																								CDRH1					alt. CDRH1								
Ab ID	L/H chains	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	36	37	38	39	40	41	42	43
cAb0301	parental	E	V	Q	L	Q	Q	S	G	P	E	L	V	R	P	G	A	S	V	K	M	S	C	K	A	S	G	Y	T	F	T	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	P	G	S	S	V	K	V	S	C	K	A	S												W	V	R	Q	A	P	G	Q
Ab1	h0301-L0H0	Q	V	Q	L	V	Q	S	G	A	E	V	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	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	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	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	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	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	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	P	G	S	S	V	K	V	S	C	K	A	S												W	V	R	Q	A	P	G	Q
Ab7	h0302-L0H1	Q	V	Q	L	V	Q	S	G	A	E	V	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	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	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	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	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	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	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	P	G	S	S	V	K	V	S	C	K	A	S												W	V	R	Q	A	P	G	Q
Ab13	h0311-L0H1	Q	V	Q	L	V	Q	S	G	A	E	V	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	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	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	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

								CDRH2																																	
Ab ID	L/H chains	44	45	46	47	48	49	50	51	52	52a	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82
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	K	A	T	L	T	V	E	K	S	S	S	T	A	Y	M	Q	L
	human acceptor A	G	L	E	W	M	G																		R	V	T	I	T	A	D	K	S	T	S	T	A	Y	M	E	L
Ab1	h0301-L0H0	G	L	E	W	M	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	R	V	T	I	T	A	D	K	S	T	S	T	A	Y	M	E	L
Ab2	h0301-L0H1	G	L	E	W	M	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	R	V	T	I	T	V	D	K	S	T	S	T	A	Y	M	E	L
Ab3	h0301-L0H2	G	L	E	W	I	G	D	I	N	P	Y	N	G	G	T	T	F	N	Q	K	F	K	G	R	A	T	L	T	V	D	K	S	T	S	T	A	Y	M	E	L
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	R	V	T	I	T	A	D	K	S	T	S	T	A	Y	M	E	L
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	R	V	T	I	T	V	D	K	S	T	S	T	A	Y	M	E	L
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	R	A	T	L	T	V	D	K	S	T	S	T	A	Y	M	E	L
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	K	A	T	L	T	S	D	R	S	S	S	T	A	Y	M	D	L
	human acceptor B	G	L	E	W	M	G																		R	V	T	I	T	A	D	K	S	T	S	T	A	Y	M	E	L
Ab7	h0302-L0H1	G	L	E	W	M	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	R	V	T	I	T	S	D	K	S	T	S	T	A	Y	M	E	L
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	R	V	T	I	T	S	D	K	S	T	S	T	A	Y	M	E	L
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	R	V	T	I	T	S	D	K	S	T	S	T	A	Y	M	E	L
Ab10	h0302-L0H2	G	L	E	W	I	G	Y	I	N	P	Y	T	D	V	T	V	Y	N	E	K	F	K	G	R	A	T	L	T	S	D	K	S	T	S	T	A	Y	M	E	L
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	R	A	T	L	T	S	D	K	S	T	S	T	A	Y	M	E	L
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	R	A	T	L	T	S	D	K	S	T	S	T	A	Y	M	E	L
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	T	T	T	L	T	V	D	K	S	S	S	T	A	Y	M	D	L
	human acceptor C	G	L	E	W	M	G																		R	V	T	I	T	A	D	K	S	T	S	T	A	Y	M	E	L
Ab13	h0311-L0H1	G	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	R	V	T	I	T	V	D	K	S	T	S	T	A	Y	M	E	L
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	R	V	T	I	T	V	D	K	S	T	S	T	A	Y	M	E	L
Ab15	h0311-L0H2	G	L	E	W	M	G	E	I	N	P	N	N	G	V	V	V	Y	N	Q	K	F	K	G	T	T	T	L	T	V	D	K	S	T	S	T	A	Y	M	E	L
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	T	T	T	L	T	V	D	K	S	T	S	T	A	Y	M	E	L

FIG. 1B

Ab ID	L/H chains	82a	82b	82b	83	84	85	86	87	88	89	90	91	92	93	94	CDRH3 95	96	97	98	99	100	100a	100b	100c	100d	100e	101	102	103	104	105	106	107	108	109	110	111	112	113	SEQ ID NO
cAb0301	parental	N	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	L	R	S	E	D	T	A	V	Y	Y	C	A	R														W	G	Q	G	T	L	V	T	V	S	S	69-72
Ab1	h0301-L0H0	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-L0H1	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-L0H2	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	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	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
Ab6	h0301-L1H2	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	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	L	R	S	E	D	T	A	V	Y	Y	C	A	R														W	G	Q	G	T	L	V	T	V	S	S	73-76
Ab7	h0302-L0H1	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	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	L	R	S	E	D	T	A	V	Y	Y	C	A	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	L	R	S	E	D	T	A	V	Y	Y	C	A	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-L0H2	S	S	L	R	S	E	D	T	A	V	Y	Y	C	A	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	L	R	S	E	D	T	A	V	Y	Y	C	A	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	L	R	S	E	D	T	A	V	Y	Y	C	A	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	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	L	R	S	E	D	T	A	V	Y	Y	C	A	R														W	G	Q	G	T	L	V	T	V	S	S	77-80
Ab13	h0311-L0H1	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	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-L0H2	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
Ab16	h0311-L1H2	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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	CDRL1 24	25	26	27	27a	27b	27c	27d	28	29	30	31	32	33	34
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	K	A	S	Q	S	V	D	Y	D	G	D	N	Y	M	N
human acceptor D		E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C															
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	K	A	S	Q	S	V	D	Y	D	G	D	N	Y	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	N	Y	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	N	Y	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	N	Y	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	N	Y	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	N	Y	M	N
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	R	A	S	E	S	V	D	N	Y	G	L	S	F	M	N
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															
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	R	A	S	E	S	V	D	N	Y	G	L	S	F	M	N
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	R	A	S	E	S	V	D	N	Y	G	L	S	F	M	N
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	R	A	S	E	S	V	D	N	Y	G	L	S	F	M	N
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	R	A	S	E	S	V	D	N	Y	G	L	S	F	M	N
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	R	A	S	E	S	V	D	N	Y	G	L	S	F	M	N
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	R	A	S	E	S	V	D	N	Y	G	L	S	F	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	S	H	M	N
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															
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	K	A	S	Q	S	V	D	Y	D	G	D	S	H	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	S	H	M	N
Ab15	h0311-L0H2	E	I	V	L	T	Q	S	P	A	T	L	S	L	S	P	G	E	R	A	T	L	S	C	K	A	S	Q	S	V	D	Y	D	G	D	S	H	M	N
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	K	A	S	Q	S	V	D	Y	D	G	D	S	H	M	N

FIG. 2A

Ab ID	L/H chains	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	CDRL2 50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
cAb0301	parental	W	Y	Q	Q	K	P	G	Q	P	P	K	L	L	I	Y	A	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	S	G	T	D
	human acceptor D	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y								G	I	P	A	R	F	S	G	S	G	S	G	T	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	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	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	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	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	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	S	G	T	D
cAb0302	parental	W	F	Q	Q	K	P	G	Q	P	P	K	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	G	G	S	R	T	D
	human acceptor E	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y								G	I	P	A	R	F	S	G	S	G	S	G	T	D
Ab7	h0302-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	S	G	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	S	R	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	S	R	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	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	S	R	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	G	S	R	T	D
cAb 0311	parental	W	Y	Q	Q	K	P	G	Q	P	P	K	L	L	I	Y	T	A	S	N	L	E	S	G	I	P	A	R	F	S	G	S	G	S	G	A	D
	human acceptor F	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y								G	I	P	A	R	F	S	G	S	G	S	G	T	D
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	S	G	T	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	S	G	A	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	S	G	T	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	S	G	A	D

FIG. 2B

Ab ID	L/H chains	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	CDRL3 89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	SEQ ID NO
cAb0301	parental	F	T	L	N	I	H	P	V	E	E	E	D	A	A	T	Y	Y	C	H	L	S	N	E	D	L	S	T	F	G	G	G	T	K	L	E	I	K	10
human acceptor D		F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C										F	G	G	G	T	K	V	E	I	K	81-84
Ab1	h0301-L0H0	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	H	L	S	N	E	D	L	S	T	F	G	G	G	T	K	V	E	I	K	46
Ab2	h0301-L0H1	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	H	L	S	N	E	D	L	S	T	F	G	G	G	T	K	V	E	I	K	46
Ab3	h0301-L0H2	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	H	L	S	N	E	D	L	S	T	F	G	G	G	T	K	V	E	I	K	46
Ab4	h0301-L1H0	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	H	L	S	N	E	D	L	S	T	F	G	G	G	T	K	V	E	I	K	47
Ab5	h0301-L1H1	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	H	L	S	N	E	D	L	S	T	F	G	G	G	T	K	V	E	I	K	47
Ab6	h0301-L1H2	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	H	L	S	N	E	D	L	S	T	F	G	G	G	T	K	V	E	I	K	47
cAb0302	parental	F	T	L	T	I	D	P	V	E	A	D	D	A	A	T	Y	F	C	Q	Q	S	K	E	L	P	W	T	F	G	G	G	T	R	L	E	I	K	12
human acceptor E		F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C										F	G	Q	G	T	K	V	E	I	K	85-88
Ab7	h0302-L0H1	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	G	T	K	V	E	I	K	48
Ab8	h0302-L1H1	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	G	T	K	V	E	I	K	49
Ab9	h0302-L2H1	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	G	T	K	V	E	I	K	50
Ab10	h0302-L0H2	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	G	T	K	V	E	I	K	48
Ab11	h0302-L1H2	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	G	T	K	V	E	I	K	49
Ab12	h0302-L2H2	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	S	K	E	L	P	W	T	F	G	Q	G	T	K	V	E	I	K	50
cAb 0311	parental	F	T	L	T	I	H	P	V	E	E	E	D	A	A	T	Y	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	S	L	E	P	E	D	F	A	V	Y	Y	C										F	G	Q	G	T	K	V	E	I	K	89-92
Ab13	h0311-L0H1	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	G	T	K	V	E	I	K	51
Ab14	h0311-L1H1	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	G	T	K	V	E	I	K	52
Ab15	h0311-L0H2	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	G	T	K	V	E	I	K	51
Ab16	h0311-L1H2	F	T	L	T	I	S	S	L	E	P	E	D	F	A	V	Y	Y	C	Q	Q	G	N	E	D	P	W	T	F	G	Q	G	T	K	V	E	I	K	52

FIG. 2C

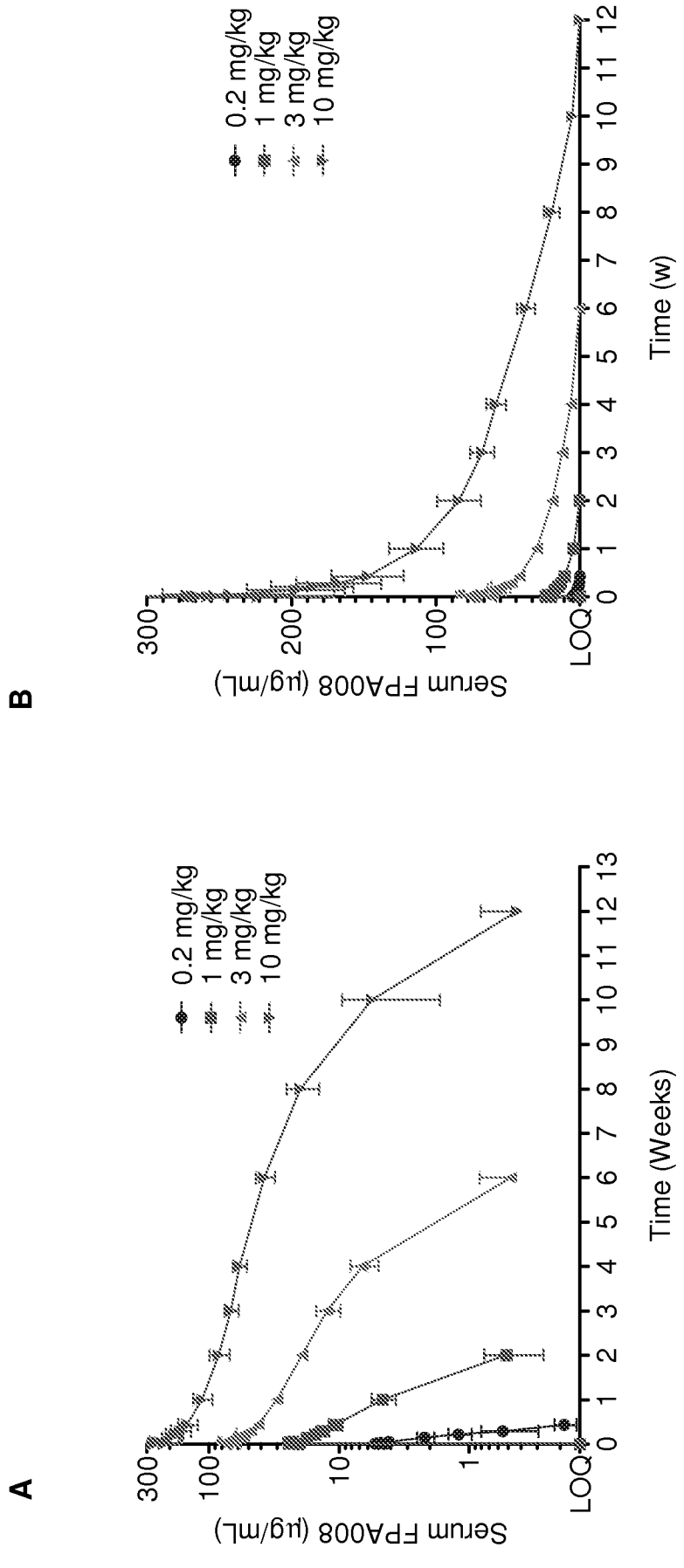

A
B
0.2 mg/kg
1 mg/kg
3 mg/kg
10 mg/kg
Serum FPA008 (µg/mL)
300
100
10
1
LOQ
200
0 1 2 3 4 5 6 7 8 9 10 11 12 13
0 1 2 3 4 5 6 7 8 9 10 11 12
Time (Weeks)
Time (w)

FIG. 3

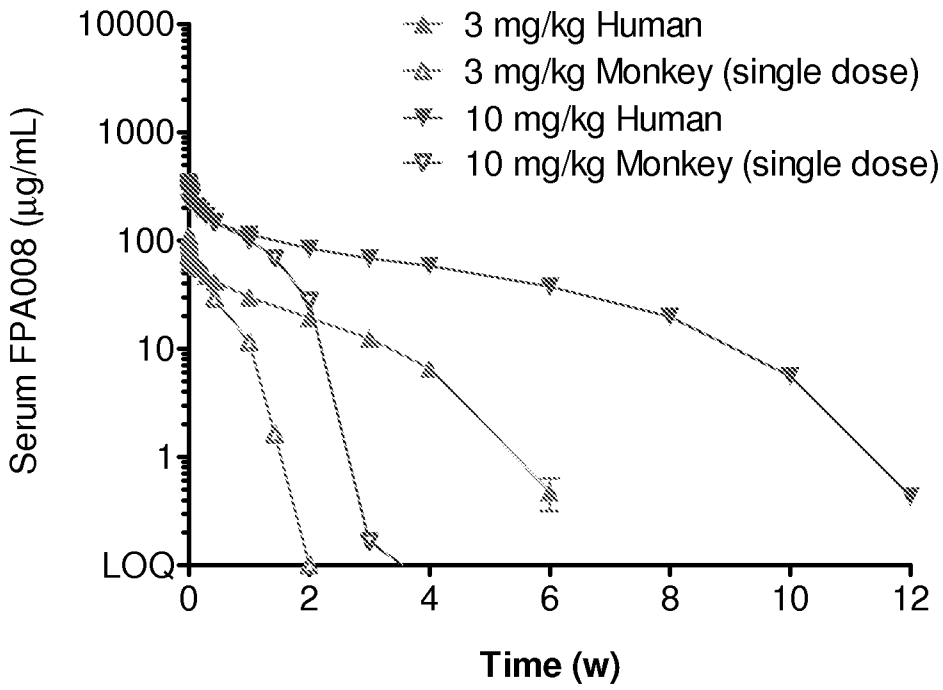

10000
1000
100
10
1
LOQ
Serum FPA008 (µg/mL)
0
2
4
6
8
10
12
Time (w)
3 mg/kg Human
3 mg/kg Monkey (single dose)
10 mg/kg Human
10 mg/kg Monkey (single dose)

FIG. 4

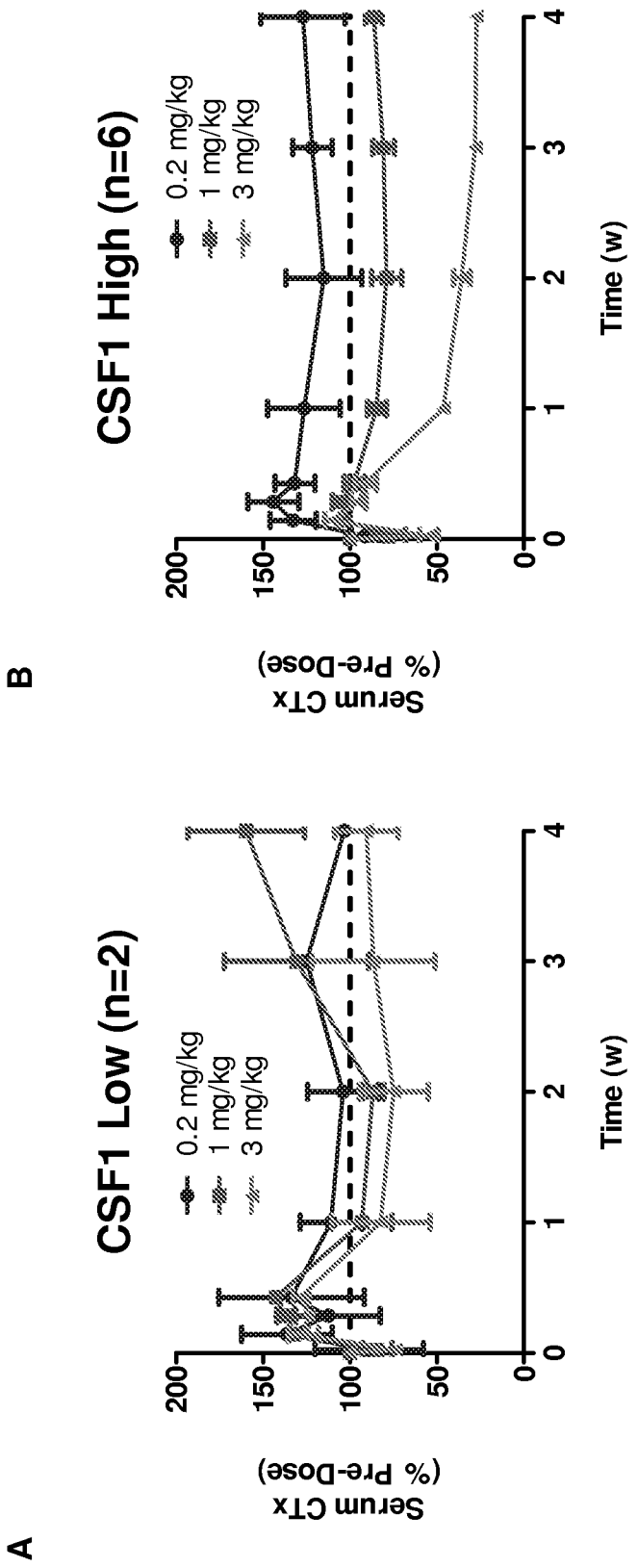

A
CSF1 Low (n=2)
0.2 mg/kg
1 mg/kg
3 mg/kg
Serum CTx
(% Pre-Dose)
200
150
100
50
0
0
1
2
3
4
Time (w)
B
CSF1 High (n=6)
0.2 mg/kg
1 mg/kg
3 mg/kg
Serum CTx
(% Pre-Dose)
200
150
100
50
0
0
1
2
3
4
Time (w)

FIG. 5

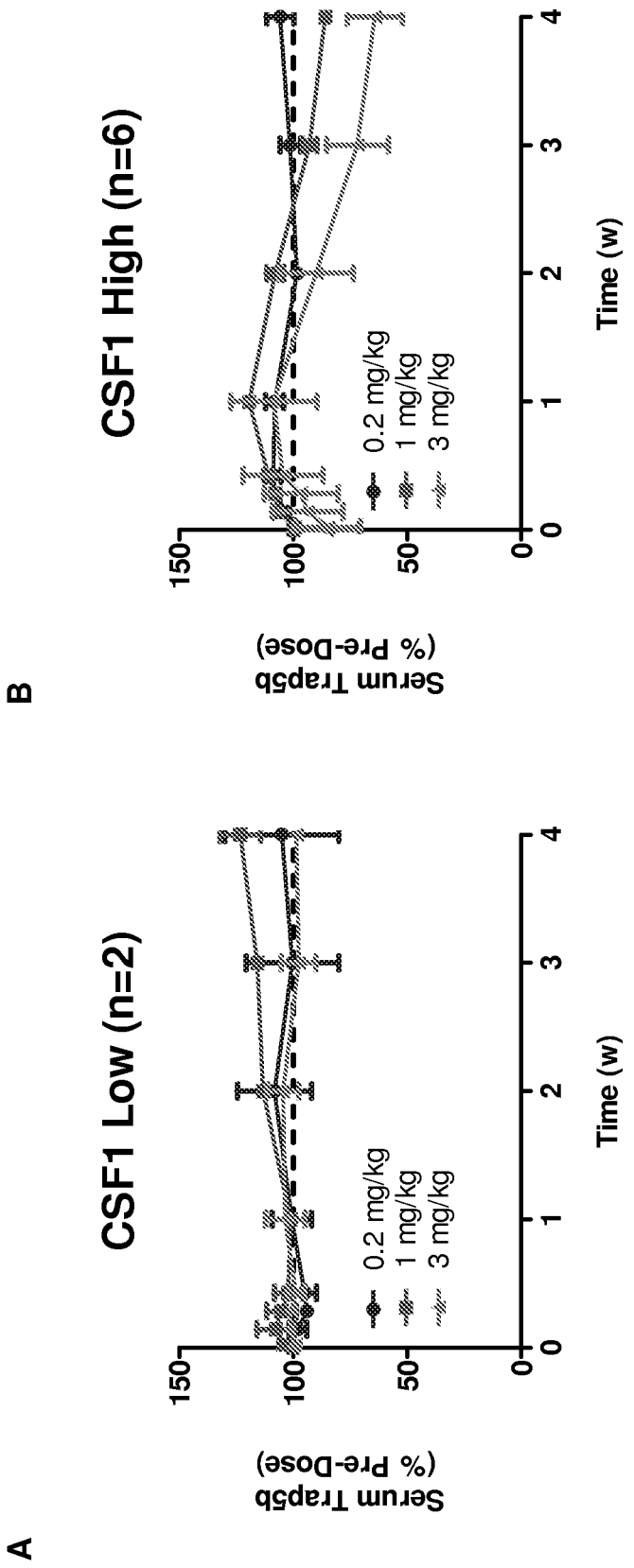

A
CSF1 Low (n=2)
Serum Trap5b
(% Pre-Dose)
150
100
50
0
0
1
2
3
4
Time (w)
0.2 mg/kg
1 mg/kg
3 mg/kg
B
CSF1 High (n=6)
Serum Trap5b
(% Pre-Dose)
150
100
50
0
0
1
2
3
4
Time (w)
0.2 mg/kg
1 mg/kg
3 mg/kg

FIG. 6

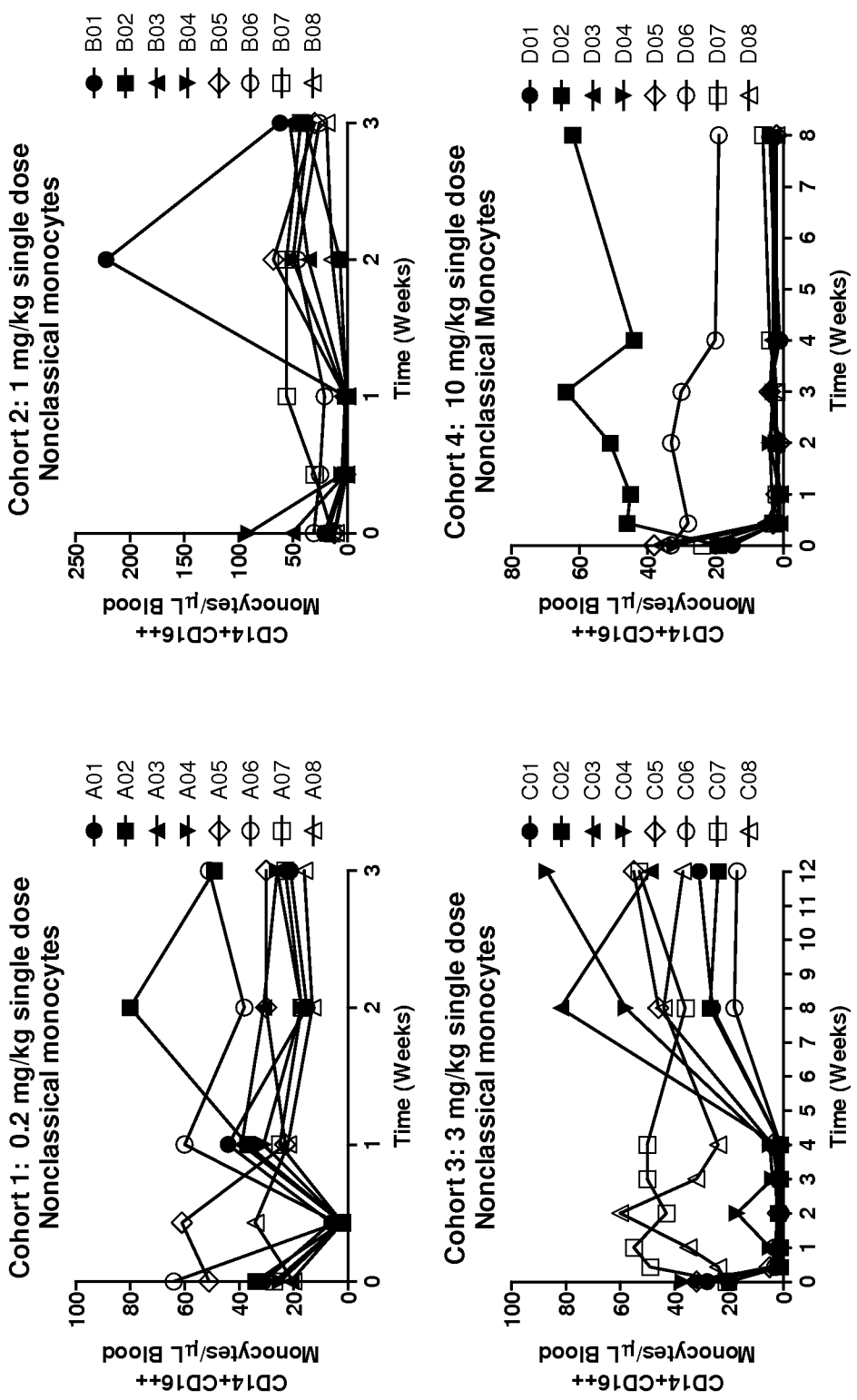

Cohort 1: 0.2 mg/kg single dose
Nonclassical monocytes
CD14+CD16++
Monocytes/μL Blood
Time (Weeks)
A01
A02
A03
A04
A05
A06
A07
A08
Cohort 2: 1 mg/kg single dose
Nonclassical monocytes
B01
B02
B03
B04
B05
B06
B07
B08
Cohort 3: 3 mg/kg single dose
Nonclassical monocytes
C01
C02
C03
C04
C05
C06
C07
C08
Cohort 4: 10 mg/kg single dose
Nonclassical Monocytes
D01
D02
D03
D04
D05
D06
D07
D08

FIG. 7

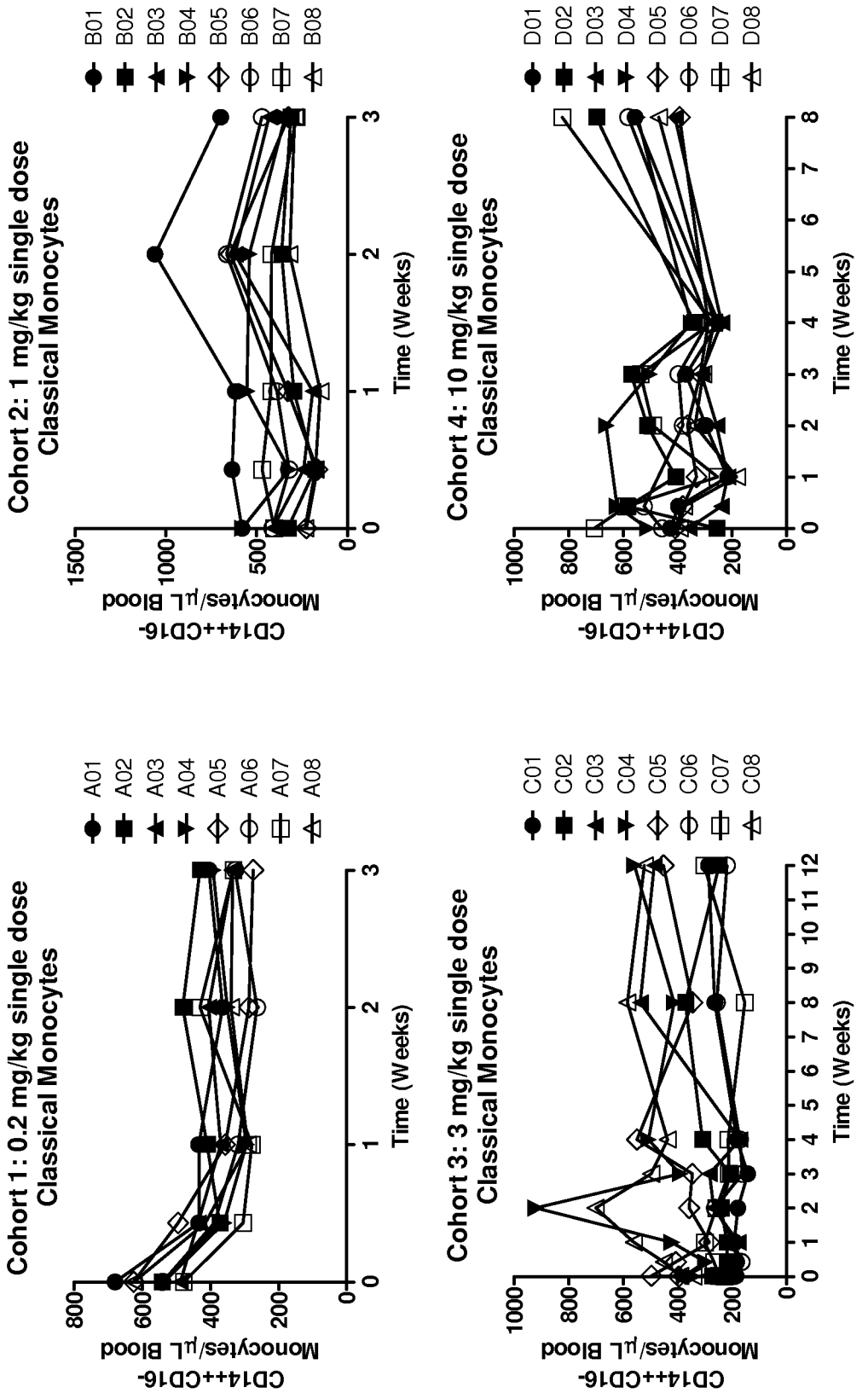

Cohort 1: 0.2 mg/kg single dose
Classical Monocytes
CD14++CD16- Monocytes/μL Blood
Time (Weeks)
A01 A02 A03 A04 A05 A06 A07 A08
Cohort 2: 1 mg/kg single dose
Classical Monocytes
CD14++CD16- Monocytes/μL Blood
Time (Weeks)
B01 B02 B03 B04 B05 B06 B07 B08
Cohort 3: 3 mg/kg single dose
Classical Monocytes
CD14++CD16- Monocytes/μL Blood
Time (Weeks)
C01 C02 C03 C04 C05 C06 C07 C08
Cohort 4: 10 mg/kg single dose
Classical Monocytes
CD14++CD16- Monocytes/μL Blood
Time (Weeks)
D01 D02 D03 D04 D05 D06 D07 D08

FIG. 8

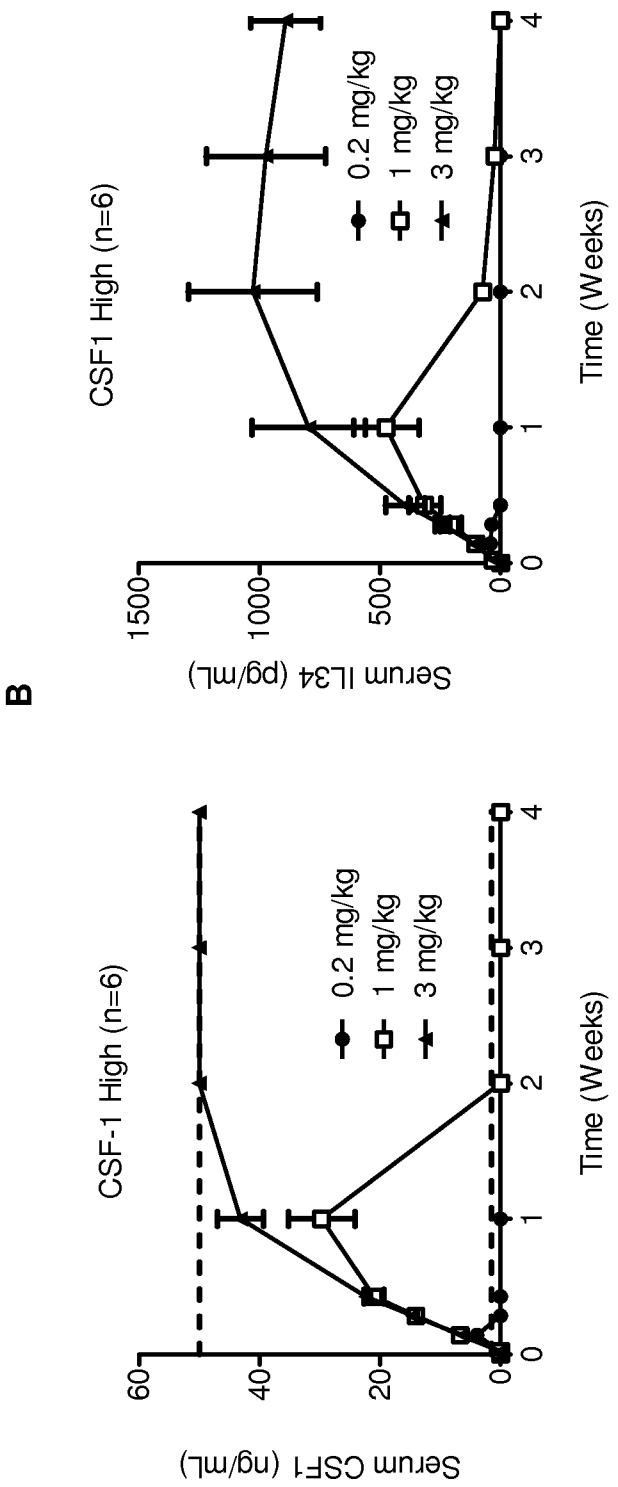

A
Serum CSF1 (ng/mL)
CSF-1 High (n=6)
0.2 mg/kg
1 mg/kg
3 mg/kg
Time (Weeks)
B
Serum IL34 (pg/mL)
CSF1 High (n=6)
0.2 mg/kg
1 mg/kg
3 mg/kg
Time (Weeks)

FIG. 9

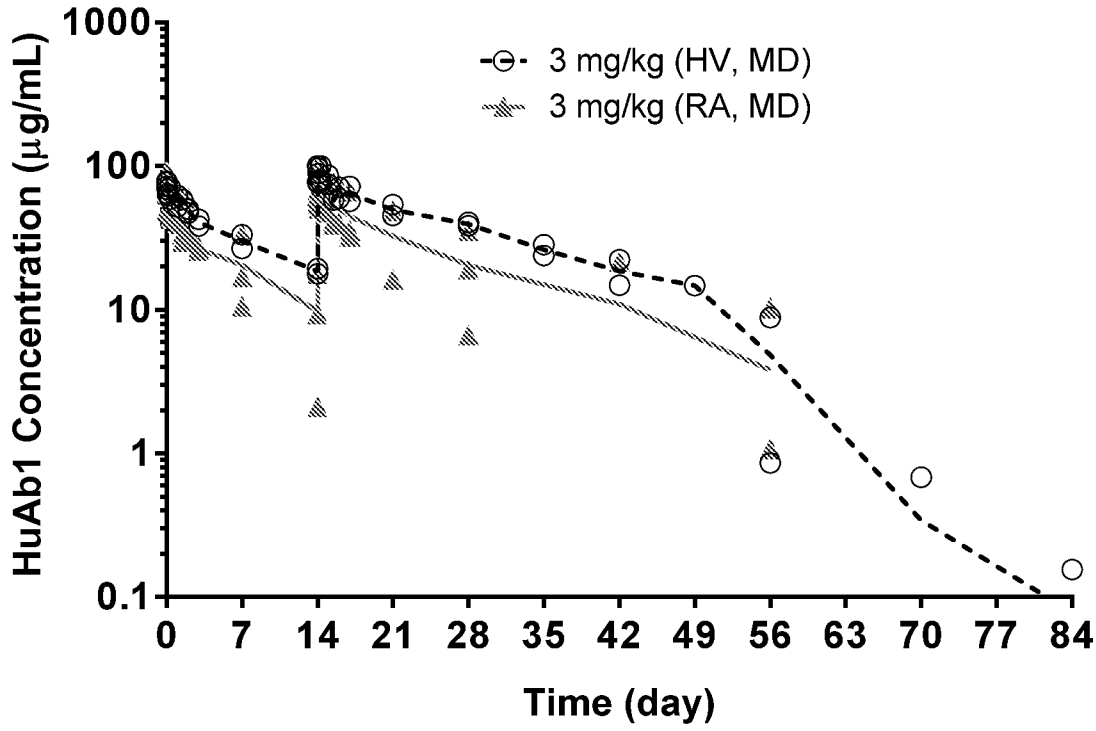

1000
100
10
1
0.1
HuAb1 Concentration (μg/mL)
3 mg/kg (HV, MD)
3 mg/kg (RA, MD)
0
7
14
21
28
35
42
49
56
63
70
77
84
Time (day)

FIG. 10

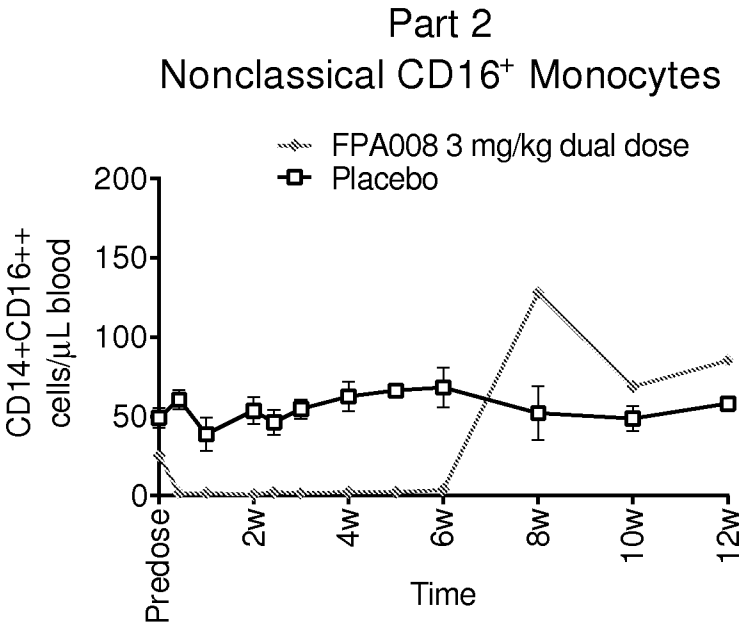

Part 2
Nonclassical CD16+ Monocytes
FPA008 3 mg/kg dual dose
Placebo
CD14+CD16++ cells/µL blood
200
150
100
50
0
Predose
2w
4w
6w
8w
10w
12w
Time

FIG. 11

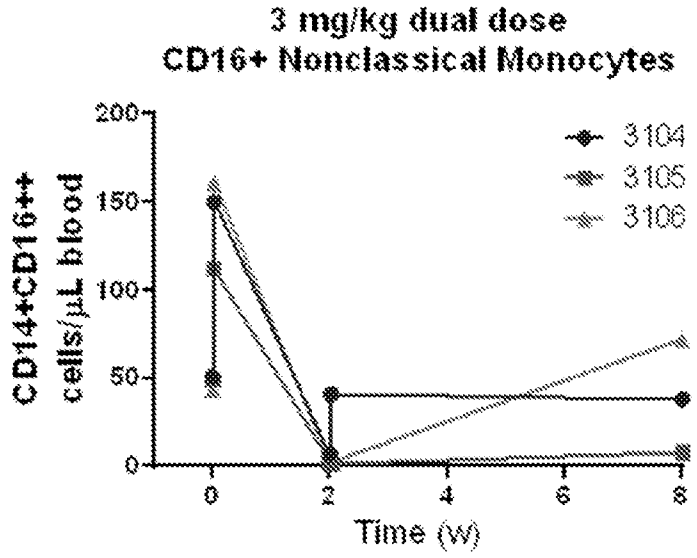

3 mg/kg dual dose
CD16+ Nonclassical Monocytes
3104
3105
3106
CD14+CD16++ cells/µL blood
200
150
100
50
0
0
2
4
6
8
Time (W)

FIG. 12