

Figure 1

		N-terminal	
hCCR8	1	---MDYTLDSLVTITVDYYPDFISSPCDAELIQTN GKLLAVFYCLLFVFSLLGNSLVILVLVVCCKLRSITDVYLLN	76
hCCR4	1	MNPTDIADITLDESIYSNYLYESIPKPCIKFEGIKAFSELFPDLSLVFVFSLLGNSLVILVLVVCCKLRSITDVYLLN	80
N-ter hCCR4-hCCR8	1	MNPTDIADITLDESIYSNYLYESIPKPCIKFEGIKAFSELFPDLSLVFVFSLLGNSLVILVLVVCCKLRSITDVYLLN	80
loop1 hCCR4-hCCR8	1	---MDYTLDSLVTITVDYYPDFISSPCDAELIQTN GKLLAVFYCLLFVFSLLGNSLVILVLVVCCKLRSITDVYLLN	76
loop2 hCCR4-hCCR8	1	---MDYTLDSLVTITVDYYPDFISSPCDAELIQTN GKLLAVFYCLLFVFSLLGNSLVILVLVVCCKLRSITDVYLLN	76
loop3 hCCR4-hCCR8	1	---MDYTLDSLVTITVDYYPDFISSPCDAELIQTN GKLLAVFYCLLFVFSLLGNSLVILVLVVCCKLRSITDVYLLN	76
		loop1	
hCCR8	77	LALSDLLFVFSFPFQTYLLDQWVFGTVMCKVVS GFYYIGFYSSMFFITLMSVDRYLAVVHAVYALKVRTIRM GTTLC LA	156
hCCR4	81	LALSDLLFVFSFPFQTYLLDQWVFGTVMCKVVS GFYYIGFYSSMFFITLMSVDRYLAVVHAVYALKVRTIRM GTTLC LA	160
N-ter hCCR4-hCCR8	81	LALSDLLFVFSFPFQTYLLDQWVFGTVMCKVVS GFYYIGFYSSMFFITLMSVDRYLAVVHAVYALKVRTIRM GTTLC LA	160
loop1 hCCR4-hCCR8	77	LALSDLLFVFSFPFQTYLLDQWVFGTVMCKVVS GFYYIGFYSSMFFITLMSVDRYLAVVHAVYALKVRTIRM GTTLC LA	156
loop2 hCCR4-hCCR8	77	LALSDLLFVFSFPFQTYLLDQWVFGTVMCKVVS GFYYIGFYSSMFFITLMSVDRYLAVVHAVYALKVRTIRM GTTLC LA	156
loop3 hCCR4-hCCR8	77	LALSDLLFVFSFPFQTYLLDQWVFGTVMCKVVS GFYYIGFYSSMFFITLMSVDRYLAVVHAVYALKVRTIRM GTTLC LA	156
		loop2	
hCCR8	157	VWLTAIMATIPLLVFYQVASEDGVLCYSFYNNQQLKWKIIFTNFKMNI LGLLIPFTIFMFCYIKILHQLKRCQNHNKTKA	236
hCCR4	161	VWLTAIMATIPLLVFYQVASEDGVLCYSFYNNQQLKWKIIFTNFKMNI LGLLIPFTIFMFCYIKILHQLKRCQNHNKTKA	240
N-ter hCCR4-hCCR8	161	VWLTAIMATIPLLVFYQVASEDGVLCYSFYNNQQLKWKIIFTNFKMNI LGLLIPFTIFMFCYIKILHQLKRCQNHNKTKA	240
loop1 hCCR4-hCCR8	157	VWLTAIMATIPLLVFYQVASEDGVLCYSFYNNQQLKWKIIFTNFKMNI LGLLIPFTIFMFCYIKILHQLKRCQNHNKTKA	236
loop2 hCCR4-hCCR8	157	VWLTAIMATIPLLVFYQVASEDGVLCYSFYNNQQLKWKIIFTNFKMNI LGLLIPFTIFMFCYIKILHQLKRCQNHNKTKA	236
loop3 hCCR4-hCCR8	157	VWLTAIMATIPLLVFYQVASEDGVLCYSFYNNQQLKWKIIFTNFKMNI LGLLIPFTIFMFCYIKILHQLKRCQNHNKTKA	236
		loop3	
hCCR8	237	IRLVLIIVVIASLLFWVPFNVVFLFSLHSMHILDGCSISQQLTYATHVTEIISFTHCCVNPVIYAFVGEKFKKHLSEIFQ	316
hCCR4	241	VKMIFAVVVLFGFWPFNNVFLFLETLVELEVLDCTFERVLDYALQATEFLAFVHCCNHTIYFEGEKFVKVILQLF	319
N-ter hCCR4-hCCR8	241	IRLVLIIVVIASLLFWVPFNVVFLFSLHSMHILDGCSISQQLTYATHVTEIISFTHCCVNPVIYAFVGEKFKKHLSEIFQ	320
loop1 hCCR4-hCCR8	237	IRLVLIIVVIASLLFWVPFNVVFLFSLHSMHILDGCSISQQLTYATHVTEIISFTHCCVNPVIYAFVGEKFKKHLSEIFQ	316
loop2 hCCR4-hCCR8	237	IRLVLIIVVIASLLFWVPFNVVFLFSLHSMHILDGCSISQQLTYATHVTEIISFTHCCVNPVIYAFVGEKFKKHLSEIFQ	316
loop3 hCCR4-hCCR8	237	IRLVLIIVVIASLLFWVPFNVVFLFSLHSMHILDGCSISQQLTYATHVTEIISFTHCCVNPVIYAFVGEKFKKHLSEIFQ	316
hCCR8	317	KSCSQIFNYLGRQMPRESCEKSSSCQHQHSSRSSSSVDYIL--	355
hCCR4	320	KDGRGLFVLCQYCGLLQIYSADTPSSSYTQSTMDHDLHDAL	360
N-ter hCCR4-hCCR8	321	KSCSQIFNYLGRQMPRESCEKSSSCQHQHSSRSSSSVDYIL--	359
loop1 hCCR4-hCCR8	317	KSCSQIFNYLGRQMPRESCEKSSSCQHQHSSRSSSSVDYIL--	355
loop2 hCCR4-hCCR8	317	KSCSQIFNYLGRQMPRESCEKSSSCQHQHSSRSSSSVDYIL--	355
loop3 hCCR4-hCCR8	317	KSCSQIFNYLGRQMPRESCEKSSSCQHQHSSRSSSSVDYIL--	355

Figure 2

region	FR1										CDR1																					
Kabat number	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	L21	L22	L23	L24	L25	L26	L27	L27A	L27B	L27C	L27D	L27E
10A11, 27G1 light chain: Seq ID No:26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1H4 light chain: Seq ID No:29	D	I	V	M	T	Q	A	A	P	S	V	P	V	T	P	G	E	S	V	S	I	S	C	R	S	S	K	S	L	L	H	S
19D7 light chain: Seq ID No:31	D	I	V	M	T	Q	A	A	P	S	V	P	V	T	P	G	E	S	V	S	I	S	C	R	S	S	K	S	L	L	H	S
8F7 light chain: Seq ID No:33	D	I	V	M	T	Q	A	A	P	S	V	P	V	T	P	G	E	S	V	S	I	S	C	R	S	S	K	S	L	L	H	S
2C7 light chain: Seq ID No:35	D	V	V	L	T	Q	T	P	L	S	L	P	V	S	L	G	G	Q	A	S	I	S	C	R	S	S	Q	S	L	V	H	S

region	CDR1										FR2										CDR2										FR3				
Kabat number	L28	L29	L30	L31	L32	L33	L34	L35	L36	L37	L38	L39	L40	L41	L42	L43	L44	L45	L46	L47	L48	L49	L50	L51	L52	L53	L54	L55	L56	L57	L58	L59			
10A11, 27G1 light chain: Seq ID No:26	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64			
1H4 light chain: Seq ID No:29	N	G	N	T	Y	L	Y	W	F	L	Q	R	P	G	Q	S	P	Q	L	L	I	Y	R	M	S	N	L	A	S	G	V	P			
19D7 light chain: Seq ID No:31	N	G	N	T	Y	L	Y	W	F	L	Q	R	P	G	Q	S	P	Q	L	L	I	Y	R	M	S	N	L	A	S	G	V	P			
8F7 light chain: Seq ID No:33	N	G	N	T	Y	L	Y	W	F	L	Q	R	P	G	Q	S	P	Q	L	L	I	Y	R	M	S	N	L	A	S	G	V	P			
2C7 light chain: Seq ID No:35	N	G	N	T	Y	L	H	W	Y	L	Q	K	P	G	Q	S	P	K	L	L	I	Y	K	V	S	N	R	F	S	G	V	P			

region	FR3										CDR3																					
Kabat number	L60	L61	L62	L63	L64	L65	L66	L67	L68	L69	L70	L71	L72	L73	L74	L75	L76	L77	L78	L79	L80	L81	L82	L83	L84	L85	L86	L87	L88	L89	L90	L91
10A11, 27G1 light chain: Seq ID No:26	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
1H4 light chain: Seq ID No:29	D	R	F	S	G	S	G	S	G	T	A	F	T	L	R	I	S	R	V	E	A	E	D	V	G	V	Y	Y	C	M	Q	H
19D7 light chain: Seq ID No:31	D	R	F	S	G	S	G	S	G	A	A	F	T	L	R	I	S	R	V	E	A	E	D	V	G	V	Y	Y	C	M	Q	H
8F7 light chain: Seq ID No:33	D	R	F	S	G	S	G	S	G	T	A	F	T	L	R	I	S	R	V	E	A	E	D	V	G	V	Y	Y	C	M	Q	H
2C7 light chain: Seq ID No:35	D	R	F	S	G	S	G	S	G	T	D	F	T	L	K	I	S	R	V	E	A	E	D	L	G	V	Y	F	C	S	Q	S

region	CDR3										FR4									
Kabat number	L92	L93	L94	L95	L96	L97	L98	L99	L100	L101	L102	L103	L104	L105	L106	L107	L108			
10A11, 27G1 light chain: Seq ID No:26	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113			
1H4 light chain: Seq ID No:29	L	E	Y	P	L	T	F	G	A	G	T	K	L	E	L	K	R			
19D7 light chain: Seq ID No:31	L	E	Y	P	F	T	F	G	S	G	T	K	L	E	I	K	R			
8F7 light chain: Seq ID No:33	L	E	Y	P	F	T	F	G	S	G	T	K	L	E	I	K	R			
2C7 light chain: Seq ID No:35	T	Q	V	P	I	T	F	G	A	G	T	K	L	E	F	I	K	R		

Figure 3

region	FR1																											CDR1				
Kabat number	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22	H23	H24	H25	H26	H27	H28	H29	H30	H31	H32
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
10A11 heavy chain:Seq ID No:27	E	V	Q	L	V	E	S	G	G	R	L	V	Q	P	K	G	S	L	K	L	S	C	A	A	S	G	F	A	F	N	T	Y
27G1 heavy chain:Seq ID No:28	E	V	Q	L	V	E	S	G	G	R	L	V	Q	P	K	G	S	L	K	L	S	C	A	A	S	G	F	A	F	N	T	Y
1H4 heavy chain:Seq ID No:30	E	V	Q	L	V	E	S	G	G	R	L	V	Q	P	K	G	S	L	K	L	S	C	A	A	S	G	F	T	F	N	T	Y
19D7 heavy chain:Seq ID No:32	E	V	Q	L	V	E	S	G	G	R	L	V	Q	P	K	G	S	L	K	L	S	C	A	A	S	G	F	T	F	N	T	Y
8F7 heavy chain:Seq ID No:34	E	V	Q	L	V	E	S	G	G	R	L	V	Q	P	K	R	S	L	K	L	S	C	A	A	S	G	F	T	F	N	P	Y
2C7 heavy chain:Seq ID No:36	Q	V	Q	L	K	Q	S	G	P	S	L	V	Q	P	S	Q	S	L	S	I	T	C	T	V	S	G	F	S	L	T	A	Y

region	FR2																											CDR2				
Kabat number	H33	H34	H35	H36	H37	H38	H39	H40	H41	H42	H43	H44	H45	H46	H47	H48	H49	H50	H51	H52	H52A	H52B	H52C	H53	H54	H55	H56	H57	H58	H59	H60	H61
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
10A11 heavy chain:Seq ID No:27	A	L	Y	W	I	R	Q	A	P	G	K	G	L	E	W	V	A	R	I	R	S	K	S	N	N	Y	A	T	Y	Y	A	D
27G1 heavy chain:Seq ID No:28	A	M	Y	W	I	R	Q	A	P	G	K	G	L	E	W	V	A	R	I	R	S	K	S	N	N	Y	A	T	Y	Y	A	D
1H4 heavy chain:Seq ID No:30	A	M	Y	W	I	R	Q	A	P	G	K	G	L	E	W	V	A	R	I	R	S	K	S	N	N	Y	A	T	Y	Y	A	D
19D7 heavy chain:Seq ID No:32	A	M	Y	W	I	R	Q	A	P	G	K	G	L	E	W	V	A	R	I	R	S	K	S	N	N	Y	A	T	Y	Y	A	D
8F7 heavy chain:Seq ID No:34	A	M	Y	W	I	R	Q	A	P	G	Q	G	L	E	W	V	A	R	I	R	S	K	S	N	N	Y	A	T	Y	Y	A	D
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52				53	54	55	56	57	58	59	60	61
2C7 heavy chain:Seq ID No:36	G	V	H	W	I	R	Q	S	P	G	K	G	Q	E	W	L	G	V	I	W				R	G	G	S	T	D	Y	N	A

region	FR3																											CDR3				
Kabat number	H62	H63	H64	H65	H66	H67	H68	H69	H70	H71	H72	H73	H74	H75	H76	H77	H78	H79	H80	H81	H82	H82A	H82B	H82C	H83	H84	H85	H86	H87	H88	H89	H90
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
10A11 heavy chain:Seq ID No:27	S	V	K	D	R	F	T	I	S	R	D	D	S	Q	S	M	L	Y	L	Q	M	N	N	L	K	T	E	D	T	A	M	Y
27G1 heavy chain:Seq ID No:28	S	V	K	D	R	F	T	I	S	R	D	D	S	Q	S	M	L	Y	L	Q	M	N	N	L	K	T	E	D	T	A	M	Y
1H4 heavy chain:Seq ID No:30	S	V	K	D	R	F	T	I	S	R	D	D	S	Q	S	M	L	Y	L	Q	M	N	N	L	K	T	E	D	T	A	M	Y
19D7 heavy chain:Seq ID No:32	S	V	K	D	R	F	T	I	S	R	D	D	S	Q	S	M	L	Y	L	Q	M	N	N	L	K	T	E	D	T	A	M	Y
8F7 heavy chain:Seq ID No:34	S	V	K	D	R	F	T	I	S	R	D	D	S	Q	S	M	L	Y	L	Q	M	N	N	L	K	T	E	D	T	A	M	Y
	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93
2C7 heavy chain:Seq ID No:36	A	F	M	S	R	L	T	I	T	K	D	N	S	K	S	Q	V	F	F	K	M	N	S	L	Q	A	D	D	T	A	I	Y

region	FR4																											CDR4		
Kabat number	H91	H92	H93	H94	H95	H96	H97	H98	H99	H100	H100B	H100C	H100D	H100E	H100F	H101	H102	H103	H104	H105	H106	H107	H108	H109	H110	H111	H112	H113		
	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	
10A11 heavy chain:Seq ID No:27	Y	C	V	R	A	R	F	Y	Y	S	D	Y	G	Y	A	M	D	Y	W	G	Q	G	T	S	V	T	V	S	S	
27G1 heavy chain:Seq ID No:28	Y	C	V	R	A	R	F	Y	Y	S	D	Y	G	Y	A	M	D	Y	W	G	Q	G	T	S	V	T	V	S	S	
1H4 heavy chain:Seq ID No:30	Y	C	V	R	A	R	F	Y	Y	S	D	Y	G	Y	A	M	D	Y	W	G	Q	G	T	S	V	T	V	S	S	
	97	98	99	100	101	102	103	104	105	106	107	108	109	110			111	112	113	114	115	116	117	118	119	120	121	122	123	
19D7 heavy chain:Seq ID No:32	Y	C	V	R	G	G	Y	G	N	Y	R	Y	A	M		D	Y	W	G	Q	G	T	S	V	T	V	S	S		
	97	98	99	100	101	102	103	104	105	106						107	108	109	110	111	112	113	114	115	116	117	118	119		
8F7 heavy chain:Seq ID No:34	Y	C	V	R	G	H	Q	G	T	M						D	Y	W	G	Q	G	T	S	V	T	V	S	S		
	94	95	96	97	98	99	100	101	102	103	104					105	106	107	108	109	110	111	112	113	114	115	116	117		
2C7 heavy chain:Seq ID No:36	Y	C	A	K	K	G	G	S	Y	A	M					D	Y	W	G	Q	G	T	S	V	T	V	S	S		

Figure 4

region	FR1																								CDR1											
Kabat number	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	L21	L22	L23	L24	L25	L26	L27	L27A	L27B							
10A11light chain: Seq ID No:26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29							
	D	I	V	M	T	Q	A	P	S	S	V	P	V	T	P	G	E	S	V	S	I	S	C	R	S	S	K	S	L							
	D	I	V	M	T	Q	S	P	D	S	L	A	V	S	L	G	E	R	A	T	I	N	C	R	S	S	K	S	L							
	E	I	V	L	T	Q	S	P	G	T	L	S	L	S	P	G	E	R	A	T	L	S	C	R	S	S	K	S	L							
	D	I	Q	M	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	R	S	S	K	S	L							
	D	I	V	M	T	Q	T	P	L	S	L	P	V	T	P	G	E	P	A	S	I	S	C	R	S	S	K	S	L							
	D	I	V	M	T	Q	S	P	L	S	L	P	V	T	P	G	E	P	A	S	I	S	C	R	S	S	K	S	L							
	D	I	Q	M	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	R	S	S	K	S	L							
region	CDR1																				FR2								CDR2							
Kabat number	L270	L270D	L27E	L28	L29	L30	L31	L32	L33	L34	L35	L36	L37	L38	L39	L40	L41	L42	L43	L44	L45	L46	L47	L48	L49	L50	L51	L52	L53							
10A11light chain: Seq ID No:26	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58							
	L	H	S	N	G	N	T	Y	L	Y	W	F	L	Q	R	P	G	Q	S	P	Q	L	L	I	Y	R	M	S	N							
	L	H	S	N	G	N	T	Y	L	Y	W	Y	Q	Q	K	P	G	Q	P	P	K	L	L	I	Y	R	M	S	N							
	L	H	S	N	G	N	T	Y	L	Y	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	R	M	S	N							
	L	H	S	N	G	N	T	Y	L	Y	W	Y	Q	Q	K	P	G	K	A	P	K	L	L	I	Y	R	M	S	N							
	L	H	S	N	G	N	T	Y	L	Y	W	Y	L	Q	K	P	G	Q	S	P	Q	L	L	I	Y	R	M	S	N							
	L	H	S	N	G	N	T	Y	L	Y	W	Y	L	Q	K	P	G	Q	S	P	Q	L	L	I	Y	R	M	S	N							
	L	H	S	N	G	N	T	Y	L	Y	W	F	Q	Q	K	P	G	K	A	P	K	S	L	I	Y	R	M	S	N							
region	CDR2																				FR3								CDR3							
Kabat number	L54	L55	L56	L57	L58	L59	L60	L61	L62	L63	L64	L65	L66	L67	L68	L69	L70	L71	L72	L73	L74	L75	L76	L77	L78	L79	L80	L81	L82							
10A11light chain: Seq ID No:26	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87							
	L	A	S	G	V	P	D	R	F	S	G	S	G	S	G	T	A	F	T	L	R	I	S	S	R	V	E	A	E	D						
	L	A	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	S	L	Q	A	E	D							
	L	A	S	G	I	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	R	L	E	P	E	D							
	L	A	S	G	V	P	S	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	S	L	Q	P	E	D							
	L	A	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	K	I	S	R	V	E	A	E	D							
	L	A	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	K	I	S	R	V	E	A	E	D							
	L	A	S	G	V	P	S	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	S	L	Q	P	E	D							
region	FR4																				CDR3								CDR4							
Kabat number	L83	L84	L85	L86	L87	L88	L89	L90	L91	L92	L93	L94	L95	L96	L97	L98	L99	L100	L101	L102	L103	L104	L105	L106	L107	L108	L109									
10A11light chain: Seq ID No:26	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114									
	V	G	V	Y	Y	C	M	Q	H	L	E	Y	P	L	T	F	G	A	G	T	K	L	E	L	K											
	V	A	V	Y	Y	C	M	Q	H	L	E	Y	P	L	T	F	G	Q	G	T	K	L	E	I	K	R	T									
	F	A	V	Y	Y	C	M	Q	H	L	E	Y	P	L	T	F	G	Q	G	T	K	V	E	I	K	R	T									
	F	A	T	Y	Y	C	M	Q	H	L	E	Y	P	L	T	F	G	Q	G	T	K	L	E	I	K	R	T									
	V	G	V	Y	Y	C	M	Q	H	L	E	Y	P	L	T	F	G	Q	G	T	K	L	E	I	K	R	T									
	V	G	V	Y	Y	C	M	Q	H	L	E	Y	P	L	T	F	G	Q	G	T	K	V	E	I	K	R	T									
	F	A	T	Y	Y	C	M	Q	H	L	E	Y	P	L	T	F	G	Q	G	T	K	L	E	I	K	R	T									

Figure 5

region	FR1																												
Kabat number	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22	H23	H24	H25	H26	H27	H28	H29
10A11heavy chain: Seq ID No:27	E	V	Q	L	V	E	S	G	G	R	L	V	Q	P	K	G	S	L	K	L	S	C	A	A	S	G	F	A	F
IGHV3-15 T94R: Seq ID No:41	E	V	Q	L	V	E	S	G	G	A	L	V	K	P	G	G	S	L	R	L	S	C	A	A	S	G	F	T	F
IGHV 3-73: Seq ID No:46	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	K	L	S	C	A	A	S	G	F	A	F

region	CDR1										FR2										CDR2									
Kabat number	H30	H31	H32	H33	H34	H35	H36	H37	H38	H39	H40	H41	H42	H43	H44	H45	H46	H47	H48	H49	H50	H51	H52	H52A	H52B	H52C	H53	H54	H55	
10A11heavy chain: Seq ID No:27	N	T	Y	A	L	Y	W	I	R	Q	A	P	G	K	G	L	E	W	V	A	R	I	R	S	K	S	N	N	Y	
IGHV3-15 T94R: Seq ID No:41	S	T	Y	A	L	Y	W	V	R	Q	A	P	G	K	G	L	E	W	V	G	R	I	R	S	K	S	N	N	Y	
IGHV 3-73: Seq ID No:46	N	T	Y	A	L	Y	W	V	R	Q	A	S	G	K	G	L	E	W	V	G	R	I	R	S	K	S	N	N	Y	

region	CDR2										FR3																		
Kabat number	H56	H57	H58	H59	H60	H61	H62	H63	H64	H65	H66	H67	H68	H69	H70	H71	H72	H73	H74	H75	H76	H77	H78	H79	H80	H81	H82	H82a	H82b
10A11heavy chain: Seq ID No:27	A	T	Y	Y	A	D	S	V	K	D	R	F	T	I	S	R	D	D	S	Q	S	M	L	Y	L	Q	M	N	N
IGHV3-15 T94R: Seq ID No:41	A	T	Y	Y	A	D	S	V	K	D	R	F	T	I	S	R	D	D	S	K	N	T	L	Y	L	Q	M	N	S
IGHV 3-73: Seq ID No:46	A	T	Y	Y	A	D	S	V	K	D	R	F	T	I	S	R	D	D	S	K	N	T	A	Y	L	Q	M	N	S

region	FR3										CDR3										FR4										
Kabat number	H82c	H83	H84	H85	H86	H87	H88	H89	H90	H91	H92	H93	H94	H95	H96	H97	H98	H99	H100	H100a	H100b	H100c	H100d	H100e	H100f	H100g	H100h	H100i	H100j	H100k	H100l
10A11heavy chain: Seq ID No:27	L	K	T	E	D	T	A	M	Y	Y	C	V	R	A	R	F	Y	Y	S	D	Y	G	Y	A	M	D	Y	W	G		
IGHV3-15 T94R: Seq ID No:41	L	K	T	E	D	T	A	V	Y	Y	C	T	R	A	R	F	Y	Y	S	D	Y	G	Y	A	M	D	Y	W	G		
IGHV 3-73: Seq ID No:46	L	K	T	E	D	T	A	V	Y	Y	C	T	R	A	R	F	Y	Y	S	D	Y	G	Y	A	M	D	Y	W	G		

region	FR4									
Kabat number	H105	H106	H107	H108	H109	H110	H111	H112	H113	
10A11heavy chain: Seq ID No:27	Q	G	T	S	V	T	V	S	S	
IGHV3-15 T94R: Seq ID No:41	Q	G	T	L	V	T	V	S	S	
IGHV 3-73: Seq ID No:46	Q	G	T	L	V	T	V	S	S	

Figure 6

region	FR1																											CDR1						
Kabat number	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	L21	L22	L23	L24	L25	L26	L27	L27A	L27B					
19D7 light chain : Seq ID No: 3 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29					
IGKV3-15 : Seq ID No: 5 4	D	I	V	M	T	Q	A	A	P	S	V	P	V	T	P	G	E	S	V	S	I	S	C	R	S	S	K	S	L					
IGKV2-18 : Seq ID No: 5 5	D	I	V	M	T	Q	T	P	P	S	L	P	V	N	P	G	E	P	A	S	I	S	C	R	S	S	K	S	L					
IGKV3-20 : Seq ID No: 5 6	E	I	V	L	T	Q	S	P	G	T	L	S	L	S	P	G	E	R	A	T	L	S	C	R	S	S	K	S	L					

region	CDR1																			FR2										CDR2						
Kabat number	L27C	L27D	L27E	L28	L29	L30	L31	L32	L33	L34	L35	L36	L37	L38	L39	L40	L41	L42	L43	L44	L45	L46	L47	L48	L49	L50	L51	L52	L53							
19D7 light chain : Seq ID No: 3 1	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58							
IGKV3-15 : Seq ID No: 5 4	L	H	S	N	G	N	T	Y	L	Y	W	F	L	Q	R	P	G	Q	S	P	Q	L	L	I	Y	R	V	S	N							
IGKV2-18 : Seq ID No: 5 5	L	H	S	N	G	N	T	Y	L	Y	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	R	V	S	N							
IGKV3-20 : Seq ID No: 5 6	L	H	S	N	G	N	T	Y	L	Y	W	Y	L	Q	K	P	G	Q	S	P	Q	L	L	I	Y	R	V	S	N							
IGKV3-20 : Seq ID No: 5 6	L	H	S	N	G	N	T	Y	L	Y	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	R	V	S	N							

region	CDR2																			FR3																			CDR3						
Kabat number	L54	L55	L56	L57	L58	L59	L60	L61	L62	L63	L64	L65	L66	L67	L68	L69	L70	L71	L72	L73	L74	L75	L76	L77	L78	L79	L80	L81	L82																
19D7 light chain : Seq ID No: 3 1	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87																
IGKV3-15 : Seq ID No: 5 4	L	A	S	G	V	P	D	R	F	S	G	S	G	S	G	A	A	F	T	L	R	I	S	R	V	E	A	E	D																
IGKV2-18 : Seq ID No: 5 5	L	A	S	G	V	P	D	R	F	S	G	S	G	S	G	T	E	F	T	L	T	I	S	S	L	Q	S	E	D																
IGKV3-20 : Seq ID No: 5 6	L	A	S	G	V	P	D	R	F	S	G	S	G	S	G	S	D	F	T	L	K	I	S	W	V	E	A	E	D																
IGKV3-20 : Seq ID No: 5 6	L	A	S	G	I	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	R	L	E	P	E	D																

region	FR3																			CDR3										FR4									
Kabat number	L83	L84	L85	L86	L87	L88	L89	L90	L91	L92	L93	L94	L95	L96	L97	L98	L99	L100	L101	L102	L103	L104	L105	L106	L107														
19D7 light chain : Seq ID No: 3 1	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112														
IGKV3-15 : Seq ID No: 5 4	V	G	V	Y	Y	C	M	Q	H	L	E	Y	P	F	T	F	G	S	G	T	K	L	E	I	K														
IGKV2-18 : Seq ID No: 5 5	F	A	V	Y	Y	C	M	Q	H	L	E	Y	P	F	T	F	G	Q	G	T	K	L	E	I	K														
IGKV3-20 : Seq ID No: 5 6	V	G	V	Y	Y	C	M	Q	H	L	E	Y	P	F	T	F	G	Q	G	T	K	L	E	I	K														
IGKV3-20 : Seq ID No: 5 6	F	A	V	Y	Y	C	M	Q	H	L	E	Y	P	F	T	F	G	Q	G	T	K	L	E	I	K														

Figure 7

region		FR1																												
Kabat number		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22	H23	H24	H25	H26	H27	H28	H29
19D7 heavy chain : Seq ID No: 3 2		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
IGHV 3-15 T94R : Seq ID No: 5 7		E	V	Q	L	V	E	S	G	G	R	L	V	Q	P	K	G	S	L	K	L	S	C	A	A	S	G	F	T	F
IGHV 3-15 T94R : Seq ID No: 5 7		E	V	Q	L	V	E	S	G	G	A	L	V	K	P	G	G	S	L	R	L	S	C	A	A	S	G	F	T	F
IGHV 3-73 : Seq ID No: 5 8		E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	K	L	S	C	A	A	S	G	F	T	F

region		CDR1										FR2										CDR2									
Kabat number		FR1	H30	H31	H32	H33	H34	H35	H36	H37	H38	H39	H40	H41	H42	H43	H44	H45	H46	H47	H48	H49	H50	H51	H52	H52A	H52B	H52C	H53	H54	H55
19D7 heavy chain : Seq ID No: 3 2		30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	
19D7 heavy chain : Seq ID No: 3 2		N	T	Y	A	M	Y	W	I	R	Q	A	P	G	K	G	L	E	W	V	A	R	I	R	S	K	S	N	N	Y	
IGHV 3-15 T94R : Seq ID No: 5 7		S	T	Y	A	M	Y	W	V	R	Q	A	P	G	K	G	L	E	W	V	G	R	I	R	S	K	S	N	N	Y	
IGHV 3-73 : Seq ID No: 5 8		S	T	Y	A	M	Y	W	V	R	Q	A	S	G	K	G	L	E	W	V	G	R	I	R	S	K	S	N	N	Y	

region		CDR2										FR3																			
Kabat number		H56	H57	H58	H59	H60	H61	H62	H63	H64	H65	H66	H67	H68	H69	H70	H71	H72	H73	H74	H75	H76	H77	H78	H79	H80	H81	H82	H82A	H82B	
19D7 heavy chain : Seq ID No: 3 2		59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	
19D7 heavy chain : Seq ID No: 3 2		A	T	Y	Y	A	D	S	V	K	D	R	F	T	I	S	R	D	D	S	Q	S	S	M	L	Y	L	Q	M	N	N
IGHV 3-15 T94R : Seq ID No: 5 7		A	T	Y	Y	A	D	S	V	K	D	R	F	T	I	S	R	D	D	S	K	N	T	L	Y	L	Q	M	N	S	
IGHV 3-73 : Seq ID No: 5 8		A	T	Y	Y	A	D	S	V	K	D	R	F	T	I	S	R	D	D	S	K	N	T	A	Y	L	Q	M	N	S	

region		FR3										CDR3										FR4									
Kabat number		H82C	H83	H84	H85	H86	H87	H88	H89	H90	H91	H92	H93	H94	H95	H96	H97	H98	H99	H100	H100A	H100B	H100C	H101	H102	H103	H104	H105	H106		
19D7 heavy chain : Seq ID No: 3 2		88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	
19D7 heavy chain : Seq ID No: 3 2		L	K	T	E	D	T	A	M	Y	Y	C	V	R	G	G	Y	G	N	Y	R	Y	A	M	D	Y	W	G	Q	G	
IGHV 3-15 T94R : Seq ID No: 5 7		L	K	T	E	D	T	A	V	Y	Y	C	T	R	G	G	Y	G	N	Y	R	Y	A	M	D	Y	W	G	Q	G	
IGHV 3-73 : Seq ID No: 5 8		L	K	T	E	D	T	A	V	Y	Y	C	T	R	G	G	Y	G	N	Y	R	Y	A	M	D	Y	W	G	Q	G	

region		FR4							
Kabat number		H107	H108	H109	H110	H111	H112	H113	
19D7 heavy chain : Seq ID No: 3 2		117	118	119	120	121	122	123	
19D7 heavy chain : Seq ID No: 3 2		T	S	V	T	V	S	S	
IGHV 3-15 T94R : Seq ID No: 5 7		T	T	V	T	V	S	S	
IGHV 3-73 : Seq ID No: 5 8		T	T	V	T	V	S	S	

Figure 8

