	325	330	
<210> 68			
<211> 330			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> IgG1 Fc domain			
<400> 68			
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys			
1	5	10	15
Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr			
	20	25	30
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser			
	35	40	45
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser			
	50	55	60
Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr			
65	70	75	80
Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys			
	85	90	95
Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys			
	100	105	110
Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro			

115	120	125
Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys		
130	135	140
Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp		
145	150	155
Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu		
165	170	175
Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu		
180	185	190
His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn		
195	200	205
Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly		
210	215	220
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu		
225	230	235
Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr		
245	250	255
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn		
260	265	270
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe		
275	280	285
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn		
290	295	300
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr		
305	310	315
Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys		
325	330	

<210> 69
 <211> 330
 <212> PRT

<213> Artificial Sequence

<220>

<223> IgG1 Fc domain

<400> 69

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

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

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

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
180 185 190

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

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
210 215 220

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

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

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

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

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

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

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

<210> 70
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H2

<400> 70

Ile Tyr His Ser Gly Ser Thr
1 5

<210> 71
<211> 330
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG1 Fc domain

<400> 71

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys

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

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

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

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

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

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

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

<210> 72
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> CDR-H2

<400> 72

Ile Tyr His Ser Gly Asn Thr
 1 5

<210> 73
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG1 Fc domain

<400> 73

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

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser

35					40					45									
Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser				
50					55					60									
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr				
65					70					75					80				
Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys				
85					90					95									
Lys	Ala	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys				
100					105					110									
Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro				
115					120					125									
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys				
130					135					140									
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp				
145					150					155					160				
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu				
165					170					175									
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu				
180					185					190									
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn				
195					200					205									
Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly				
210					215					220									
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu				
225					230					235					240				
Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr				
245					250					255									
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn				
260					265					270									

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

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

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

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

<210> 74

<211> 330

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG1 Fc domain

<400> 74

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65		70				75				80					

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

Lys	Ala	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
100				105				110							

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

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

Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150					155					160

Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
			165						170					175	

Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
			180					185					190		

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

Lys	Ala	Leu	Pro	Ala	Pro	Glu	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
210						215					220				

Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu
225					230					235					240

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

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

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

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

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

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

<210> 75

<211> 8

<212> PRT

<213> Artificial Sequence

<220>
<223> CDR-H2

<400> 75

Ile Ser Tyr Asp Gly Asn Asn Lys
1 5

<210> 76
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H2

<400> 76

Ile Asn His Ser Gly Ser Thr
1 5

<210> 77
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H2

<400> 77

Ile Ser Gly Ser Gly Gly Asp Thr
1 5

<210> 78
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H2

<400> 78

Ile His Asn Asp Gly Ser Arg Thr
1 5

<210> 79
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H2

<400> 79

Ile Ser Gly Ser Gly Ser Ser Thr
1 5

<210> 80

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H2

<400> 80

Ile Ser Tyr Asp Gly Arg Asn Glu
1 5

<210> 81

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H2

<400> 81

Ile Asp Thr Asn Thr Gly Glu Pro
1 5

<210> 82

<211> 327

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG4 Fc Domain

<400> 82

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

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

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

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser

50					55					60					
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Lys	Thr
65					70					75					80
Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
				85					90					95	
Arg	Val	Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Cys	Pro	Ser	Cys	Pro	Ala	Pro
			100					105					110		
Glu	Phe	Glu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys
		115					120					125			
Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val
	130					135					140				
Asp	Val	Ser	Gln	Glu	Asp	Pro	Glu	Val	Gln	Phe	Asn	Trp	Tyr	Val	Asp
145					150					155					160
Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Phe
				165					170					175	
Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp
			180					185					190		
Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Gly	Leu
	195						200					205			
Pro	Ser	Ser	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg
	210					215					220				
Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Gln	Glu	Glu	Met	Thr	Lys
225					230					235					240
Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp
				245					250					255	
Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys
		260						265					270		
Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser
		275					280					285			

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

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

Leu	Ser	Leu	Ser	Leu	Gly	Lys
325						

<210> 83
 <211> 327
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IgG4 Fc Domain

<400> 83

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Lys	Thr
65		70		75		80									

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Leu	Ser	Leu	Ser	Leu	Gly	Lys
					325	

<210> 84

<211> 327

<212> PRT

<213> Artificial Sequence

<220>

<223> IgG4 Fc Domain

<400> 84

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

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

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

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

Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Lys	Thr
65				70					75						80

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

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

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

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

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

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

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

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

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

Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Gln	Glu	Glu	Met	Thr	Lys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

225	230	235	240
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp	245	250	255
Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys	260	265	270
Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser	275	280	285
Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser	290	295	300
Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser	305	310	315
			320
Leu Ser Leu Ser Leu Gly Lys	325		
<210> 85			
<211> 327			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> IgG4 Fc Domain			
<400> 85			
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg	5	10	15
Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr	20	25	30
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser	35	40	45
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser	50	55	60
Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr	65	70	75
			80
Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys			

85					90					95						
Arg	Val	Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Cys	Pro	Ser	Cys	Pro	Ala	Pro	
100					105					110						
Glu	Ala	Ala	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	
115					120					125						
Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	
130					135					140						
Asp	Val	Ser	Gln	Glu	Asp	Pro	Glu	Val	Gln	Phe	Asn	Trp	Tyr	Val	Asp	
145					150					155					160	
Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Phe	
165					170					175						
Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	
180					185					190						
Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Gly	Leu	
195					200					205						
Pro	Ser	Ser	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	
210					215					220						
Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Gln	Glu	Glu	Met	Thr	Lys	
225					230					235					240	
Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	
245					250					255						
Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	
260					265					270						
Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	
275					280					285						
Arg	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Glu	Gly	Asn	Val	Phe	Ser	
290					295					300						
Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	
305					310					315					320	

Leu Ser Leu Ser Leu Gly Lys
325

<210> 86
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H3

<400> 86

Ala Arg Arg Gly Ile Trp Phe Gly Val Gly Pro
1 5 10

<210> 87
<211> 327
<212> PRT
<213> Artificial Sequence

<220>
<223> IgG4 Fc Domain

<400> 87

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

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

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

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr
65 70 75 80

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

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

Glu Phe Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys

115	120	125
Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val		
130	135	140
Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp		
145	150	155
Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe		
165	170	175
Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp		
180	185	190
Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu		
195	200	205
Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg		
210	215	220
Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys		
225	230	235
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp		
245	250	255
Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys		
260	265	270
Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser		
275	280	285
Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser		
290	295	300
Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser		
305	310	315
Leu Ser Leu Ser Leu Gly Lys		
325		

<210> 88
 <211> 16
 <212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H3

<400> 88

Ala	Arg	Glu	Gly	Ile	Glu	Gly	Tyr	Tyr	Phe	Tyr	Tyr	Gly	Met	Asp	Val
1			5						10					15	

<210> 89

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H3

<400> 89

Ala	Arg	Asp	Lys	Cys	Ser	Thr	Thr	Thr	Cys	Ser	Phe	Asp	Tyr
1			5						10				

<210> 90

<400> 90

000

<210> 91

<400> 91

000

<210> 92

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H3

<400> 92

Trp	Ala	Ala	Ala	Gly	Ala	Phe	Tyr	Ile
1			5					

<210> 93

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H3

<400> 93

Ser Arg Val Asp Ser Gly Ser Tyr Pro Tyr Tyr Asp Gly Leu Asp Val
1 5 10 15

<210> 94
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H3

<400> 94

Ala Ser Ser His Tyr Gly Ser Gly Ser Phe Pro Asp Ser Tyr Gly Met
1 5 10 15

Asp Val

<210> 95
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H3

<400> 95

Ala Lys Asp Gly Gly Ser Tyr Tyr Pro Pro Phe Asp Tyr
1 5 10

<210> 96
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> CDR-H3

<400> 96

Thr Arg Asp Pro Pro Pro Tyr Asp Ile Leu Thr Gly Tyr Pro Phe Asp
1 5 10 15

Tyr

<210> 97
<211> 14
<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H3

<400> 97

Ala	Ala	Tyr	Ser	Gly	Ser	Tyr	Tyr	Tyr	Tyr	Gly	Met	Asp	Val
1				5						10			

<210> 98

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H3

<400> 98

Ala	Lys	Gly	Ser	Gly	Ser	Tyr	Tyr	Phe	Asp	Tyr
1				5						10

<210> 99

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR-H3

<400> 99

Ala	Arg	Ser	Arg	Gly	Asn	Tyr	Phe	Ala	Met	Glu	Tyr
1				5						10	

<210> 100

<400> 100
000

<210> 101

<400> 101
000

<210> 102

<400> 102
000

<210> 103

<400> 103
000

<210> 104
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> VH sequence

<400> 104

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

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Ile Ser Ser Ser
20 25 30

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

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

Lys Ser Arg Val Thr Ile Ser Val Asp Lys 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 Arg Gly Ile Trp Phe Gly Val Gly Pro Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 105

<400> 105
000

<210> 106
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> VH sequence

<400> 106

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

Thr	Leu	Ser	Leu	Thr	Cys	Ala	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Ser
			20						25					30	

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

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

Lys	Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Lys	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	Glu	Gly	Ile	Glu	Gly	Tyr	Tyr	Phe	Tyr	Tyr	Gly	Met	Asp	Val
		100						105					110		

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

<210> 107

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 107

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

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

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

Ile	Gly	Ser	Ile	Tyr	His	Ser	Gly	Asn	Thr	Tyr	Tyr	Asn	Pro	Ser	Leu
	50					55					60				

Lys Ser Arg Val Thr Ile Leu 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 Asp Lys Cys Ser Thr Thr Thr Cys Ser Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 108

<400> 108
000

<210> 109

<400> 109
000

<210> 110

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 110

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 Lys Phe
20 25 30

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

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

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

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

Trp	Ala	Ala	Ala	Gly	Ala	Phe	Tyr	Ile	Trp	Gly	Gln	Gly	Thr	Met	Val
100				105				110							

Thr	Val	Ser	Ser
115			

<210> 111
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> VH sequence

<400> 111

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

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

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

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

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

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

Arg	Val	Asp	Ser	Gly	Ser	Tyr	Pro	Tyr	Tyr	Asp	Gly	Leu	Asp	Val	Trp
100				105				110							

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

<210> 112
<211> 124
<212> PRT
<213> Artificial Sequence

<220>

<223> VH sequence

<400> 112

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

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

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

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

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

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

Ser Ser His Tyr Gly Ser Gly Ser Phe Pro Asp Ser Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ala
115 120

<210> 113

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 113

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

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

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

Ser	Ala	Ile	Ser	Gly	Ser	Gly	Gly	Asp	Thr	Tyr	Tyr	Ala	Asp	Ser	Val
50						55						60			

Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Ser	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	Lys	Asp	Gly	Gly	Ser	Tyr	Tyr	Pro	Pro	Phe	Asp	Tyr	Trp	Gly	Gln
			100					105						110	

Gly	Thr	Leu	Val	Thr	Val	Ser	Ser
		115				120	

<210> 114
 <211> 124
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VH sequence

<400> 114

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

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

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

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

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

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

Thr	Arg	Asp	Pro	Pro	Pro	Tyr	Asp	Ile	Leu	Thr	Gly	Tyr	Pro	Phe	Asp
			100					105					110		

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

<210> 115
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> VH sequence

<400> 115

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

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

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

Ser Ala Ile Ser Gly Ser Gly Ser Ser Thr His Tyr Ala Asp Ser Val
50 55 60

Lys Gly 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 Ala Tyr Ser Gly Ser Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly
100 105 110

Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 116
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> VH sequence

<400> 116

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

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

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

Ser	Ala	Ile	Ser	Gly	Ser	Gly	Ser	Ser	Thr	His	Tyr	Ala	Asp	Ser	Val
	50					55					60				

Lys	Gly	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	Ala	Tyr	Ser	Gly	Ser	Tyr	Tyr	Tyr	Tyr	Gly	Met	Asp	Val	Trp	Gly
		100						105					110		

Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser
		115					120	

<210> 117
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VH sequence

<400> 117

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	Val	Ala	Ser	Gly	Phe	Ile	Phe	Ser	Asn	Tyr
			20						25				30		

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

Ala	Val	Ile	Ser	Tyr	Asp	Gly	Arg	Asn	Glu	Asp	His	Val	Asp	Ser	Val
	50						55				60				

Lys	Gly	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	Lys	Gly	Ser	Gly	Ser	Tyr	Tyr	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr
			100					105					110		

Leu	Val	Thr	Val	Ser	Ser
					115

<210> 118

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 118

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

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

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

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

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

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

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

Thr	Ser	Val	Thr	Val	Ser	Ser
						115

<210> 119

<400> 119
000

<210> 120

<400> 120
000

<210> 121

<400> 121
000

<210> 122

<400> 122
000

<210> 123

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> VL sequence

<400> 123

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

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Gly
20 25 30

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

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

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

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

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

<210> 124

<400> 124
000

<210> 125
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 125

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

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

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

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

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

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

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

<210> 126
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 126

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 Gln Ala Ser Gln Asp Phe Ser Asn Tyr
20 25 30

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

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

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

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

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

<210> 127

<400> 127
000

<210> 128

<400> 128
000

<210> 129

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> VL sequence

<400> 129

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

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

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

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

Lys Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly

65	70	75	80
Asp	Glu	Ala	Asp
	Tyr	Tyr	Cys
		Gln	Val
		Trp	Asp
		Ser	Ser
		Ser	Ser
		Asp	His
	85	90	95
Tyr	Val	Phe	Gly
	Thr	Gly	Thr
	Lys	Val	Thr
	Val	Leu	
	100	105	
<210> 130			
<211> 106			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> VL sequence			
<400> 130			
Ser	Ser	Glu	Leu
	Thr	Gln	Pro
	Pro	Ser	Val
	Ser	Val	Ser
	Pro	Gly	Gln
1	5	10	15
Thr	Ala	Ser	Ile
	Thr	Cys	Ser
	Gly	Asp	Lys
	Leu	Gly	Asp
	Lys	Tyr	Val
	20	25	30
Tyr	Trp	Tyr	Gln
	Gln	Lys	Pro
	Gly	Gln	Ser
	Pro	Val	Leu
	Val	Ile	Tyr
	35	40	45
His	Asp	Asp	Arg
	Arg	Pro	Ala
	Gly	Ile	Pro
	Glu	Arg	Phe
	Ala	Gly	Ser
	50	55	60
Ala	Ser	Gly	Asn
	Thr	Ala	Thr
	Leu	Thr	Ile
	Ser	Gly	Thr
	Gln	Ala	Met
65	70	75	80
Asp	Glu	Ala	Asp
	Tyr	Tyr	Cys
	Gln	Thr	Trp
	Asp	Ser	Ser
	Thr	Val	Val
	85	90	95
Phe	Gly	Gly	Gly
	Thr	Lys	Leu
	Thr	Val	Leu
	100	105	
<210> 131			
<211> 106			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> VL sequence			
<400> 131			

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

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

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

Gln	Asp	Asp	Lys	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
	50					55					60				

Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Gly	Thr	Gln	Ala	Met
65					70					75					80

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

Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu
			100					105	

<210> 132
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VL sequence

<400> 132

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

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

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

Gln	Asp	Thr	Lys	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe	Ser	Gly	Ser
	50					55					60				

Asn	Ser	Gly	Asn	Thr	Ala	Thr	Leu	Thr	Ile	Ser	Gly	Thr	Gln	Ala	Met
65					70					75					80

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

Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu
			100					105	

<210> 133
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VL sequence

<400> 133

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	Trp
		20					25						30		

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

Tyr	Gly	Ala	Ser	Ser	Leu	Gln	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	Tyr	Cys	Gln	Glu	Ala	Asn	Ser	Phe	Pro	Tyr
				85					90					95	

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

<210> 134
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VL sequence

<400> 134

Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Val	Ser	Pro	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10	15
Glu	Arg	Ala	Thr
Leu	Ser	Cys	Arg
Ala	Ser	Gln	Ser
Val	Ser	Ser	Asn
20	25	30	
Leu	Ala	Trp	Tyr
Gln	Gln	Lys	Ser
Gly	Gln	Ala	Pro
Arg	Leu	Leu	Ile
35	40	45	
Tyr	Gly	Ala	Ser
Thr	Arg	Ala	Thr
Gly	Ile	Pro	Ala
Arg	Phe	Ser	Gly
50	55	60	
Ser	Gly	Ser	Gly
Thr	Glu	Phe	Thr
Leu	Thr	Ile	Ser
Ser	Ser	Leu	Gln
Ser			
65	70	75	80
Glu	Asp	Phe	Ala
Gly	Tyr	Tyr	Cys
Gln	Gln	Tyr	Asn
Asn	Trp	Pro	Tyr
85	90	95	
Thr	Phe	Gly	Gln
Gly	Thr	Lys	Leu
Glu	Ile	Lys	
100	105		
<210> 135			
<211> 107			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> VL sequence			
<400> 135			
Glu	Ile	Val	Met
Thr	Gln	Ser	Pro
Ala	Thr	Leu	Ser
Val	Ser	Pro	Gly
1	5	10	15
Glu	Arg	Ala	Thr
Leu	Ser	Cys	Arg
Ala	Ser	Gln	Ser
Val	Ser	Arg	Asn
20	25	30	
Leu	Ala	Trp	Tyr
Gln	Gln	Lys	Ser
Gly	Gln	Ala	Pro
Arg	Leu	Leu	Ile
35	40	45	
Tyr	Gly	Ala	Ser
Thr	Arg	Ala	Thr
Gly	Ile	Pro	Ala
Arg	Phe	Ser	Gly
50	55	60	
Ser	Gly	Ser	Gly
Thr	Glu	Phe	Thr
Leu	Thr	Ile	Ser
Ser	Ser	Leu	Gln
Ser			
65	70	75	80
Glu	Asp	Phe	Ala
Gly	Tyr	Tyr	Cys
Gln	Gln	Tyr	Asn
Asn	Trp	Pro	Tyr

	85	90	95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys			
	100	105	

<210> 136
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 136

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

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Thr Val Leu Asn Ser			
	20	25	30

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

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

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

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

Tyr Tyr Asn Thr Pro Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu			
	100	105	110

Ile Lys

<210> 137
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 137

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

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

Leu Ser Trp Phe Gln Gln Lys Pro Gly Lys Ser Pro Lys Thr Leu Ile
35 40 45

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

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

Glu Asp Met Gly Phe Tyr Tyr Cys Leu Gln Tyr Asp Glu Phe Pro Phe
85 90 95

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

<210> 138

<400> 138
000

<210> 139

<400> 139
000

<210> 140

<400> 140
000

<210> 141

<400> 141
000

<210> 142

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 142

caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggggac cctgtccctc 60
acctgcgctg tctctggtgg ctccatcagc agtagtaact ggtggagttg ggtccgccag 120
ccccagggga aggggctgga atggattggg gaaatctatc atagtgggag caccaactac 180
aaccctccc tcaagagtcg agtcaccata tcagtagaca agtccaagaa ccagttctcc 240
ctgaagctga gttctgtgac cgccgcggac acggccgtgt attactgtgc gagaaggggg 300
atatggttcg gggtcgggtcc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 143

<400> 143

000

<210> 144

<211> 369

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 144

caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggggac cctgtctctc 60
acctgcgctg tctctggtgg ctccatcagc agtagtaact ggtggagttg ggtccgccag 120
ccccagggga aggggctgga gtggattggg gaaatctatc atagtgggaa caccaactac 180
aaccctccc tcaagagtcg agtcaccata tcagtagaca agtccaagaa ccagttctcc 240
ctgaagctga gctctgtgac cgccgcggac acggccgtgt attactgtgc gagagagggg 300
atagaggggt actacttcta ctacggtatg gacgtctggg gccaaaggac cacggtcacc 360
gtctcctca 369

<210> 145

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 145

caggtgcagc tgcaggagtc gggcccagga ctgctgaagc cttcgagac cctgtccctc 60
acctgcgctg tctctgatta ctccatcagc agtgggttact actggggctg gatccggcag 120
ccccggggga aggggctgga gtggattggg agtatctatc atagtgggaa tacctattat 180
aaccctccc tcaagagtcg agtcaccata ttagtagaca cgtccaagaa ccagttctcc 240

ctgaagctga gctctgtgac cgccgcagac acggccgtgt attactgtgc gagagataaa 300
 tgtagtacta caacctgctc ctttgactac tggggccagg gaaccttggg caccgtctcc 360
 tca 363

<210> 146

<400> 146
 000

<210> 147

<400> 147
 000

<210> 148

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 148

caggtgcagc tgggtggagtc tgggggaggc gtgggtccagc ctgggagggtc cctgagactc 60

tcctgtgcag cctctggatt caccttcagt aaatttggca tgcactgggt cgcagggt 120

ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaaataa taaatactat 180

acagactccg tgaagggccg attcaccatc tccagagaca attccaggaa cacgctgtat 240

ctgcaaatgg acagcgtgaa acctgaggac acggctgtgt actattcctg ggcagcagct 300

ggtgcttttt atatctgggg ccaagggaca atggtcaccg tctcttca 348

<210> 149

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 149

caggtgcagc tacagcagtg gggcgcagga ctgttgaagc cttcggagac cctgtccctc 60

acctgcgctg tctatggtgg gtccttcagt gggtactact ggagctggat tgcaggccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcata gtggaagcac caacttcaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgaggt ctgtgaccgc cgcggacacg gctgtgtatt actgttcgag agtcgatagt 300

gggagctatc cctactacga cggtttggac gtctggggcc aagggaccac ggtcacgctc 360

tcctca 366

<210> 150

<211> 372

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 150

caggtgcagc tacagcagtg gggcgcagga ctgttgaagc cttcggagac cctgtccctc 60

acctgcgctg tctatggttg gtccttcagt acttactact ggaactggat ccgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcata gtggaagcac caactacaac 180

ccgtccctca agagtcgagt catcatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcgacacg gctgtgtatt actgtgcgag cagtcattat 300

ggttcgggga gttttcccga ctctacggt atggacgtct ggggccaagg gaccacggtc 360

accgtctccg ca 372

<210> 151

<211> 360

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 151

gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctgggggggc cctgagactc 60

tcctgtgcag cctctggatt cacgtttagc agctatgcca tgagctgggt ccgccaggct 120

ccagggaagg ggctggagtg ggtctcagct attagtggta gtggtggtga cacttactac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagag cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaagacggt 300

gggagctact accccccctt tgactactgg ggccagggaa ccctgggtcac cgtctcctca 360

<210> 152

<211> 372

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 152

gaggtgcagc tggtaggagtc cgggggaggc ttagttcagc ctgggggggtc cctgagactc 60
tcttgtgcag cctctggatt caccttcagt agctactgga tgcactgggt cgcgaagct 120
ccagggaagg ggctgggtgtg ggtctcacgt attcataatg atgggagtag aacaagttac 180
gcggactccg tgaagggccg attcactatc tccagagaca acgccaagaa cacgctgtat 240
ctgcaaatga gcagtctgcg agccgaggac acggctgtgt attactgtac aagagatccc 300
cctccttacg atattttgac tggttacccc tttgactact ggggccaggg aaccctggtc 360
accgtctcct ca 372

<210> 153

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 153

gaggtgcagg tgtaggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttagc agctatgcc a tgagctgggt cgcgcaggct 120
ccagggaagg ggctggagtg ggtctcagct attagtggta gtggtagtag cacacactac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc ggcgtatagt 300
gggagctact actactatgg aatggacgtc tggggacaag ggaccacggt caccgtctcc 360
tca 363

<210> 154

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 154

gaggtgcaga tgtaggagtc tgggggaggc ttggttcagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttagc agctatgcc a tgagctgggt cgcgcaggct 120
ccagggaagg ggctggagtg ggtctcagct attagtggta gtggtagtag cacacactac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgttt attactgtgc ggcgtatagt 300

gggagctact actactatgg aatggacgtc tggggacagg ggaccacggg caccgtctcc 360

tca 363

<210> 155

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 155

cagggtgcagc tgggtggagtc tgggggaggc gtgggtccagc ctgggaggtc cctgagactc 60

tcctgtgtag cctctggatt catcttcagt aactatggca tgcactgggt ccgccaggct 120

ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagaaa tgaagaccat 180

gtagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agctgaggac acggctgtat attactgtgc gaaagggtcg 300

gggagctact actttgacta ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 156

<211> 357

<212> DNA

<213> Artificial Sequence

<220>

<223> VH sequence

<400> 156

cagatccagt tgggtgcagtc tggacctgag ctgaagaagc ctggagagac agtcaagatc 60

tcctgcaagg gttctgggta taccttcaga aactttggaa tgaattgggt gaagcaggct 120

ccaggaatgg gtttaaagtg gatgggtgtgg atagacacca aactggaga gccaacatat 180

gctgaagagt tcaagggacg gtttgccttc tctttggaaa cctctgccag cactgcctat 240

ttgcagatca acaacctcaa aaatgaggac acggctacat atttctgtgc aagatcgaga 300

ggtaactact ttgctatgga gtattggggg caaggaacct cagtcaccgt ctctca 357

<210> 157

<400> 157

000

<210> 158

<400> 158
000

<210> 159

<400> 159
000

<210> 160

<400> 160
000

<210> 161

<211> 336

<212> DNA

<213> Artificial Sequence

<220>

<223> VL sequence

<400> 161

gatattgtga tgactcagtc tccactctcc ctgcccgtca ccctggaga gccggcctcc 60

atctcctgca ggtctagtca ggcctccta catggtaatg gattcaacta tttggattgg 120

tacctgcaga agccagggca gtctccacag ctctgatct atttgggttc taatcgggcc 180

tccgggggtcc ctgacagggt cactggcagt ggatcaggca cagattttac actgaaaatc 240

agcagagtgg aggctgagga tgttgggggt tattactgca tgcaagggtct acaaactcct 300

cggacgttcg gccaaaggac caaggtggaa atcaaa 336

<210> 162

<400> 162
000

<210> 163

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> VL sequence

<400> 163

gacatccagt tgaccagtc tccatccttc ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgcc gggccagtca gggcattagc gggtatttag actggtatca gcaaaaacca 120

gggaaagccc ctaagctcct gatctatgct gcatccactt taaaagagg ggtcccatca 180

aggttcagcg gcagtggatc tgggacagat ttcaatctca caatcagcag cctgcagcct 240

gaagattttg caacttatta ctgtcaacag tttactagtg acctcatcac cttcggccaa 300
gggacacgac tggagattaa a 321

<210> 164
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 164
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc aggcgagtca ggactttagc aactatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctacgt gcacccaatt tggaacagg ggtcccatcg 180
aggttcagtg gaagtggatc tgggacagat tttactttca ccatcagcag cctgcagcct 240
gaagatattg cagtatatta ctgtcaacag tatgataatc tcccgtacac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 165

<400> 165
000

<210> 166

<400> 166
000

<210> 167
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 167
tcctatgtgc tgactcagcc accctcgggtg tcagtggccc caggacagac ggccaggatt 60
acctgtgggg gataacaacat tggaagtaaa agtgtgcact ggtaccagca gaaggcaggc 120
caggcccctg tgctggtcgt ctatgatgat agcggccggc cctcagggat ccctgagcga 180
ttgtctggct ccaagtctgg gaacacggcc accctgacca tcagcagggt cgaagccggg 240
gatgaggccg actattactg tcagggtgtgg gatagtagta gtgatcatta tgtcttcgga 300
actgggacca aggtcaccgt ccta 324

<210> 168
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 168
tcctctgaat tgactcagcc accctcagt tccgtgtccc caggacagac agccagcatc 60
acctgctctg gagataaatt gggggataaa tatgtttact ggtatcaaca gaagccaggc 120
cagtcccctg tgttgggtcat ctatcatgat gatcggcggc ccgctgggat ccctgagcga 180
ttcgctggct ccgcttctgg gaacacagcc actctgacca tcagcgggac ccaggctatg 240
gatgaggctg actattactg tcagacgtgg gacagcagca ctgtggtttt cggcggaggg 300
accaagctga ccgtccta 318

<210> 169
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 169
tcctatgaat tgactcagtc accctcagt tccgtgtccc caggacagac agccagcatc 60
acctgctctg gagataaatt gggggataga tatgcttggg ggtatcagca gaagccaggc 120
cagtcccctg tgctgggtcat ctatcaagat gacaagcggc cctcagggat ccctgagcga 180
ttctctggct ccaactctgg gaacacagcc actctgacca tcagcgggac ccaggctatg 240
gatgaggctg actattactg tcaggcgtgg gacagcagca ctgcggtatt cggcggaggg 300
accaagctga ccgtccta 318

<210> 170
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 170
tcctatgagc tgactcagcc accctcagt tccgtgtccc caggacagac agccagcatc 60
acctgctctg gagataaatt gggggataga tatgcttgct ggtatcagca gaagccaggc 120

cagtccccctg tactgggtcat ctatcaagat accaagcggc cctcagggat ccctgagcga 180
ttctctgggt ccaactctgg gaacacagcc actctgacca tcagcgggac ccaggctatg 240
gatgaggctg actattactg tcaggcgtgc gacagcagca ctgcggtggt cggcggaggg 300
accaagctga cgcctcta 318

<210> 171
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 171
gacatccaga tgaccagtc tccgtcttcc gtgtctgcat ctgtaggaga cagagtcacc 60
atcacttgtc gggcgagtca ggatattagc agctggttag cctgggtttca gcagaaacca 120
gggaaagccc ctaagctcct gatctatggt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagat ttcactctca ccatcagcag cctgcagcct 240
gaagattttg caacttacta ttgtcaagag gctaacagtt tcccgtatac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 172
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> VL sequence

<400> 172
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcagaaatct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg caggttatta ctgccagcag tataataact ggccgtacac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 173
<211> 321
<212> DNA
<213> Artificial Sequence

<220>

<223> VL sequence

<400> 173

gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagt aggaatttag cctggtacca gcagaaatct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg caggttatta ctgccagcag tataataact ggccgtacac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 174

<211> 342

<212> DNA

<213> Artificial Sequence

<220>

<223> VL sequence

<400> 174

gacatcgtgc tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gactgtttta aacagctcca acaataagaa ctacctagct 120
tggtaccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctatccgg 180
gaatccgggg tcctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttataatact 300
cctccgtgga cgttcggcca agggaccaag gtggaaatca aa 342

<210> 175

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> VL sequence

<400> 175

gacatcaaga tgaccagtc tccatcttcc atgtatgcat ctctaggaga gagagtcact 60
gtcacttgca aggcgagtca ggacattaat cgctatttaa gctggttcca gcagaaacca 120
gggaaatctc ctaagaccct gatctatcgt gcaaacagat tggtagatgg ggtcccatca 180
aggttcagtg gcagtggatc tgggcaagat tattctctca ccatcagcag cctggagtat 240
gaagatatgg gattttatta ttgtctacag tatgatgagt ttccattcac gttcggctcg 300

gggacaaagt tggaaataaa a

321