

Ab ID	L/H chains	CDRH1																														alt. CDRH1													
		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	33	34	35									
cAb0301	parental	E	V	Q	L	Q	L	Q	S	G	P	E	L	V	R	P	G	A	S	V	K	M	S	C	K	A	S	G	Y	T	F	L	D	N	Y	M	I	W	V	K	Q	S	H	G	K
human acceptor A		Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	T	D	N	Y	M	I	W	V	R	Q	A	P	G	Q
Ab1	h0301-L0H0	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	T	D	N	Y	M	I	W	V	R	Q	A	P	G	Q
Ab2	h0301-L0H1	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	T	D	N	Y	M	I	W	V	R	Q	A	P	G	Q
Ab3	h0301-L0H2	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	T	D	N	Y	M	I	W	V	R	Q	A	P	G	Q
Ab4	h0301-L1H0	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	T	D	N	Y	M	I	W	V	R	Q	A	P	G	Q
Ab5	h0301-L1H1	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	T	D	N	Y	M	I	W	V	R	Q	A	P	G	Q
Ab6	h0301-L1H2	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	T	D	N	Y	M	I	W	V	R	Q	A	P	G	Q
cAb0302	parental	E	I	Q	L	Q	L	Q	S	G	P	E	L	V	K	P	G	A	S	V	K	M	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	K	Q	K	P	G	Q
human acceptor B		Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	R	Q	A	P	G	Q
Ab7	h0302-L0H1	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	R	Q	A	P	G	Q
Ab8	h0302-L1H1	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	R	Q	A	P	G	Q
Ab9	h0302-L2H1	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	R	Q	A	P	G	Q
Ab10	h0302-L0H2	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	R	Q	A	P	G	Q
Ab11	h0302-L1H2	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	R	Q	A	P	G	Q
Ab12	h0302-L2H2	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	T	F	S	D	F	N	I	H	W	V	R	Q	A	P	G	Q
cAb 0311	parental	E	I	Q	L	Q	L	Q	S	G	P	D	L	M	K	P	G	A	S	V	K	M	S	C	K	A	S	G	Y	I	F	T	D	Y	N	M	H	W	V	K	Q	N	Q	G	K
human acceptor C		Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	I	F	T	D	Y	N	M	H	W	V	R	Q	A	P	G	Q
Ab13	h0311-L0H1	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	I	F	T	D	Y	N	M	H	W	V	R	Q	A	P	G	Q
Ab14	h0311-L1H1	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	I	F	T	D	Y	N	M	H	W	V	R	Q	A	P	G	Q
Ab15	h0311-L0H2	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	I	F	T	D	Y	N	M	H	W	V	R	Q	A	P	G	Q
Ab16	h0311-L1H2	Q	V	Q	L	V	Q	S	G	A	E	V	K	K	K	P	G	S	S	V	K	V	S	C	K	A	S	G	Y	I	F	T	D	Y	N	M	H	W	V	R	Q	A	P	G	Q

FIG. 1A

Ab ID	L/H chains	CDRH2																							
		44	45	46	47	48	49	50	51	52	52a	53	54	55	56	57	58	59	60	61	62	63	64	65	
cAb0301	parental	S	L	E	W	I	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
human	acceptor A	G	L	E	W	M	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
Ab1	h0301-LOH0	C	L	E	W	M	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
Ab2	h0301-LOH1	G	L	E	W	M	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
Ab3	h0301-LOH2	G	L	E	W	I	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
Ab4	h0301-L1H0	G	L	E	W	M	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
Ab5	h0301-L1H1	G	L	E	W	M	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
Ab6	h0301-L1H2	G	L	E	W	I	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	
cAb0302	parental	G	L	E	W	I	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
human	acceptor B	G	L	E	W	M	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
Ab7	h0302-LOH1	G	L	E	W	M	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
Ab8	h0302-L1H1	G	L	E	W	M	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
Ab9	h0302-L2H1	G	L	E	W	M	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
Ab10	h0302-LOH2	G	L	E	W	I	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
Ab11	h0302-L1H2	G	L	E	W	I	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
Ab12	h0302-L2H2	G	L	E	W	I	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	
cAb 0311	parental	S	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	
human	acceptor C	G	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	
Ab13	h0311-LOH1	G	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	
Ab14	h0311-L1H1	G	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	
Ab15	h0311-LOH2	G	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	
Ab16	h0311-L1H2	G	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	

FIG. 1B

Ab ID	L/H chains	82a	82b	82b	83	84	85	86	87	88	89	90	91	92	93	94	CDRH3										103	104	105	106	107	108	109	110	111	112	113	SEQ ID NO				
Ab ID	L/H chains	82a	82b	82b	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	100a	100b	100c	100d	100e	101	102	103	104	105	106	107	108	109	110		111	112	113	
cAb0301	parental	N	S	S	L	T	S	E	D	S	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	G	Q	G	T	S	V	T	V	S	S	9
human acceptor A		S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	G	Q	G	T	L	V	T	V	S	S	69-72
Ab1	h0301-LOH0	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	G	Q	G	T	L	V	T	V	S	S	39
Ab2	h0301-LOH1	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	G	Q	G	T	L	V	T	V	S	S	40
Ab3	h0301-LOH2	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	G	Q	G	T	L	V	T	V	S	S	41
Ab4	h0301-L1H0	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	G	Q	G	T	L	V	T	V	S	S	39
Ab5	h0301-L1H1	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	C	Q	G	T	L	V	T	V	S	S	40
Ab6	h0301-L1H2	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	E	S	P	Y	F	S	N	L	Y	V	M	D	Y	W	G	Q	G	T	L	V	T	V	S	S	41
CAb0302	parental	S	S	L	T	S	E	D	S	A	V	Y	Y	Y	C	A	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	S	I	T	V	S	S	11	
human acceptor B		S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	L	V	T	V	S	S	73-76
Ab7	h0302-LOH1	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	S	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	L	V	T	V	S	S	42
Ab8	h0302-L1H1	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	S	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	L	V	T	V	S	S	42
Ab9	h0302-L2H1	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	S	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	L	V	T	V	S	S	42
Ab10	h0302-LOH2	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	S	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	L	V	T	V	S	S	43
Ab11	h0302-L1H2	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	S	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	L	V	T	V	S	S	43
Ab12	h0302-L2H2	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	S	S	Y	F	D	G	T	F	D	Y	A	L	D	Y	W	G	Q	G	T	L	V	T	V	S	S	43
cAb 0311	parental	H	S	L	T	S	E	D	S	A	V	Y	Y	Y	C	T	R	A	L	Y	H	S	N	F	G	W	Y	F	D	S	W	G	K	G	T	T	L	T	V	S	S	13
human acceptor C		S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	R	A	L	Y	H	S	N	F	G	W	Y	F	D	S	W	G	Q	G	T	L	V	T	V	S	S	77-80
Ab13	h0311-LOH1	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	T	R	A	L	Y	H	S	N	F	G	W	Y	F	D	S	W	G	Q	G	T	L	V	T	V	S	S	44
Ab14	h0311-L1H1	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	T	R	A	L	Y	H	S	N	F	G	W	Y	F	D	S	W	G	Q	G	T	L	V	T	V	S	S	44
Ab15	h0311-LOH2	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	T	R	A	L	Y	H	S	N	F	G	W	Y	F	D	S	W	G	Q	G	T	L	V	T	V	S	S	45
Ab16	h0311-L1H2	S	S	S	L	R	S	E	D	T	A	V	Y	Y	C	T	R	A	L	Y	H	S	N	F	G	W	Y	F	D	S	W	G	Q	G	T	L	V	T	V	S	S	45

FIG. 1C

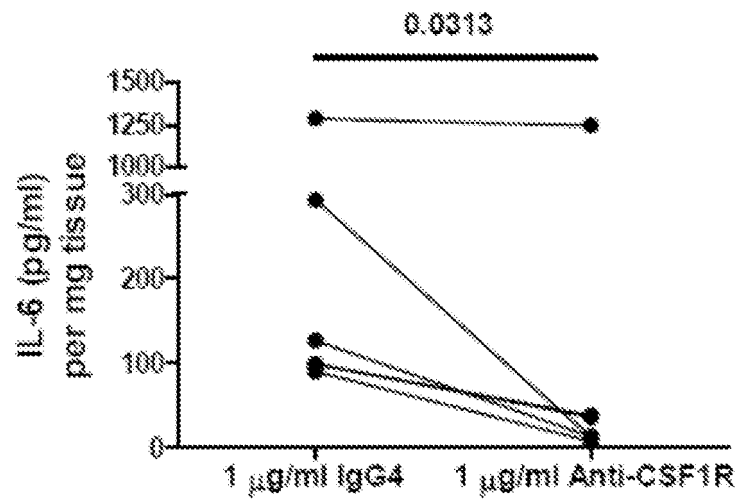
Ab ID	L/H chains	CDRL1																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
cAb0301	parental	N	I	V	L	T	Q	S	P	A	S	L	A	V	S	L	G	Q	R	A	T	I	S	C	23
human acceptor D		E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	C	E	R	A	T	L	S	C	22
Ab1	h0301-L0H0	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	21
Ab2	h0301-L0H1	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	20
Ab3	h0301-L0H2	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	19
Ab4	h0301-L1H0	N	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	18
Ab5	h0301-L1H1	N	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	17
Ab6	h0301-L1H2	N	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	16
cAb0302	parental	D	V	V	V	T	Q	T	P	A	S	L	A	V	S	L	G	Q	R	A	T	I	S	C	15
human acceptor E		E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	14
Ab7	h0302-L0H1	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	13
Ab8	h0302-L1H1	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	12
Ab9	h0302-L2H1	E	I	V	V	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	11
Ab10	h0302-L0H2	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	10
Ab11	h0302-L1H2	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	9
Ab12	h0302-L2H2	E	I	V	V	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	8
cAb 0311	parental	D	I	V	L	T	Q	S	P	A	S	L	A	V	S	L	G	Q	R	A	T	I	S	C	7
human acceptor F		E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	6
Ab13	h0311-L0H1	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	5
Ab14	h0311-L1H1	D	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	4
Ab15	h0311-L0H2	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	C	E	R	A	T	L	S	C	3
Ab16	h0311-L1H2	D	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	2

Ab ID	L/H chains	CDRL2												70																							
		56	55	54	53	52	51	50	49	48	47	46	45		44	43	42	41	40	39	38	37	36	35													
cAb0301 parental human acceptor D	Ab1	h0301-L0H0	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	A	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab2	h0301-L0H1	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	A	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab3	h0301-L0H2	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	A	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab4	h0301-L1H0	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	A	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab5	h0301-L1H1	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	A	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab6	h0301-L1H2	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	A	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
cAb0302 parental human acceptor F	Ab7	h0302-L0H1	W	F	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	G	S	R	T	D
	Ab8	h0302-L1H1	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab9	h0302-L2H1	W	F	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab10	h0302-L0H2	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab11	h0302-L1H2	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab12	h0302-L2H2	W	F	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	R	T	D	
cAb 0311 parental human acceptor F	Ab13	h0311-L0H1	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	A	D	
	Ab14	h0311-L1H1	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	T	D	
	Ab15	h0311-L0H2	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	A	D	
	Ab16	h0311-L1H2	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	A	D	

FIG. 2B

Ab ID	L/H chains	CDRL3																SEQ ID NO																							
		71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86		87	88																					
cAb0301	parental	F	T	L	T	I	N	I	H	P	V	E	E	E	D	A	A	T	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	L	E	I	K	10
	human acceptor D	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	V	E	I	K	81-84
Ab1	h0301-L0H0	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	V	E	I	K	46
Ab2	h0301-L0H1	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	V	E	I	K	46
Ab3	h0301-L0H2	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	V	E	I	K	46
Ab4	h0301-L1H0	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	V	E	I	K	47
Ab5	h0301-L1H1	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	V	E	I	K	47
Ab6	h0301-L1H2	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	H	L	S	N	E	D	L	L	S	T	F	G	G	G	T	K	V	E	I	K	47
cAb0302	parental	F	T	L	T	I	D	I	P	V	E	A	D	D	A	A	T	Y	F	C	Q	Q	S	K	E	L	P	W	T	F	G	G	Q	G	T	R	L	E	I	K	12
	human acceptor E	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	85-88
Ab7	h0302-L0H1	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	48
Ab8	h0302-L1H1	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	49
Ab9	h0302-L2H1	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	50
Ab10	h0302-L0H2	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	48
Ab11	h0302-L1H2	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	49
Ab12	h0302-L2H2	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	50
cAb 0311	parental	F	T	L	T	I	T	I	H	P	V	E	E	E	D	A	A	T	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	G	G	T	R	L	E	I	K	14	
	human acceptor F	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	G	N	E	D	P	W	T	F	C	Q	C	T	K	V	E	I	K	89-92	
Ab13	h0311-L0H1	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	51
Ab14	h0311-L1H1	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	52
Ab15	h0311-L0H2	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	51
Ab16	h0311-L1H2	F	T	L	T	I	S	I	S	S	L	E	P	E	D	F	A	V	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	Q	G	T	K	V	E	I	K	52

FIG. 2C

**FIG. 3**

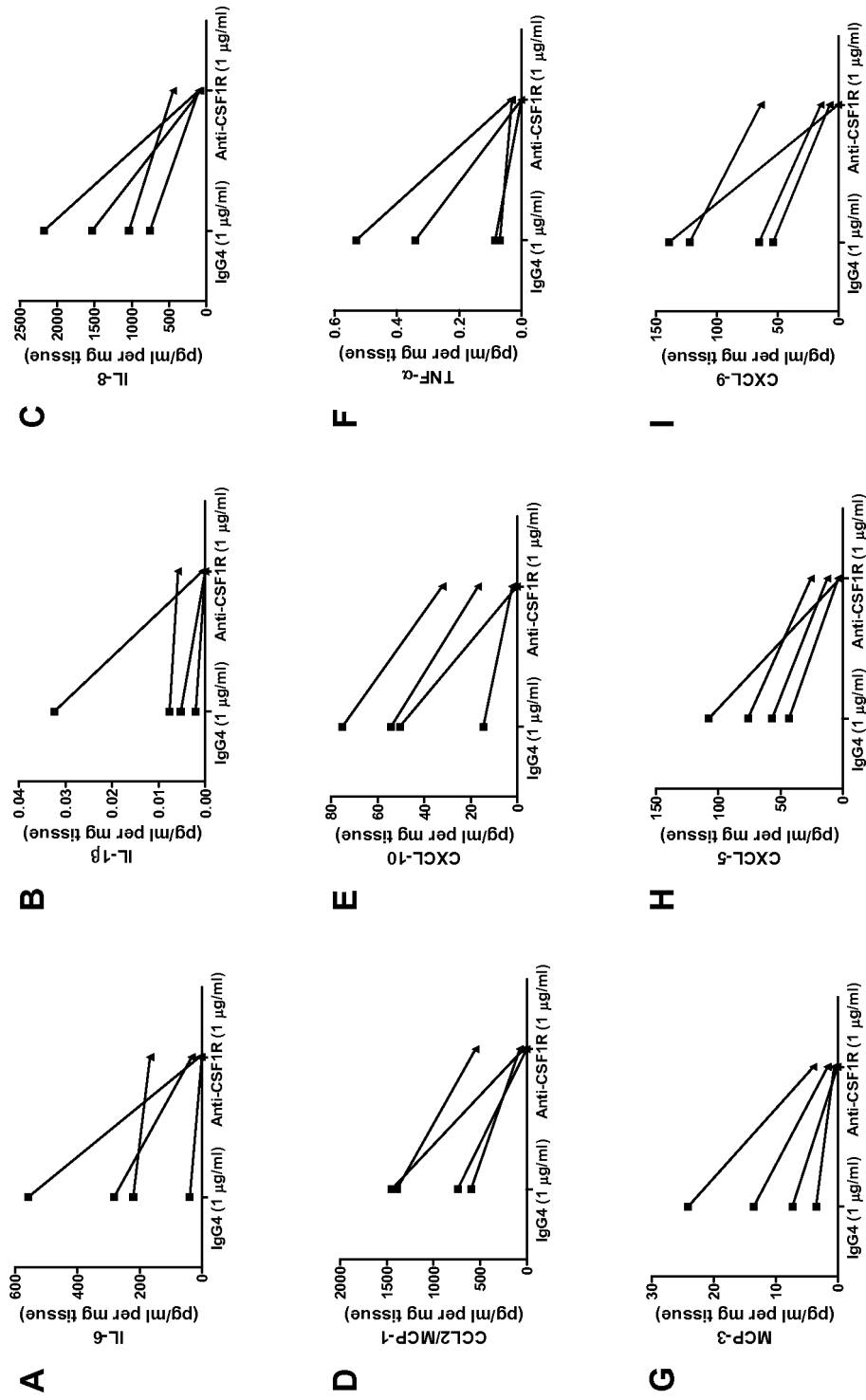


FIG. 4

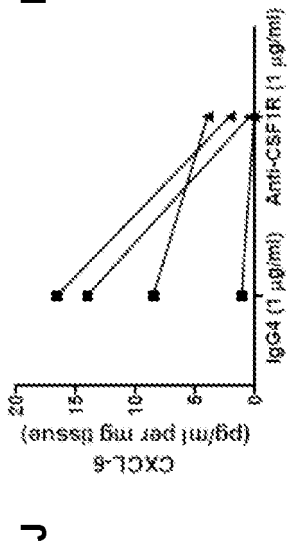
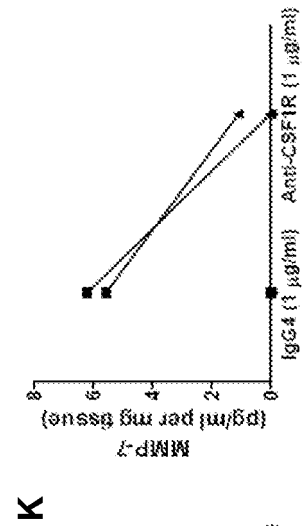
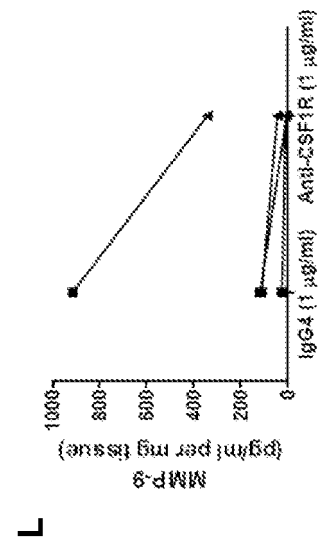
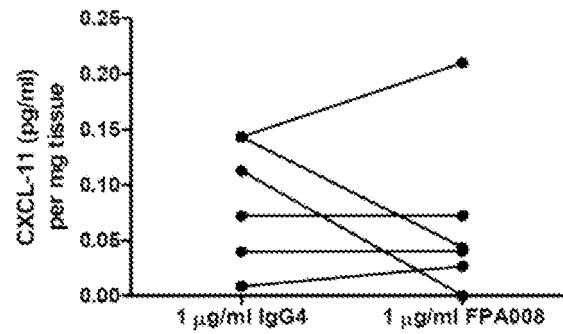
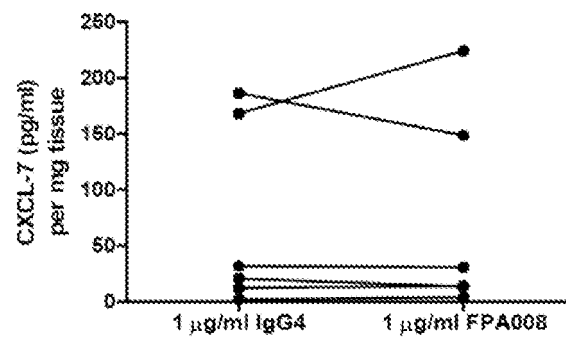
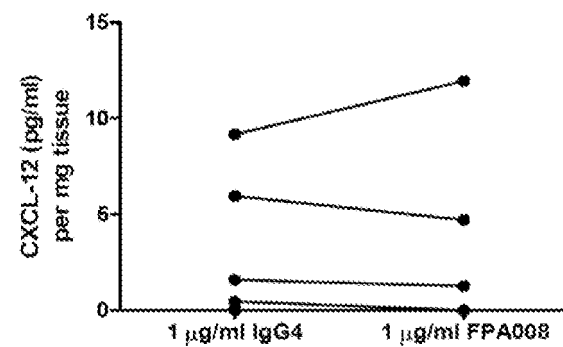


FIG. 4 (cont.)

A**B****C****FIG. 5**

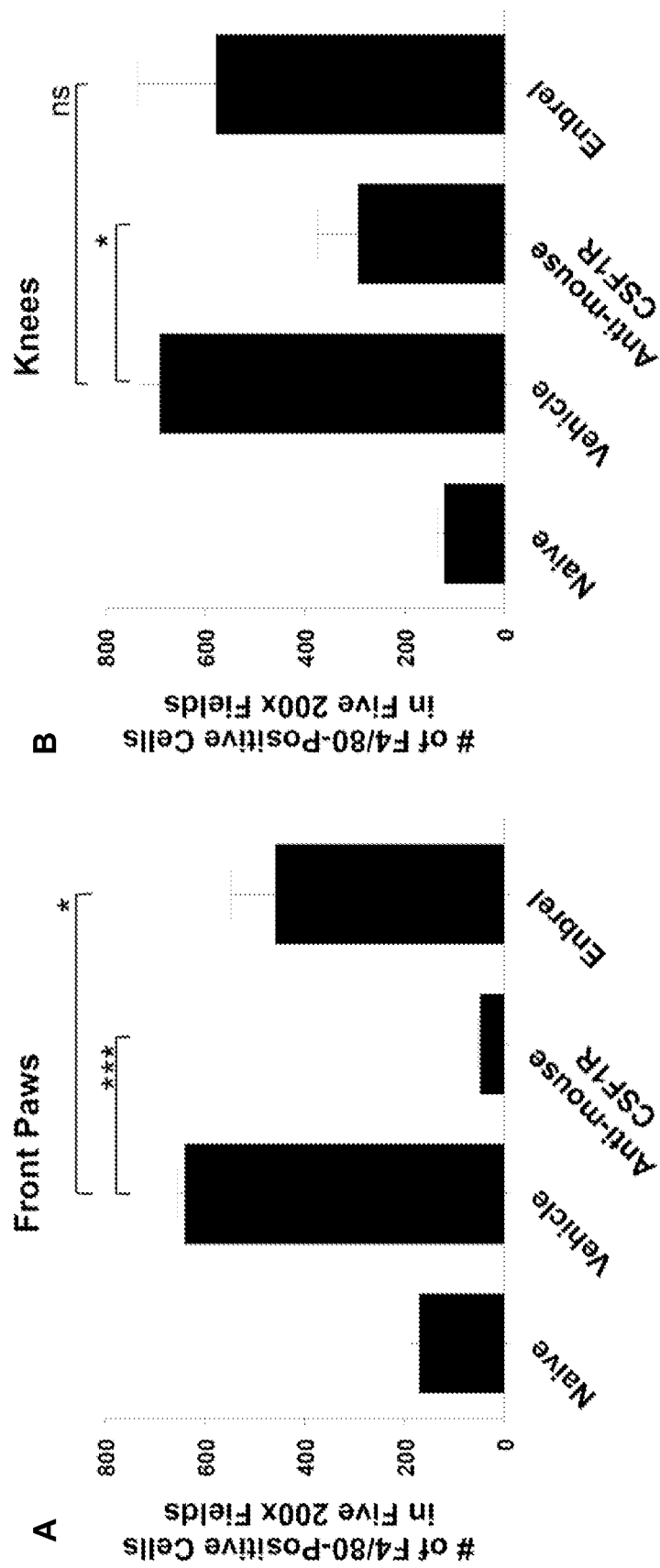


FIG. 6

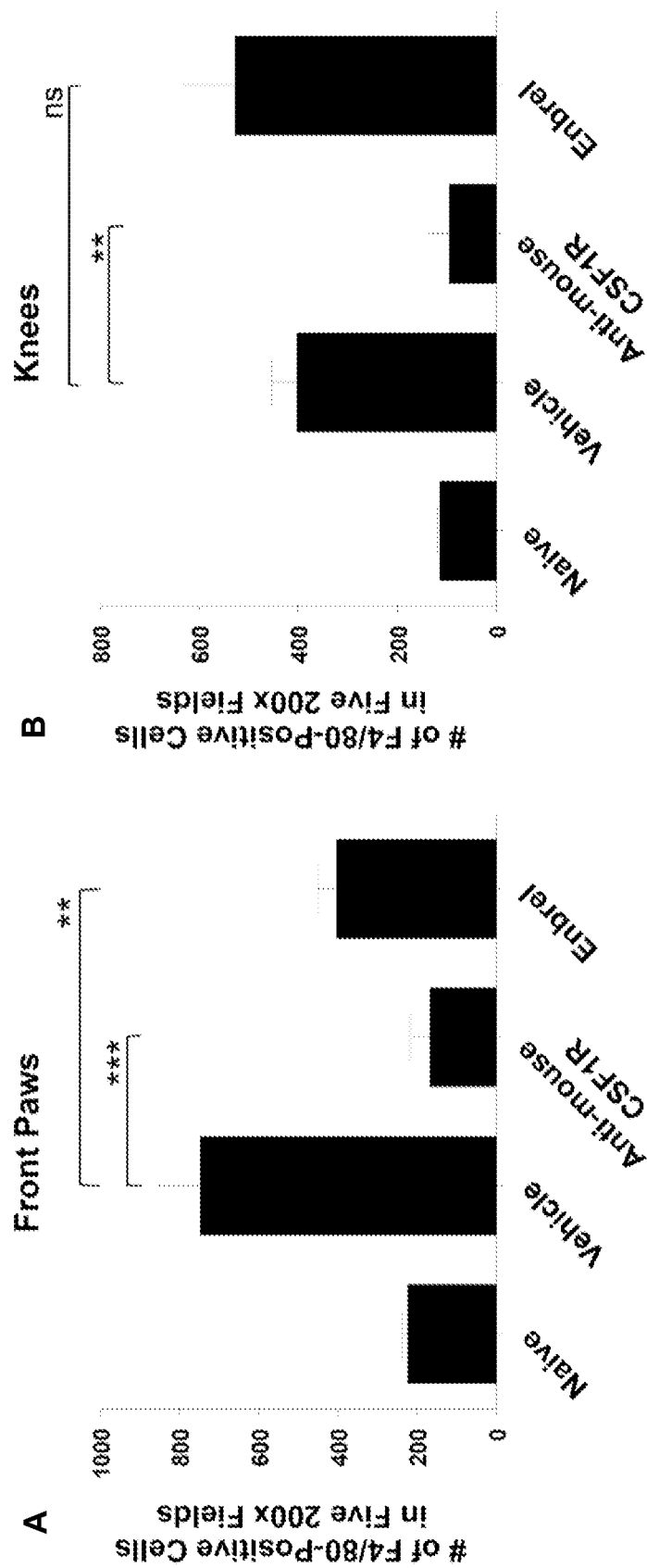


FIG. 7