

1/42

VH	Framework 1										CDR 1																								
SEQ ID NO: 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	30	31	32	33	34	35
SEQ ID NO: 9	Q	V	Q	L	Q	Q	S	G	P	E	L	V	K	P	G	T	S	V	K	I	S	C	K	A	S	G	Y	S	F	T	T	Y	Y	I	H
	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	S	F	T	T	Y	Y	I	H
	Framework 2										CDR 2																								
SEQ ID NO: 1	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	52a	53	54	55	56	57	58	59	60	61	62	63	64	65				
SEQ ID NO: 9	W	V	K	Q	R	P	G	Q	G	L	E	W	I	G	W	F	F	P	G	S	G	N	I	K	Y	N	E	K	F	K	G				
	W	V	R	Q	A	P	G	Q	G	L	E	W	M	G	W	F	F	P	G	S	G	N	I	K	Y	N	E	K	F	K	G				
	Framework 3										Framework 4																								
SEQ ID NO: 1	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	82a	82b	82c	83	84	85	86	87	88	89	90	91	92	93	94			
SEQ ID NO: 9	K	A	T	L	T	A	D	T	S	S	S	T	A	Y	M	Q	L	S	S	L	T	S	E	E	S	A	V	Y	F	C	A	G			
	R	V	T	I	T	A	D	I	S	T	S	T	A	Y	M	E	L	S	S	L	R	S	E	D	T	A	V	Y	C	A	G				
	CDR 3										Framework 4																								
SEQ ID NO: 1	95	96	97	98	99	100	100a	100b	101	102	103	104	105	106	107	108	109	110	111	112	113														
SEQ ID NO: 9	S	Y	Y	S	Y	D	V	L	D	Y	W	G	H	G	T	T	L	T	V	S	S														
	S	Y	Y	S	Y	D	V	L	D	Y	W	G	Q	G	T	T	V	T	V	S	S														

FIG. 1A

VL	Framework 1										CDR 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	30	31	32	33	34
SEQ ID NO: 2	D	I	L	M	T	Q	S	Q	K	F	M	S	T	S	L	G	D	R	V	S	V	S	C	K	A	S	Q	N	V	G	I	N	V	V
SEQ ID NO: 10	D	I	Q	M	T	Q	S	P	S	F	L	S	A	S	V	G	D	R	V	T	I	T	C	K	A	S	Q	N	V	G	I	N	V	V
SEQ ID NO: 11	D	I	Q	M	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	K	A	S	Q	N	V	G	I	N	V	V
	Framework 2										CDR 2																							
	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56												
SEQ ID NO: 2	W	H	Q	Q	K	P	G	Q	S	P	K	A	L	I	Y	S	S	S	H	R	Y	S												
SEQ ID NO: 10	W	H	Q	Q	K	P	G	K	A	P	K	A	L	I	Y	S	S	S	H	R	Y	S												
SEQ ID NO: 11	W	H	Q	Q	K	P	G	K	V	P	K	A	L	I	Y	S	S	S	H	R	Y	S												
	Framework 3																																	
	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	83	84	85	86	87	88		
SEQ ID NO: 2	G	V	P	D	R	F	T	G	S	G	S	G	T	D	F	T	L	T	I	N	N	V	Q	S	E	D	L	A	E	Y	F	C		
SEQ ID NO: 10	G	V	P	S	R	F	S	G	S	G	S	G	T	E	F	T	L	T	I	S	S	L	Q	P	E	D	F	A	T	Y	F	C		
SEQ ID NO: 11	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	V	A	T	Y	F	C		
	CDR 3										Framework 4																							
	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107															
SEQ ID NO: 2	Q	Q	F	K	S	Y	P	L	T	F	G	A	G	T	K	L	E	L	K															
SEQ ID NO: 10	Q	Q	F	K	S	Y	P	L	T	F	G	Q	Q	T	K	L	E	I	K															
SEQ ID NO: 11	Q	Q	F	K	S	Y	P	L	T	F	G	Q	Q	T	K	L	E	I	K															

FIG. 1B

VH		Framework 1																								CDR 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	30	31	32	33	34	35
SEQ ID NO: 15	D	V	Q	L	V	E	S	G	G	L	V	Q	P	G	G	S	R	K	L	S	C	A	A	S	G	F	T	F	S	N	F	G	M	H		
SEQ ID NO: 25	Q	V	Q	L	V	E	S	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	A	A	S	G	F	T	F	S	N	F	G	M	H		
SEQ ID NO: 23	E	V	Q	L	V	E	S	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	A	A	S	G	F	T	F	S	N	F	G	M	H		
SEQ ID NO: 24	E	V	Q	L	V	E	S	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	A	A	S	G	F	T	F	S	N	F	G	M	H		
		Framework 2																								CDR 2										
		36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	52a	53	54	55	56	57	58	59	60	61	62	63	64	65				
SEQ ID NO: 15	W	V	R	Q	A	P	D	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y	Y	A	D	T	L	K	G					
SEQ ID NO: 25	W	V	R	Q	A	P	G	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y	Y	A	D	T	L	K	G					
SEQ ID NO: 23	W	V	R	Q	A	P	G	K	G	L	E	W	V	S	Y	I	S	S	G	S	S	T	I	Y	Y	A	D	T	L	K	G					
SEQ ID NO: 24	W	V	R	Q	A	P	G	K	G	L	E	W	V	S	Y	I	S	S	G	S	S	T	I	Y	Y	A	D	T	L	K	G					
		Framework 3																								CDR 3										
		66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	82a	82b	82c	83	84	85	86	87	88	89	90	91	92	93	94			
SEQ ID NO: 15	R	F	T	I	S	R	D	N	P	K	N	T	L	F	L	Q	M	T	S	L	R	S	E	D	T	A	M	Y	Y	C	A	R				
SEQ ID NO: 25	R	F	T	I	S	R	D	N	S	K	N	T	L	Y	L	Q	M	N	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R				
SEQ ID NO: 23	R	F	T	I	S	R	D	N	A	K	N	S	L	Y	L	Q	M	N	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R				
SEQ ID NO: 24	R	F	T	I	S	R	D	N	S	K	N	T	L	Y	L	Q	M	N	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R				
		Framework 4																								CDR 4										
		95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113																
SEQ ID NO: 15	R	G	E	G	A	M	D	Y	W	G	Q	G	T	S	V	T	V	S	S																	
SEQ ID NO: 25	R	G	E	G	A	M	D	Y	W	G	Q	G	T	T	V	T	V	S	S																	
SEQ ID NO: 23	R	G	E	G	A	M	D	Y	W	G	Q	G	T	T	V	T	V	S	S																	
SEQ ID NO: 24	R	G	E	G	A	M	D	Y	W	G	Q	G	T	T	V	T	V	S	S																	

FIG. 2A

VL	Framework 1																														CDR 1									
SEQ ID NO: 16	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						
SEQ ID NO: 26	E	N	V	L	T	Q	S	P	A	I	M	S	A	S	L	G	E	K	V	T	M	S	C	R	A	S	S	S	V	-	N	Y	I	Y						
SEQ ID NO: 27	D	N	Q	L	T	Q	S	P	S	F	L	S	A	S	V	G	D	R	V	T	I	T	C	R	A	S	S	S	V	-	N	Y	I	Y						
SEQ ID NO: 28	D	N	Q	L	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	R	A	S	S	S	V	-	N	Y	I	Y						
SEQ ID NO: 29	E	N	V	L	T	Q	S	P	A	T	L	S	V	S	P	G	E	R	A	T	L	S	C	R	A	S	S	S	V	-	N	Y	I	Y						
SEQ ID NO: 30	Q	N	V	L	T	Q	P	P	S	-	A	S	G	T	P	G	Q	R	V	T	I	S	C	R	A	S	S	S	V	-	N	Y	I	Y						
	S	N	E	L	T	Q	P	P	S	-	V	S	V	S	P	G	Q	T	A	R	I	T	C	R	A	S	S	S	V	-	N	Y	I	Y						

	Framework 2																	CDR 2								
SEQ ID NO: 16	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56				
SEQ ID NO: 26	W	Y	Q	Q	K	S	D	A	S	P	K	L	W	I	Y	Y	T	S	N	L	A	P				
SEQ ID NO: 27	W	Y	Q	Q	K	P	G	K	A	P	K	L	L	I	Y	Y	T	S	N	L	A	P				
SEQ ID NO: 28	W	Y	Q	Q	K	P	G	K	A	P	K	L	L	I	Y	Y	T	S	N	L	A	P				
SEQ ID NO: 29	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	Y	T	S	N	L	A	P				
SEQ ID NO: 30	W	Y	Q	Q	K	S	G	Q	A	P	V	L	V	I	Y	Y	T	S	N	L	A	P				

FIG. 2B

Framework 3	
SEQ ID NO: 16	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 83 84 85 86 87 88
SEQ ID NO: 26	G V P T R F S G S G S G S G N S Y S L T I S S M E G E D A A T Y Y C
SEQ ID NO: 27	G V P S R F S G S G S G N E Y T L T I S S L Q P E D F A T Y Y C
SEQ ID NO: 28	G V P S R F S G S G S G N E Y T L T I S S L Q P E D F A T Y Y C
SEQ ID NO: 29	G I P A R F S G S G S G N E Y T L T I S S L Q S E D F A V Y Y C
SEQ ID NO: 30	G V P D R F S G S G S G N E Y T L T I S S L R S E D E A D Y Y C
	G I P E R F S G S G S G N E Y T L T I S S A Q S E D E A D Y Y C
CDR 3	
Framework 4	
SEQ ID NO: 16	89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107
SEQ ID NO: 26	Q Q F T S S P F T F G S G T K L E I K
SEQ ID NO: 27	Q Q F T S S P F T F G Q G T K L E I K
SEQ ID NO: 28	Q Q F T S S P F T F G Q G T K L E I K
SEQ ID NO: 29	Q Q F T S S P F T F G T G T K V T V L
SEQ ID NO: 30	Q Q F T S S P F T F G T G T K V T V L

FIG. 2B
(Continued)

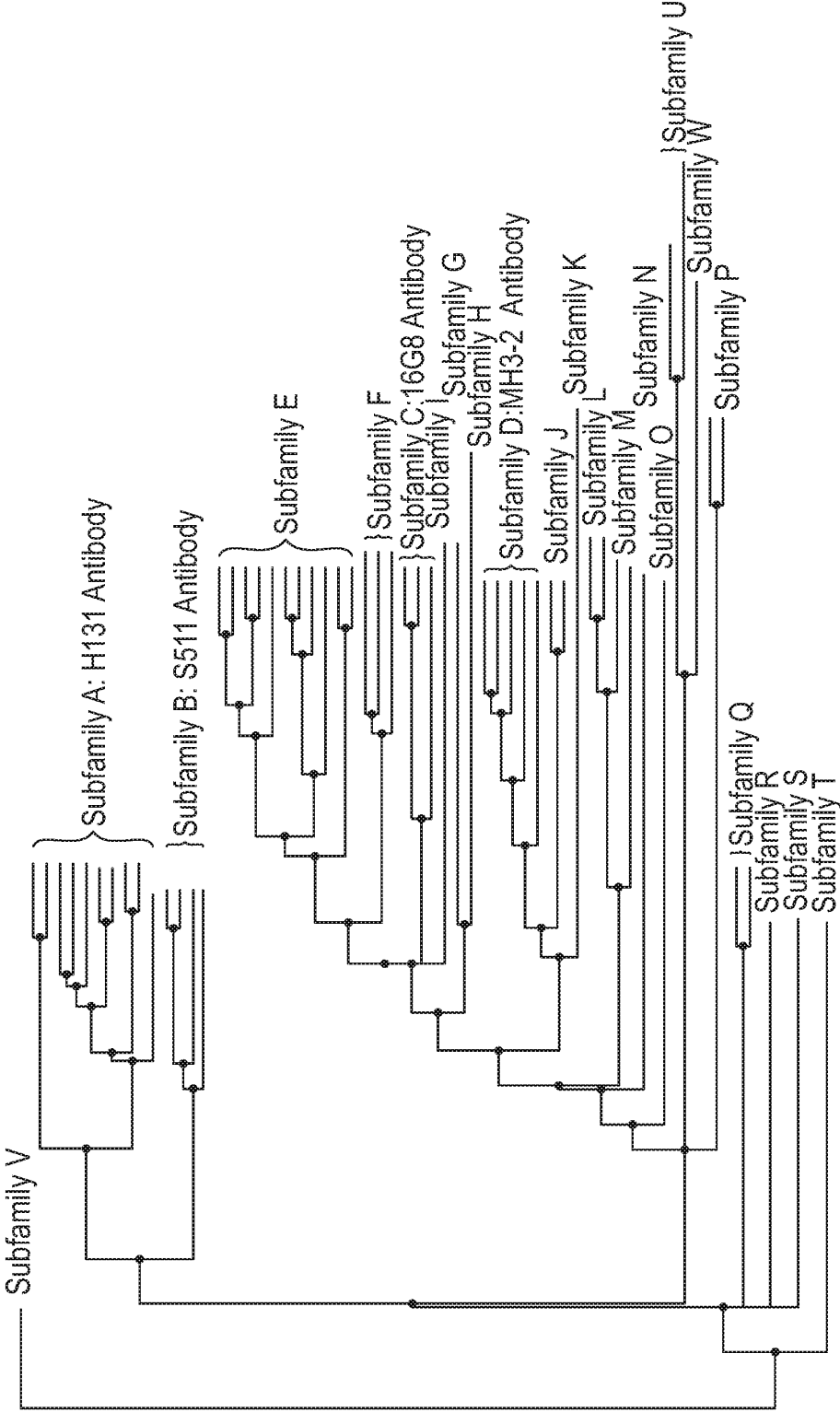


FIG. 3

7/42

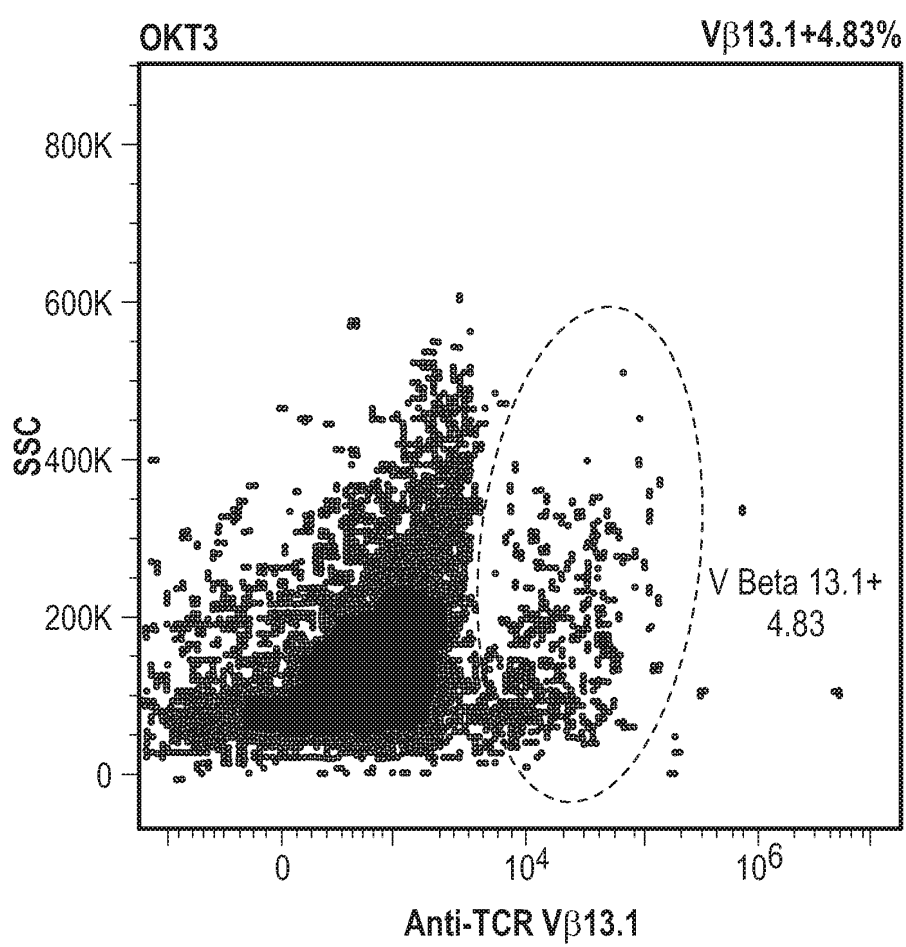


FIG. 4A

8/42

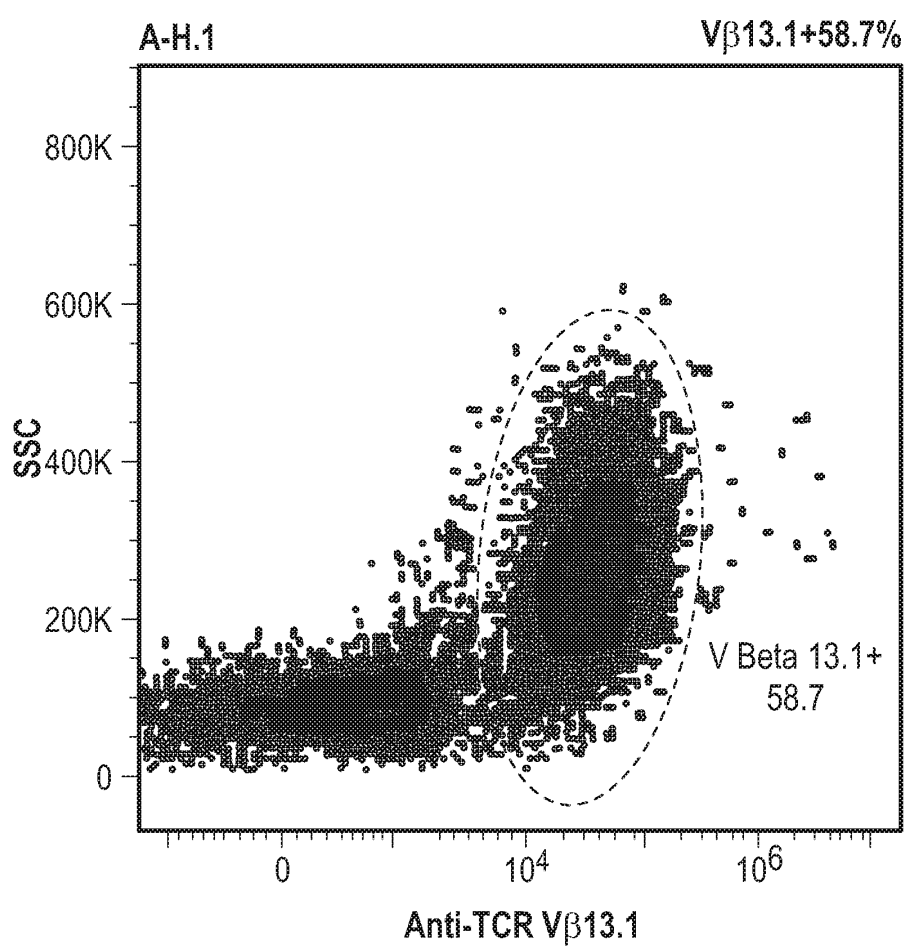


FIG. 4A
(Continued)

9/42

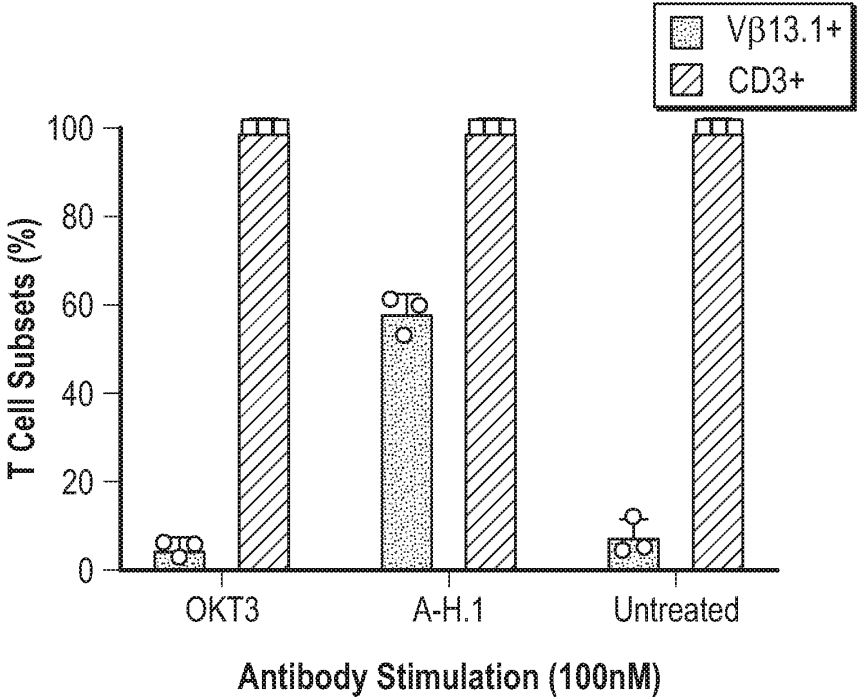


FIG. 4B

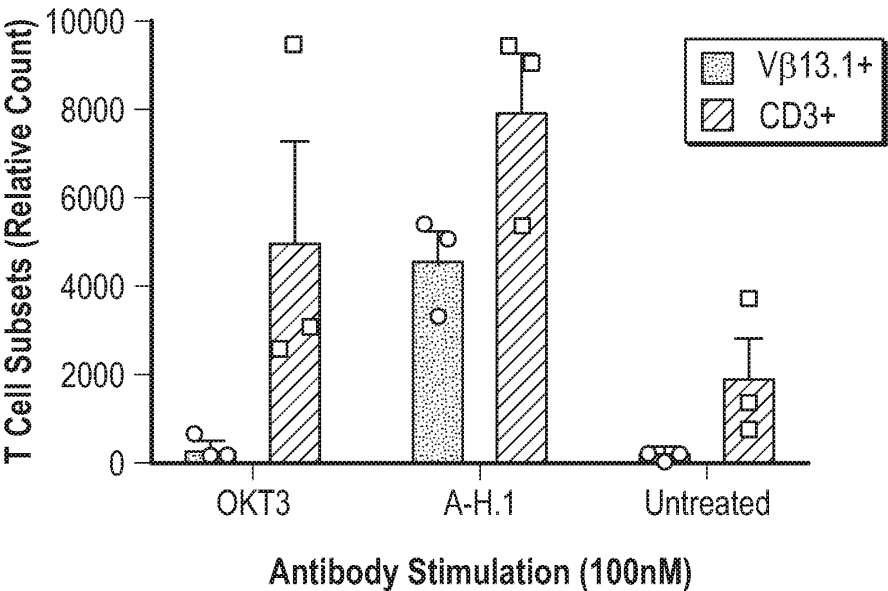


FIG. 4C

10/42

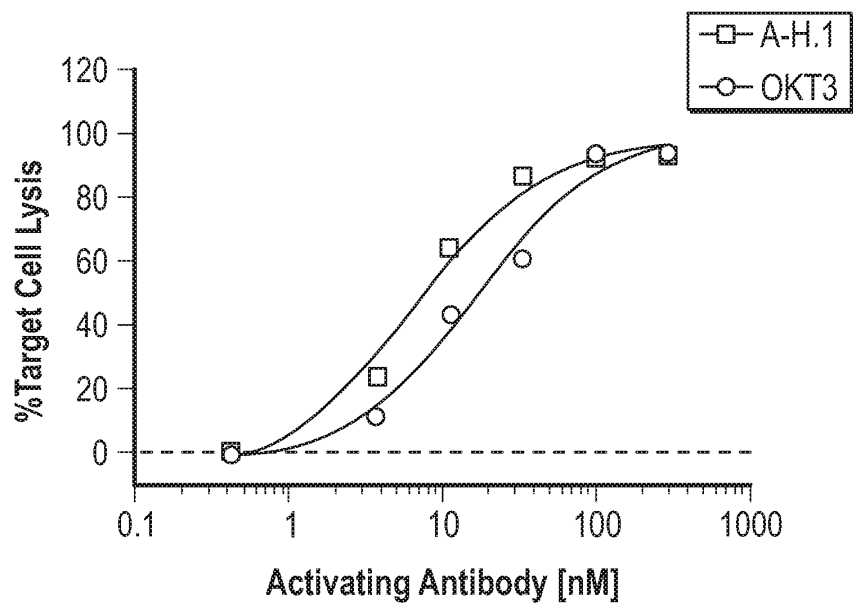


FIG. 5A

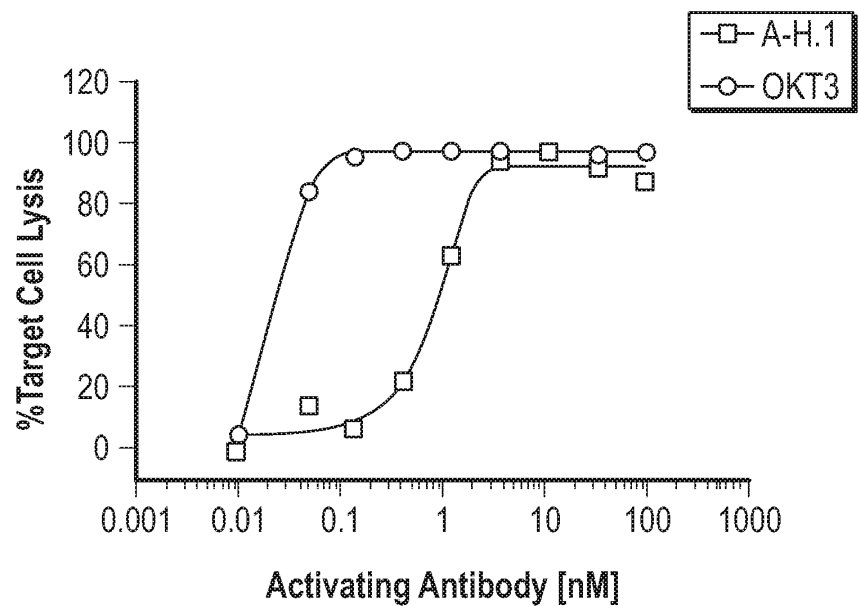


FIG. 5B

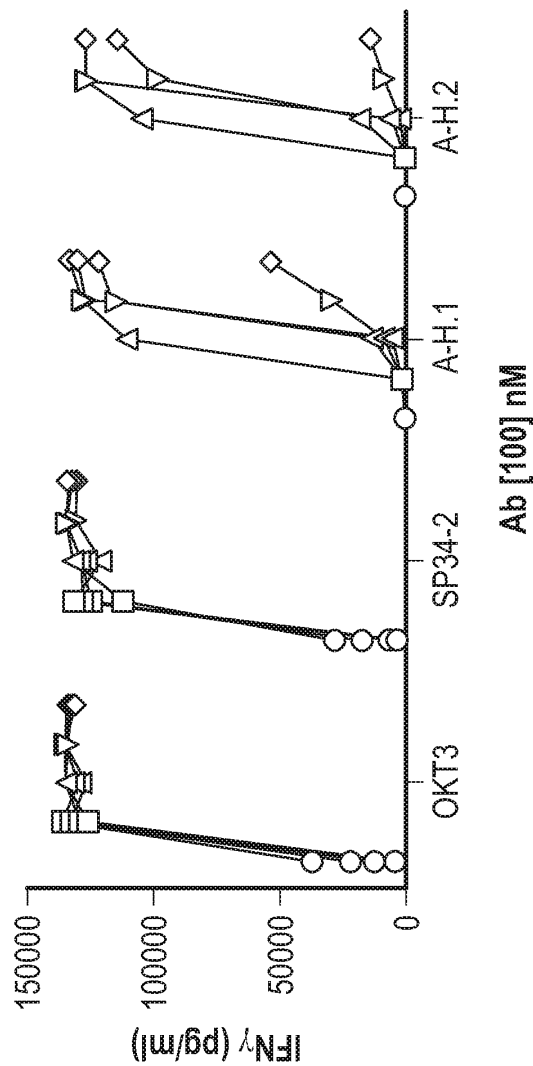
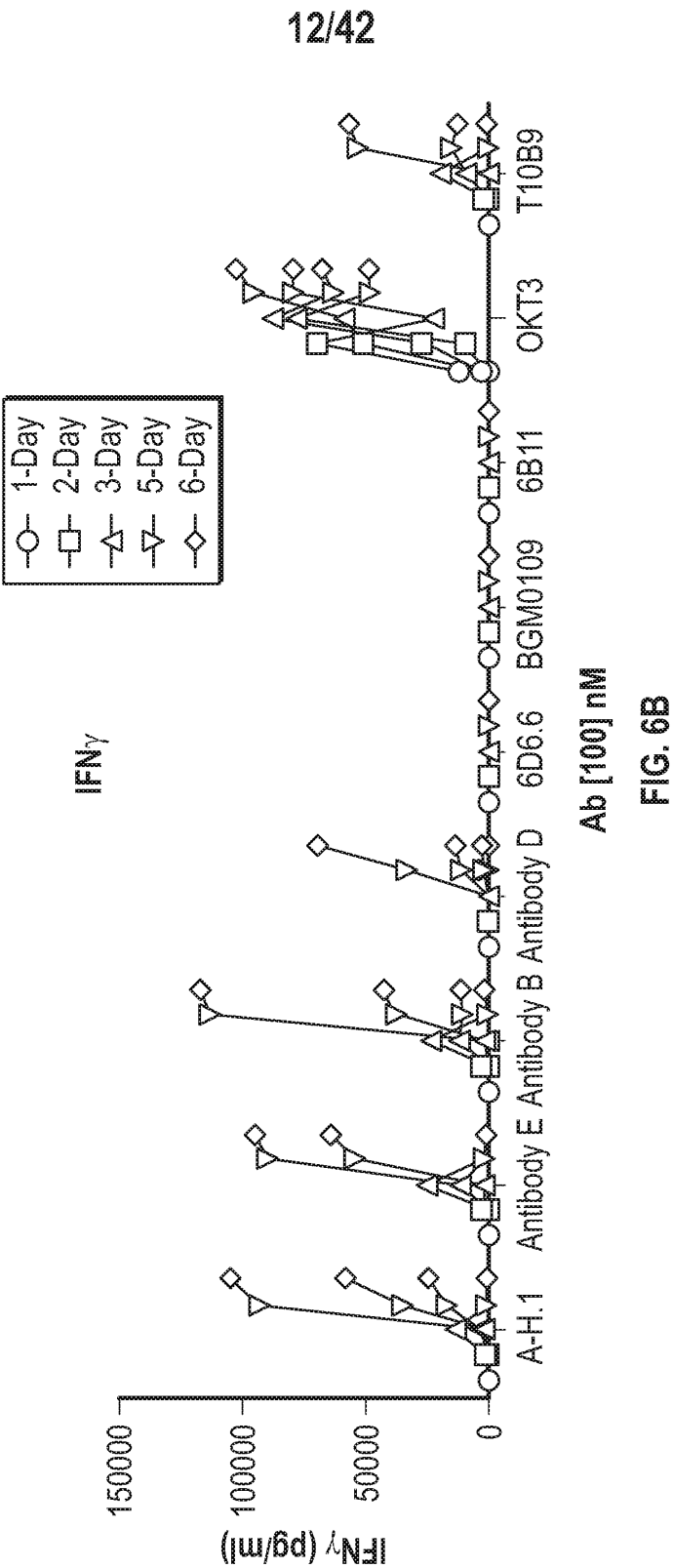


FIG. 6A



13/42

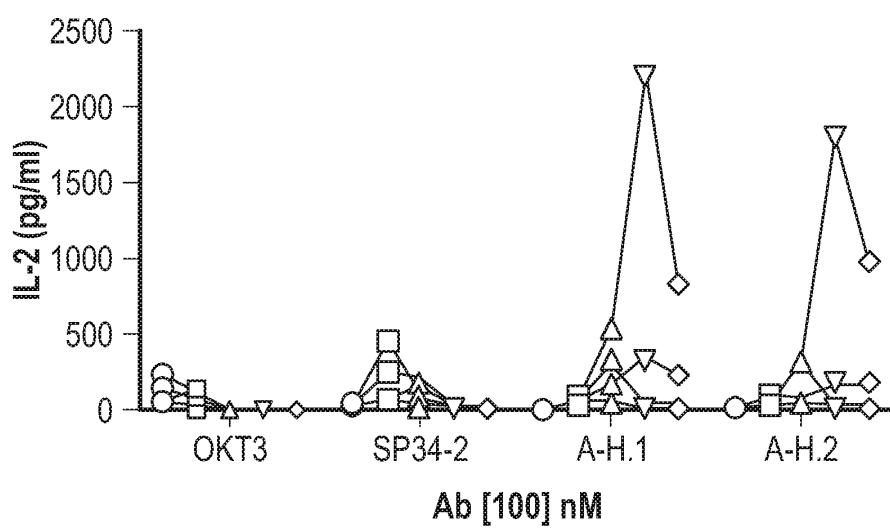


FIG. 7A

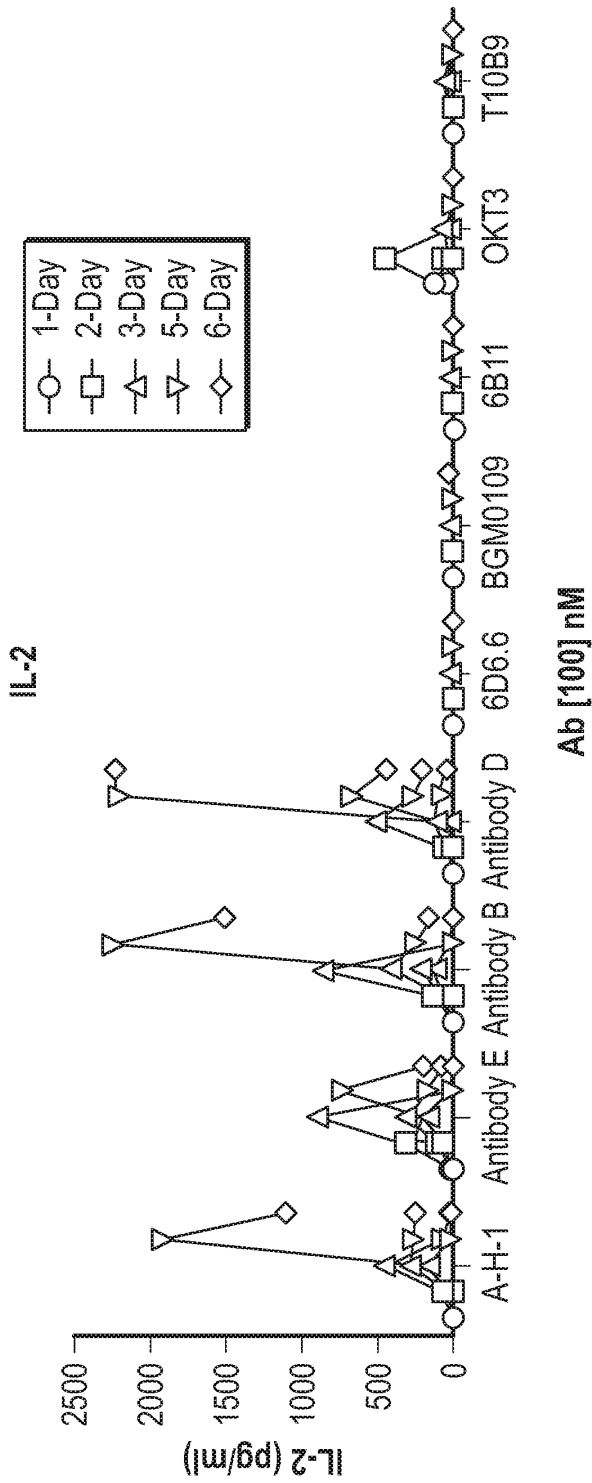


FIG. 7B

15/42

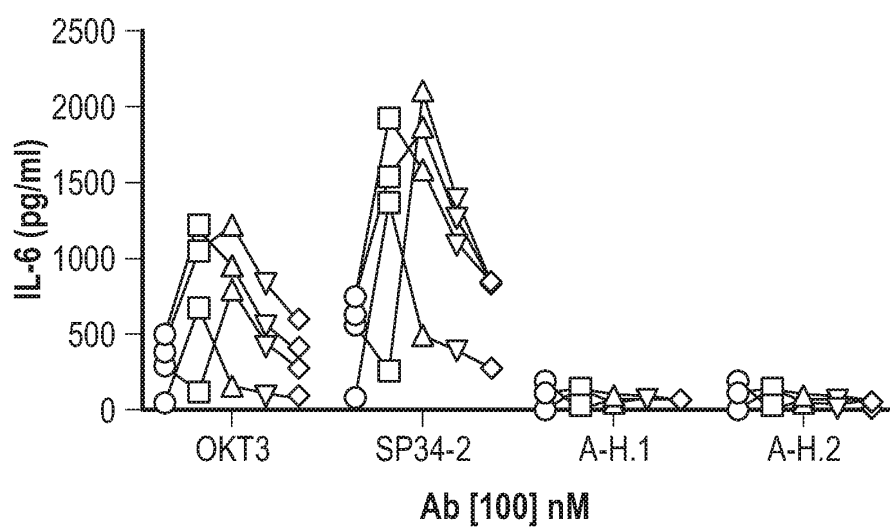
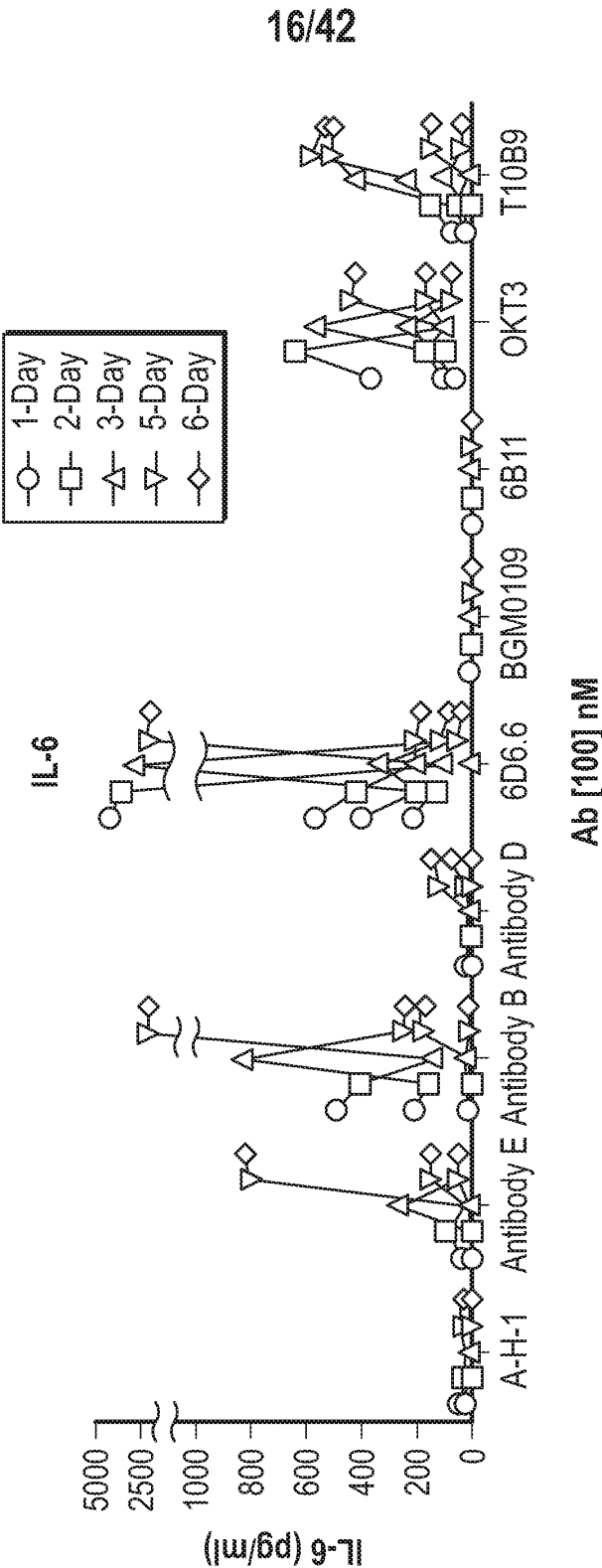


FIG. 8A



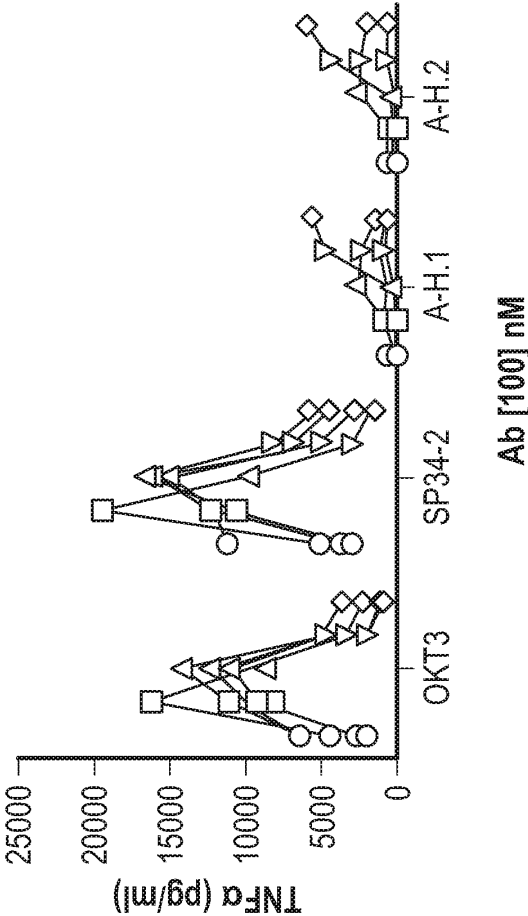
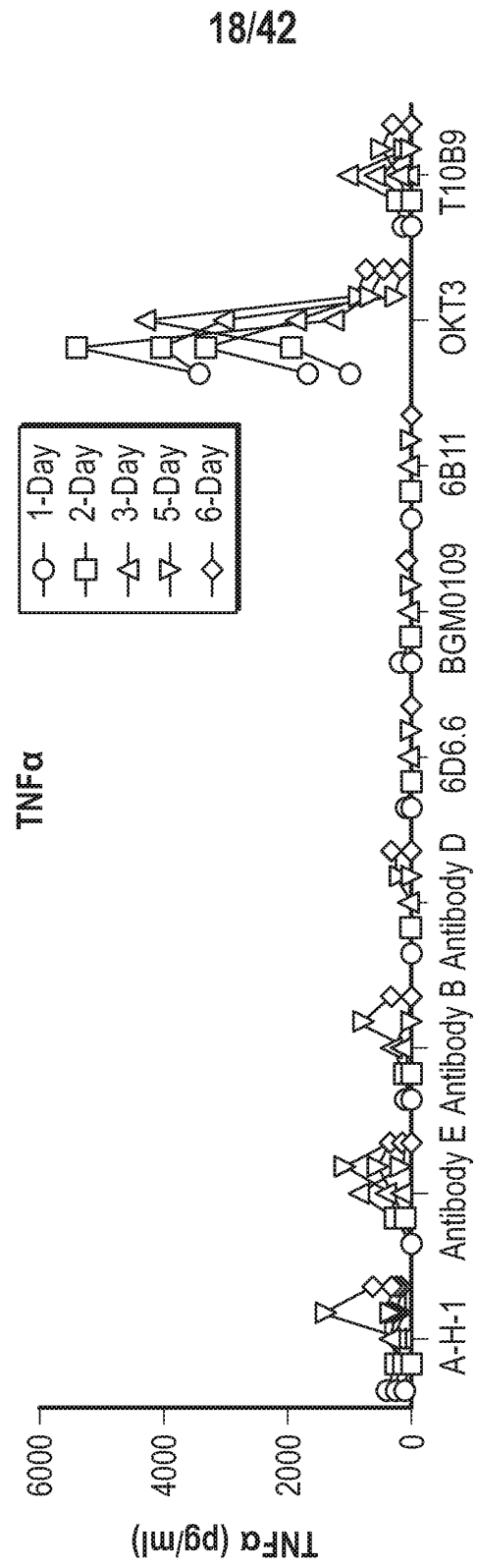


FIG. 9A



Ab [100] nM

FIG. 9B

19/42

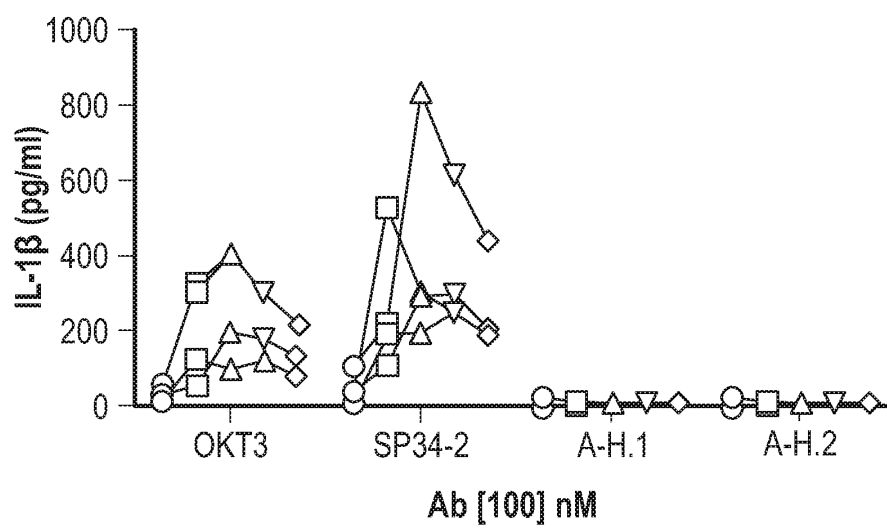
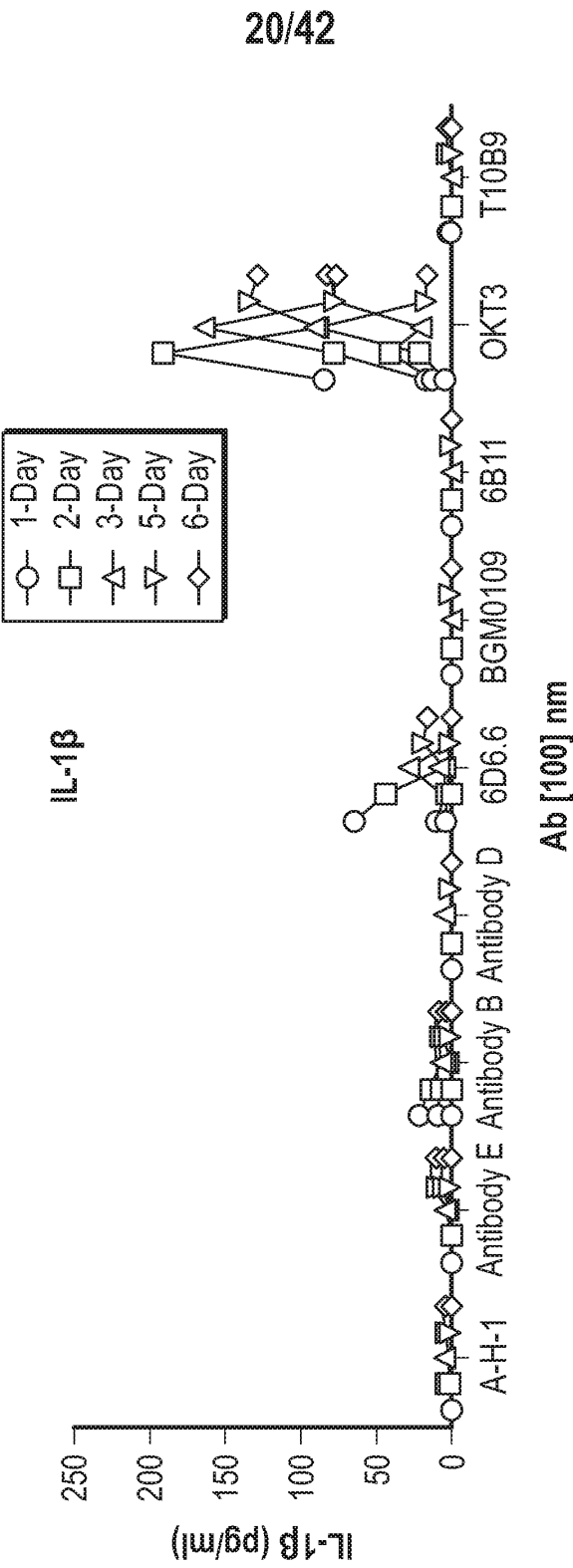


FIG. 10A



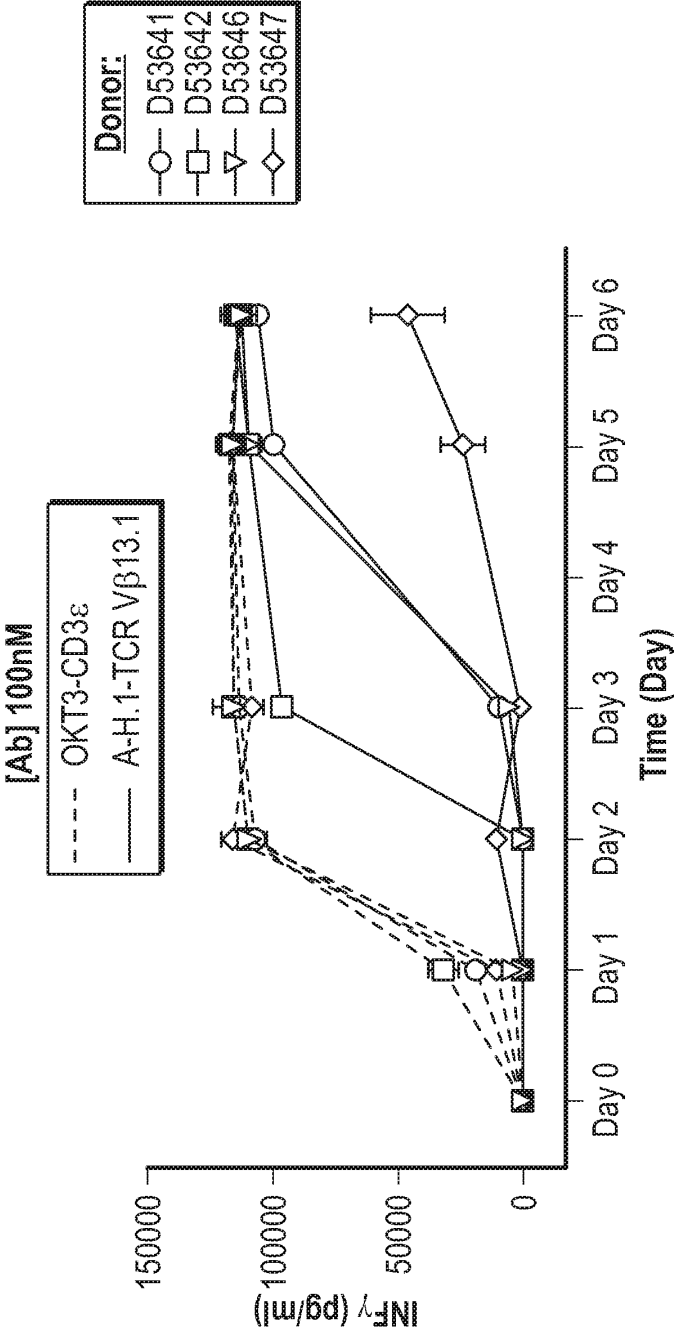


FIG. 11A

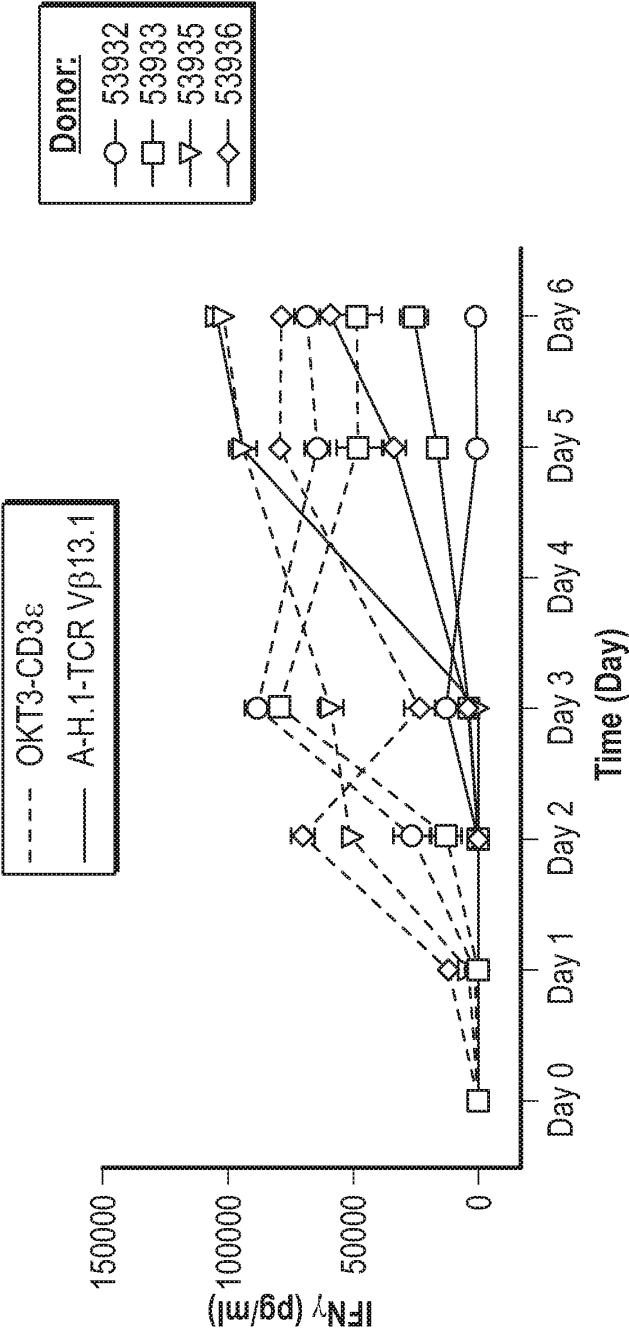


FIG. 11B

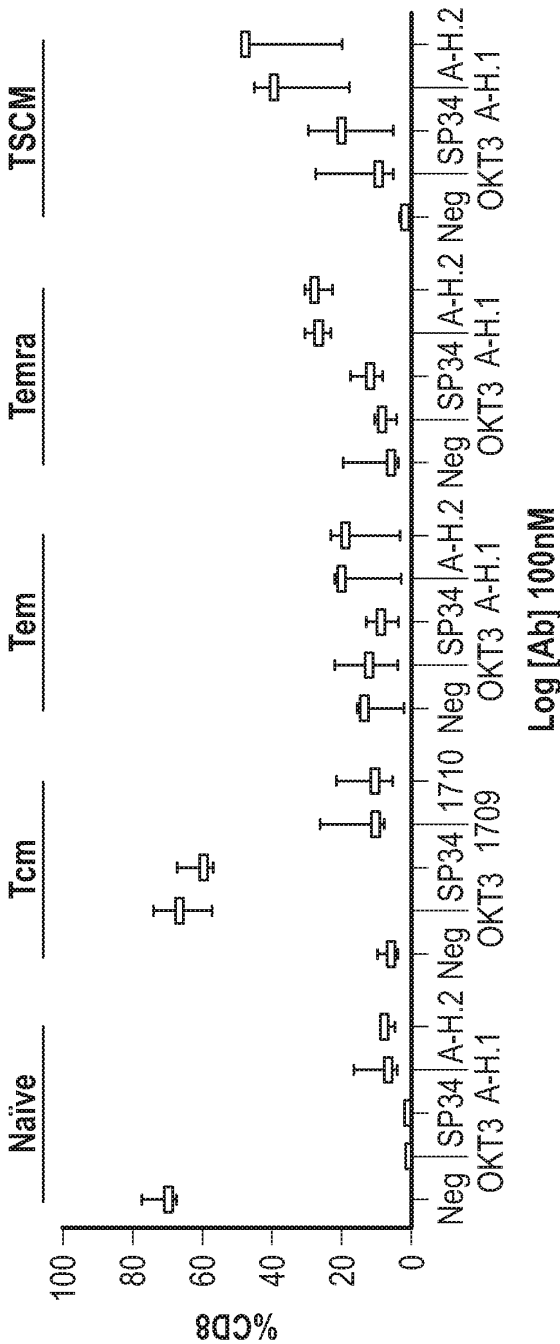


FIG. 12

24/42

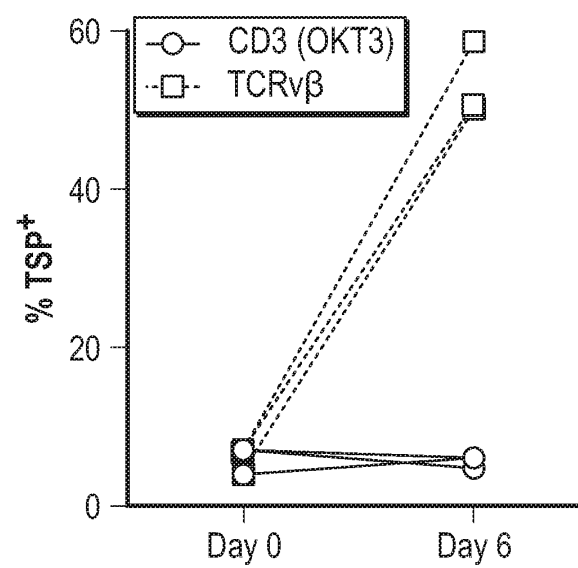


FIG. 13A

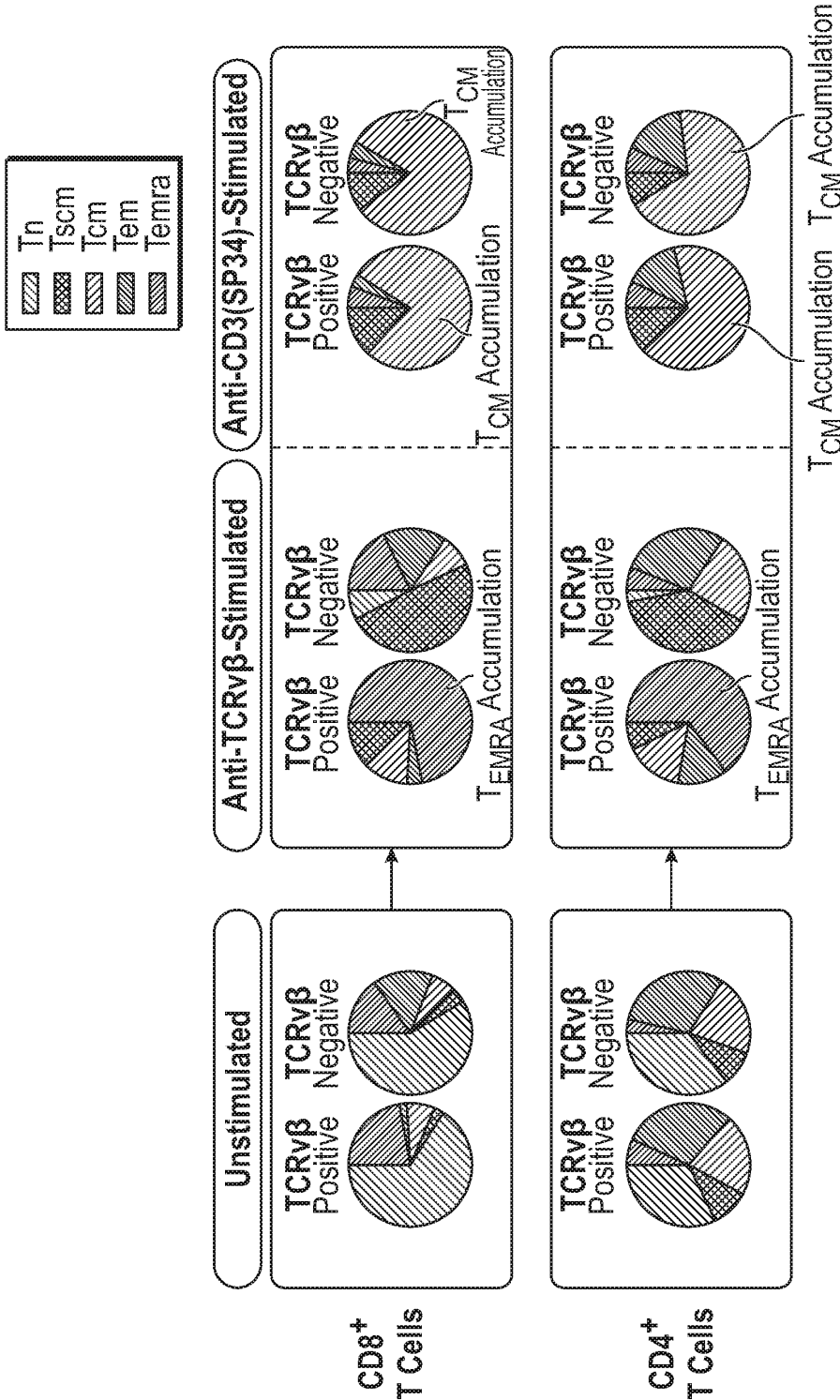


FIG. 13B

26/42

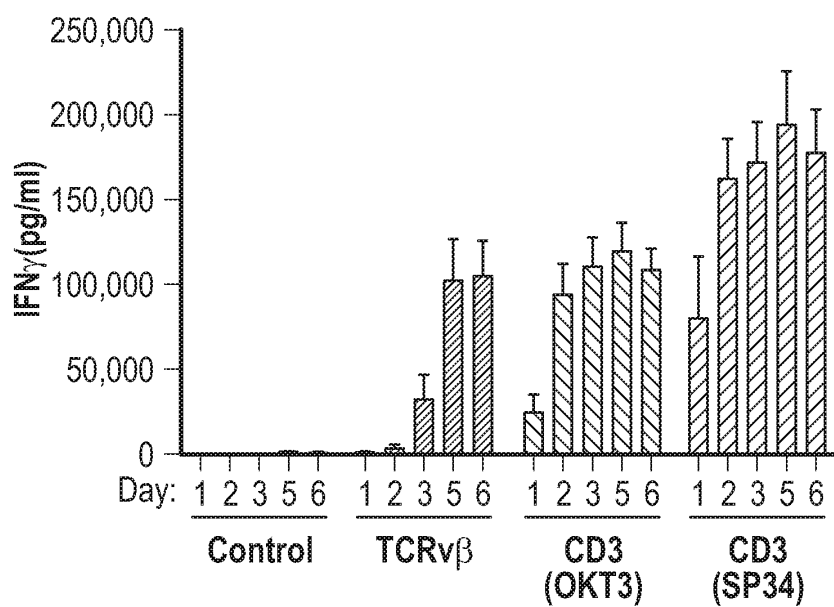


FIG. 13C

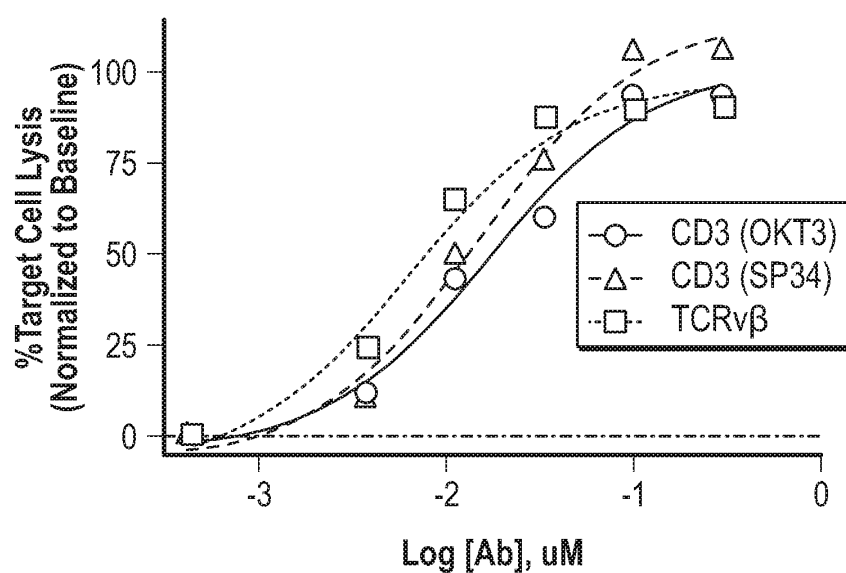


FIG. 13D

27/42

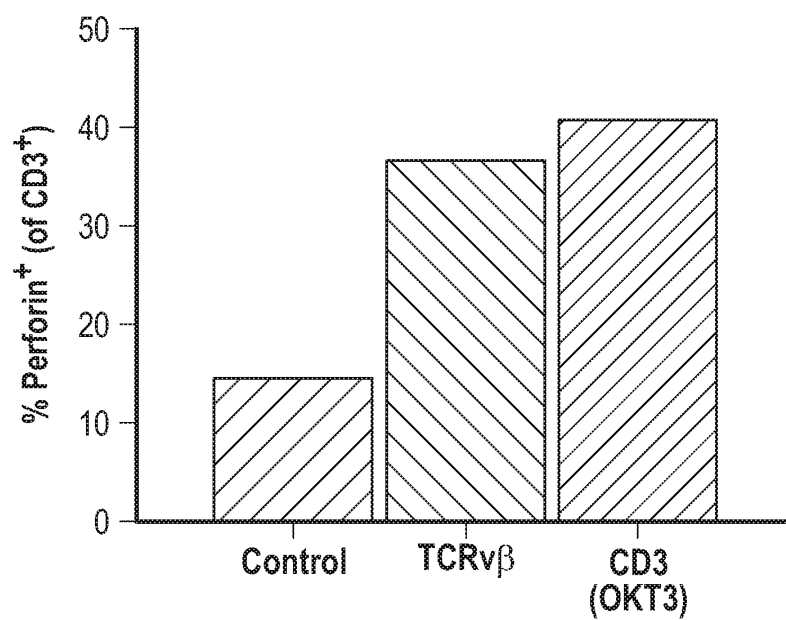


FIG. 13E

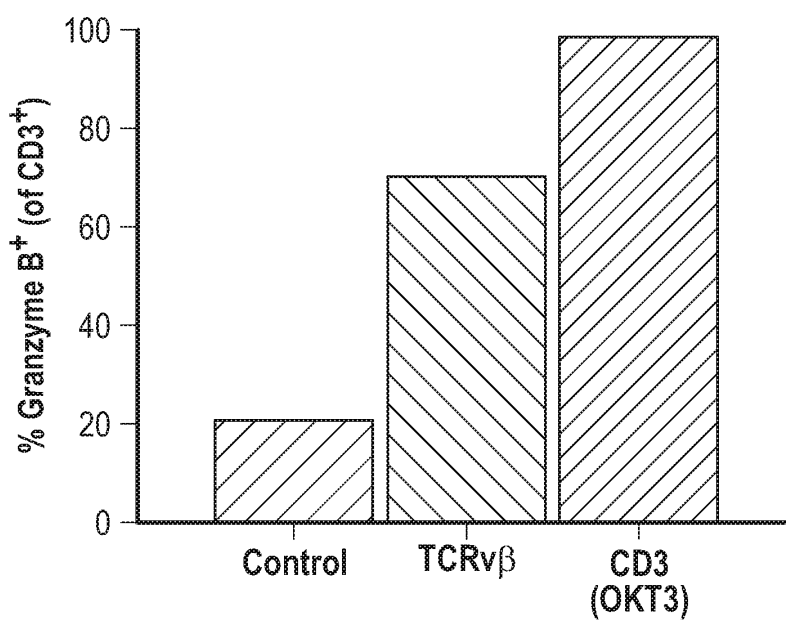


FIG. 13F

28/42

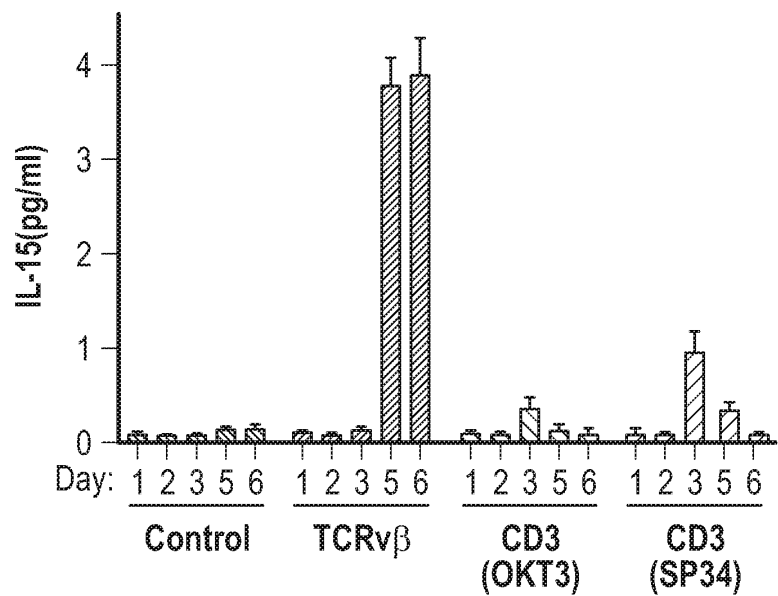
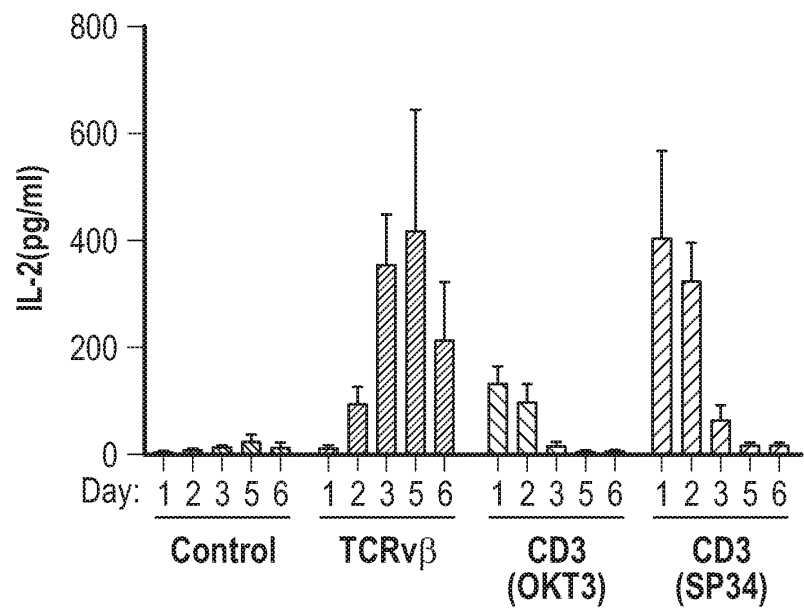


FIG. 14A

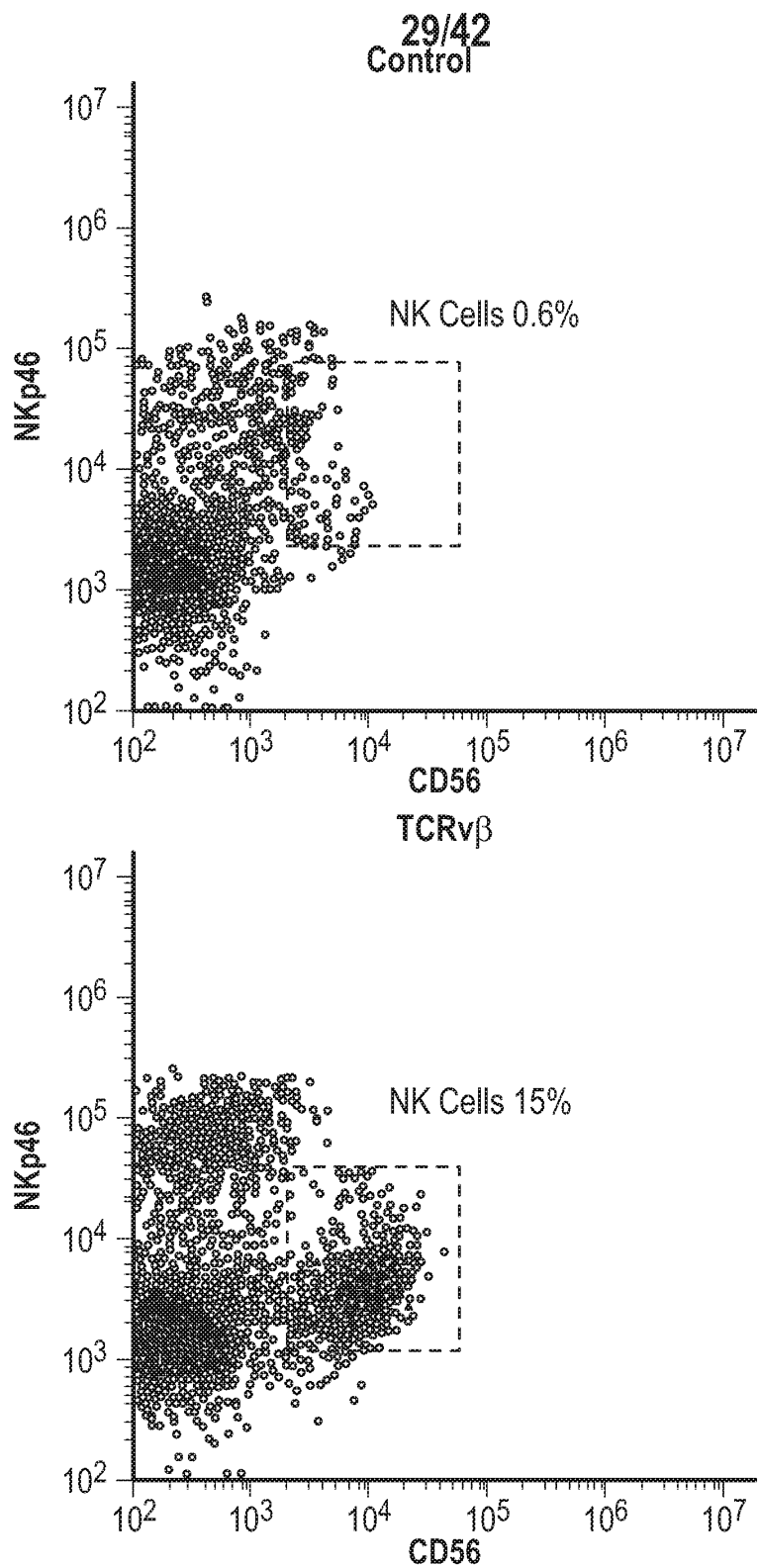


FIG. 14B

30/42

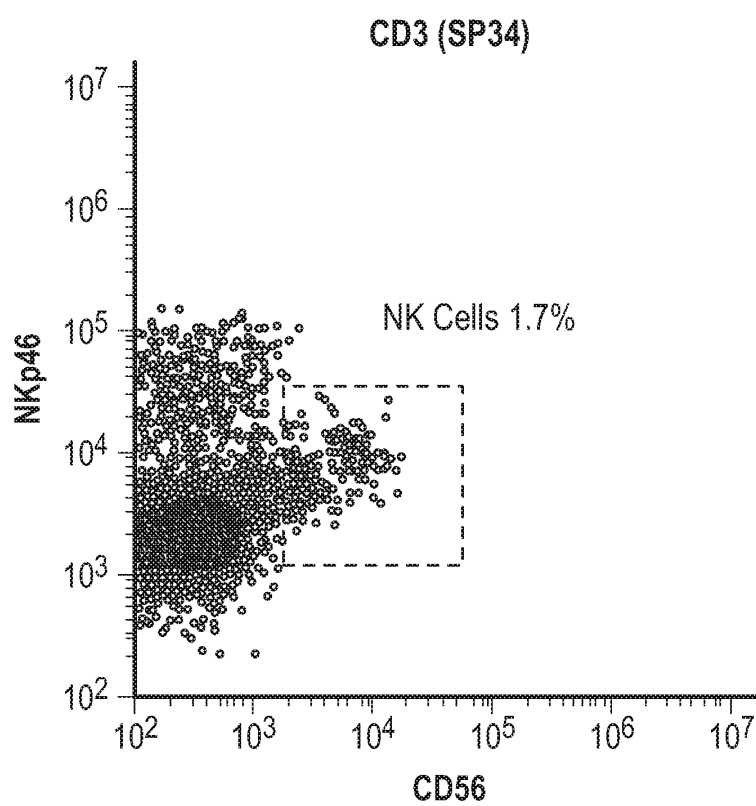


FIG. 14B
(Continued)

31/42

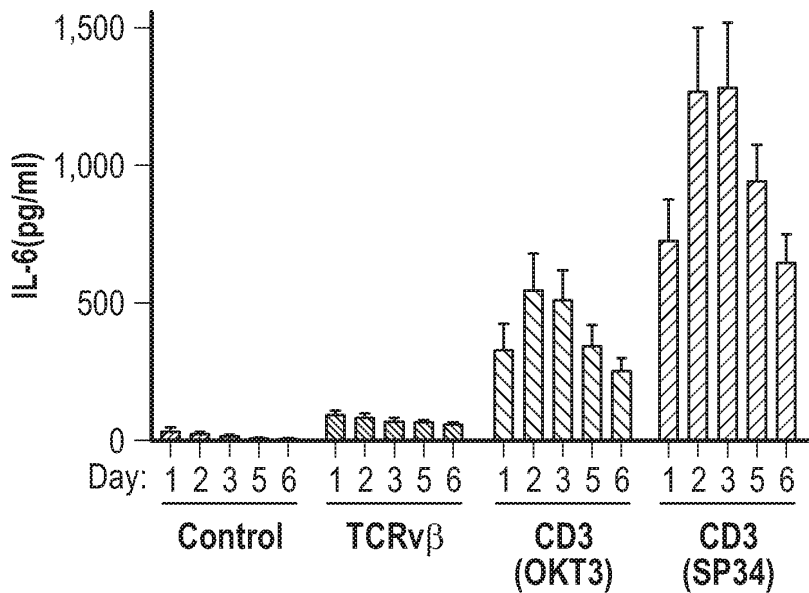


FIG. 15A

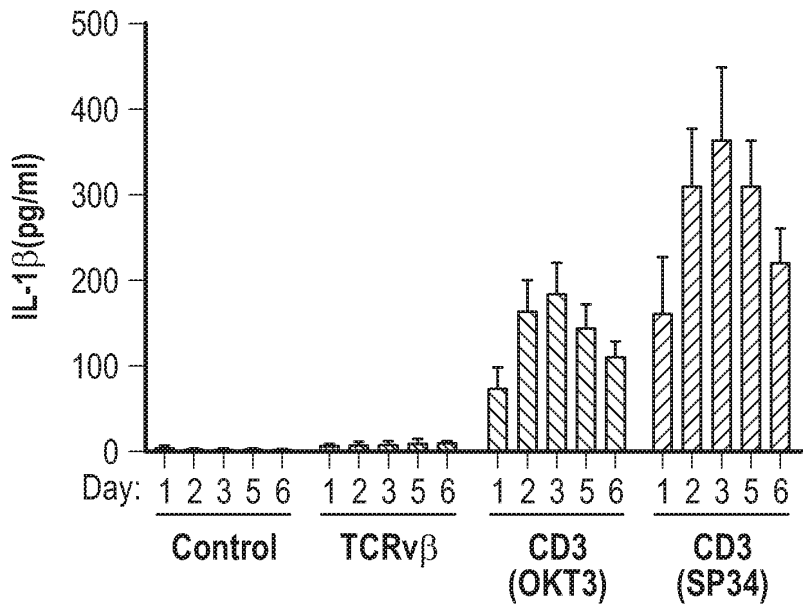


FIG. 15B

32/42

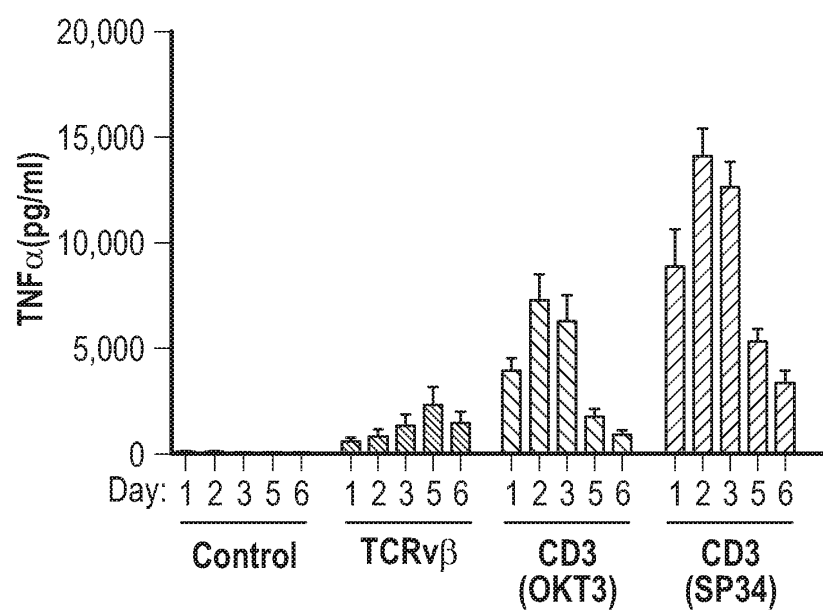


FIG. 15C

33/42

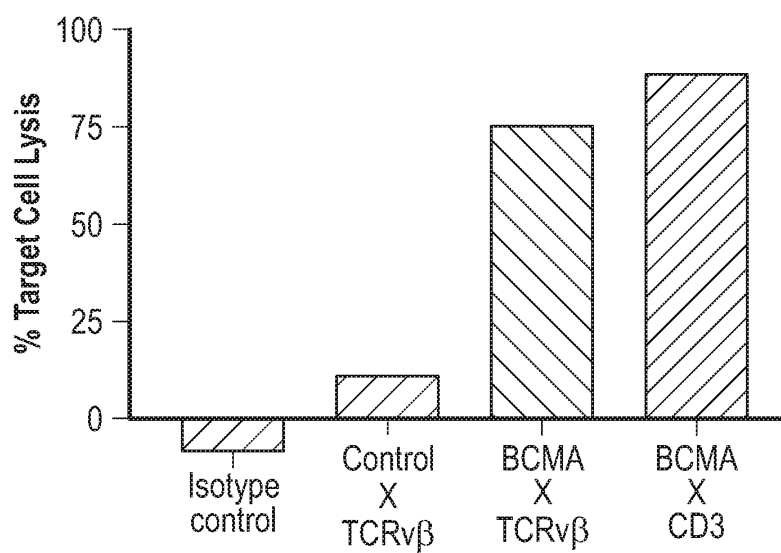


FIG. 16A

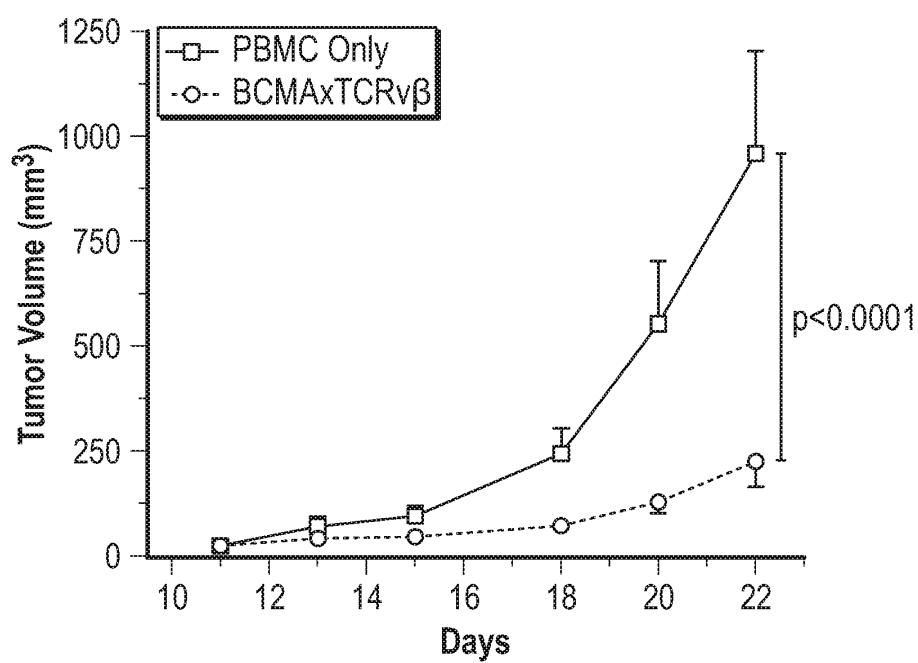


FIG. 16B

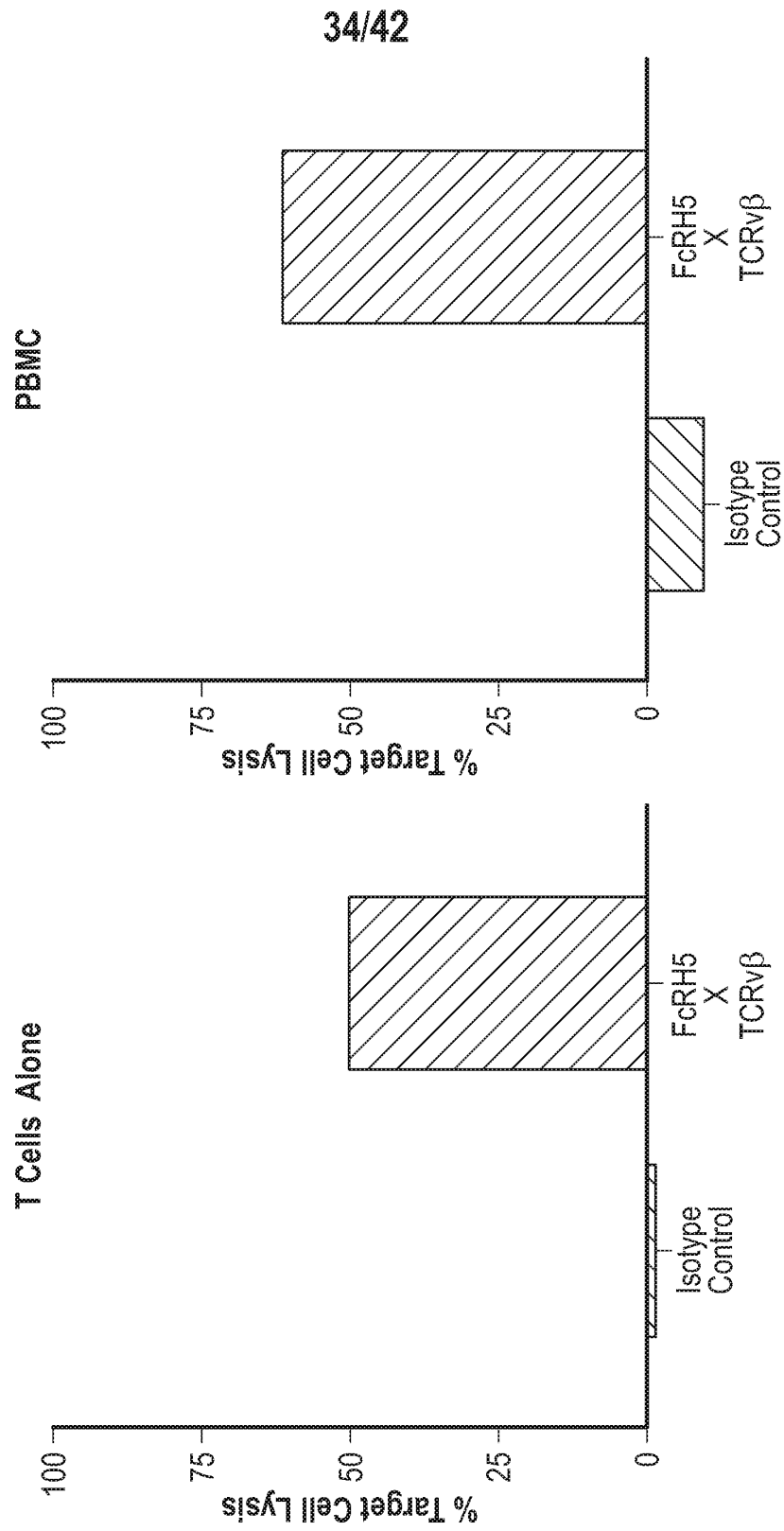


FIG. 17

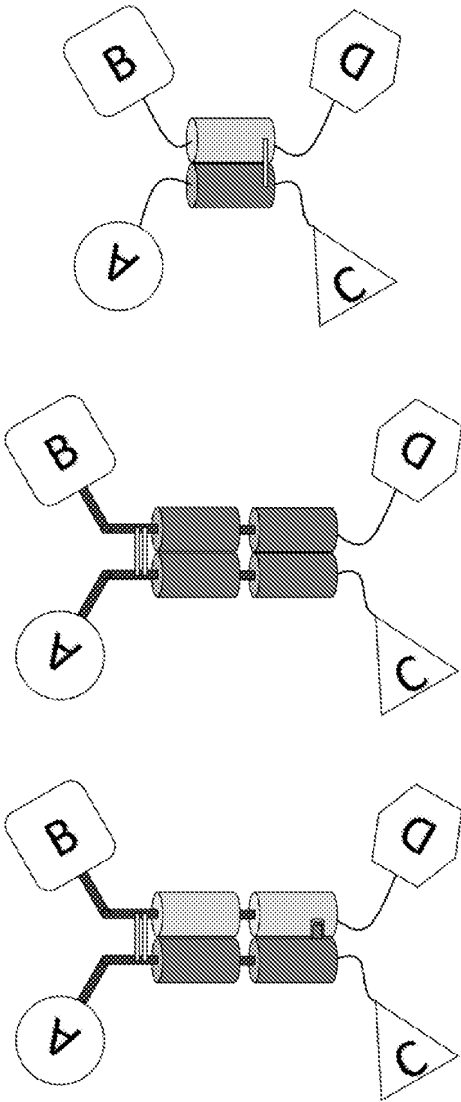


FIG. 18C

FIG. 18B

FIG. 18A

FIG. 19A

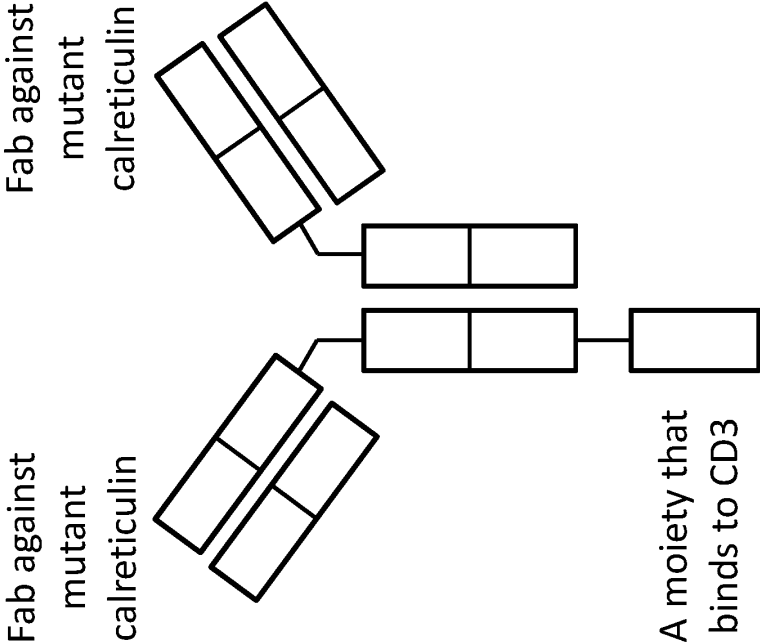


FIG. 19B

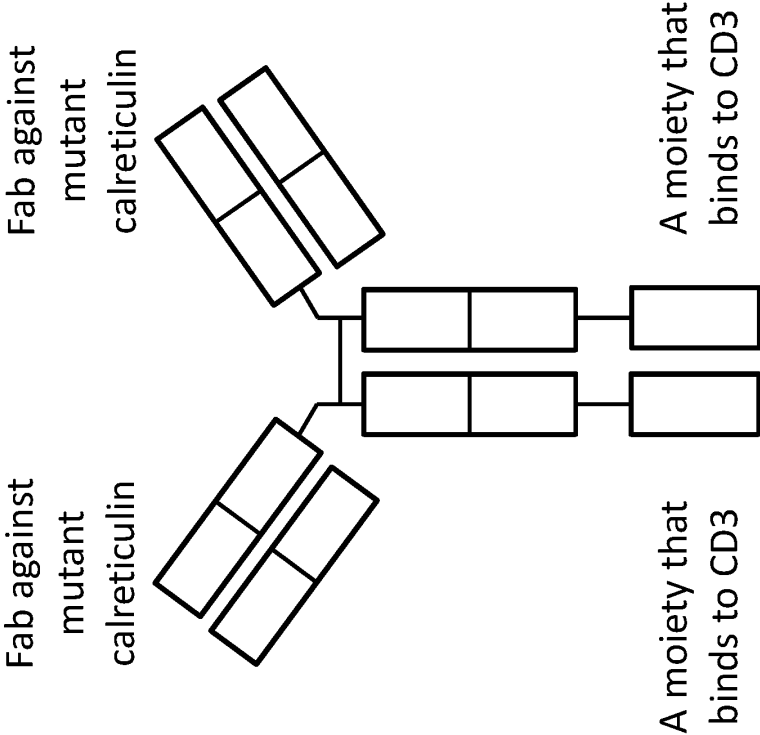


FIG. 20A

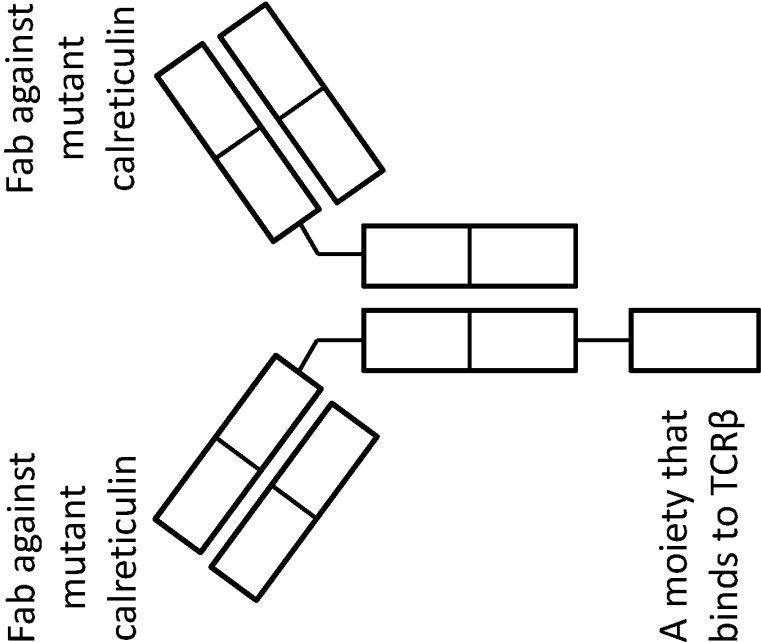


FIG. 20B

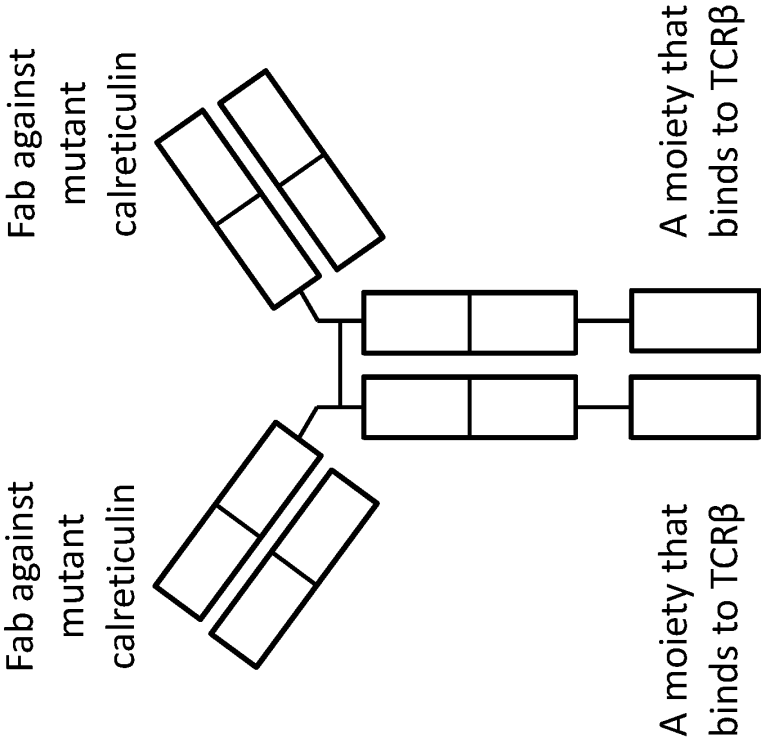


FIG. 21A

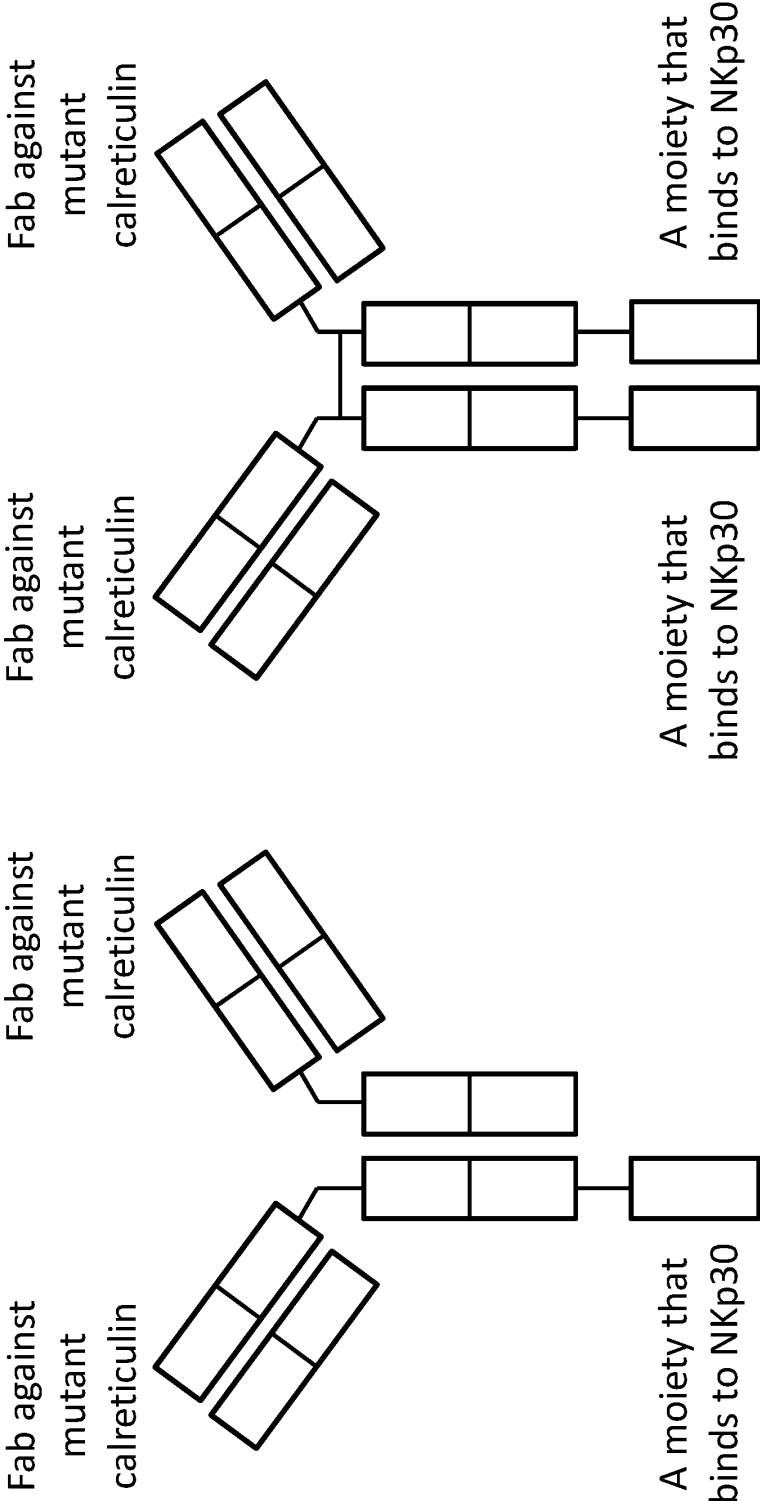
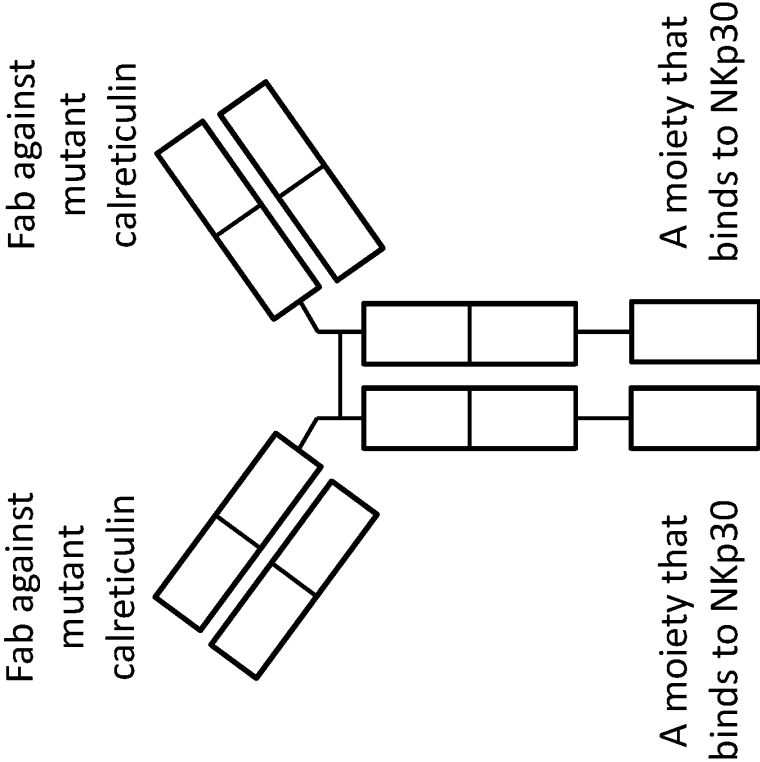


FIG. 21B



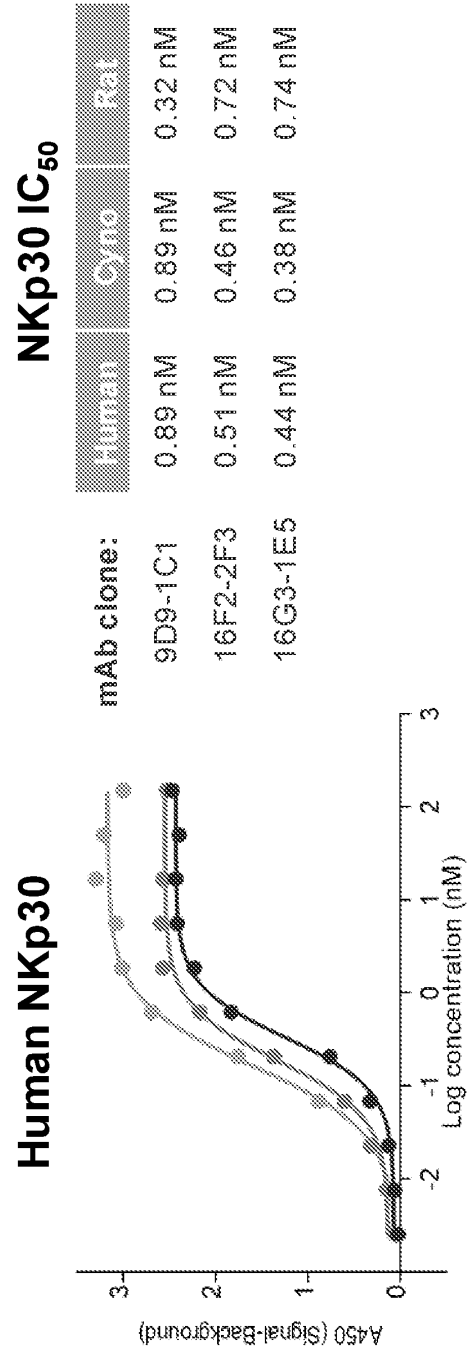


FIG. 22

Activation of NK92 cells by NK p30 Ab

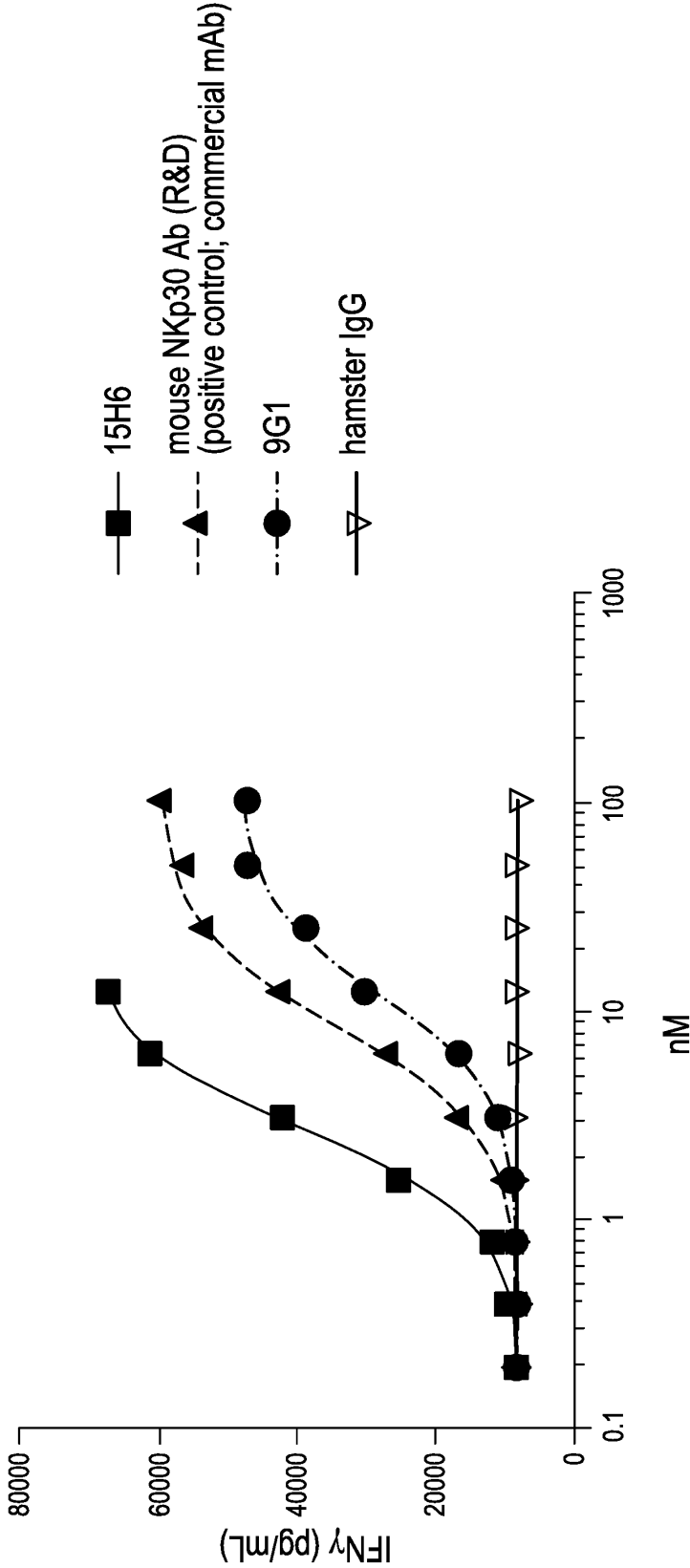


FIG. 23

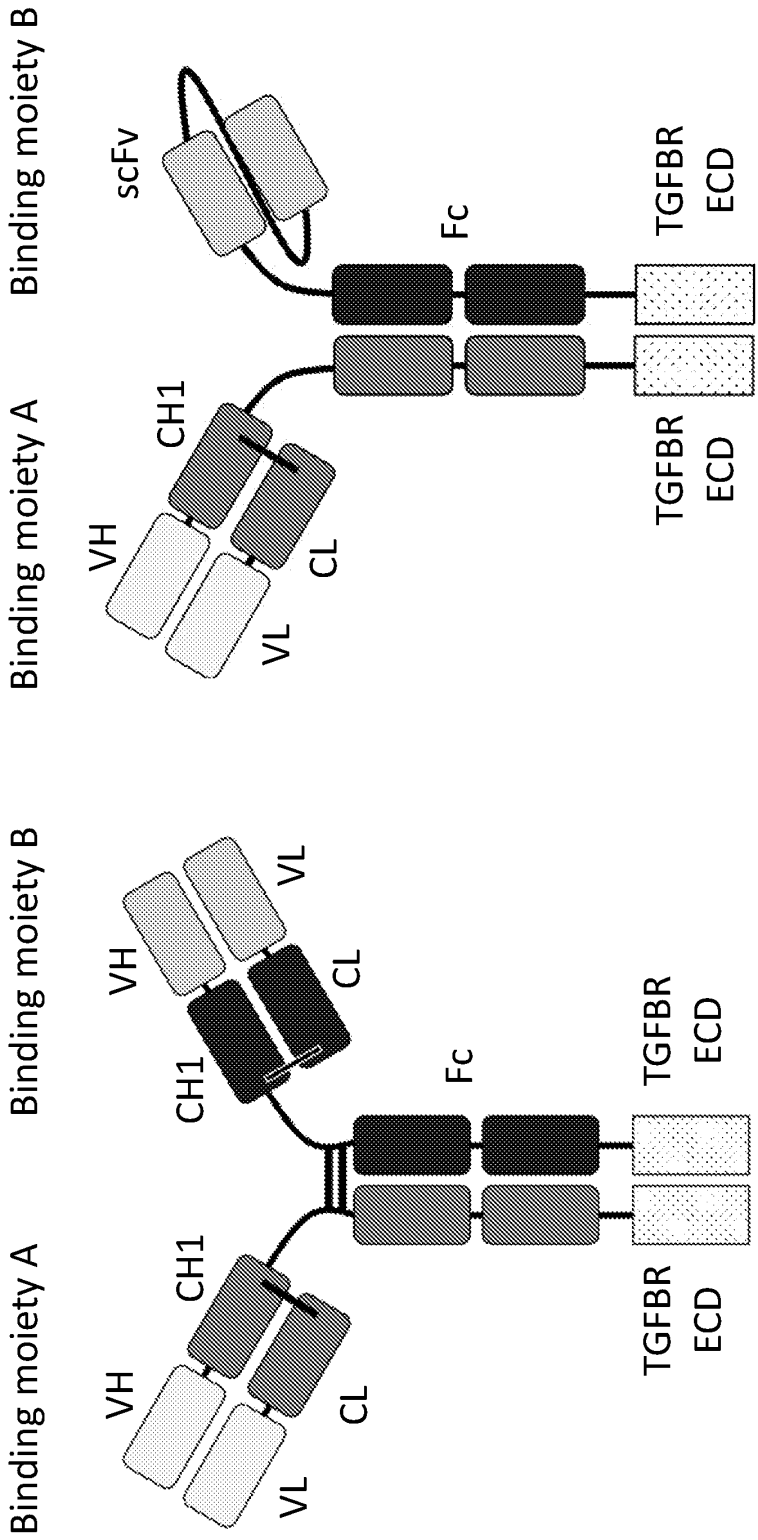


FIG. 24B

FIG. 24A

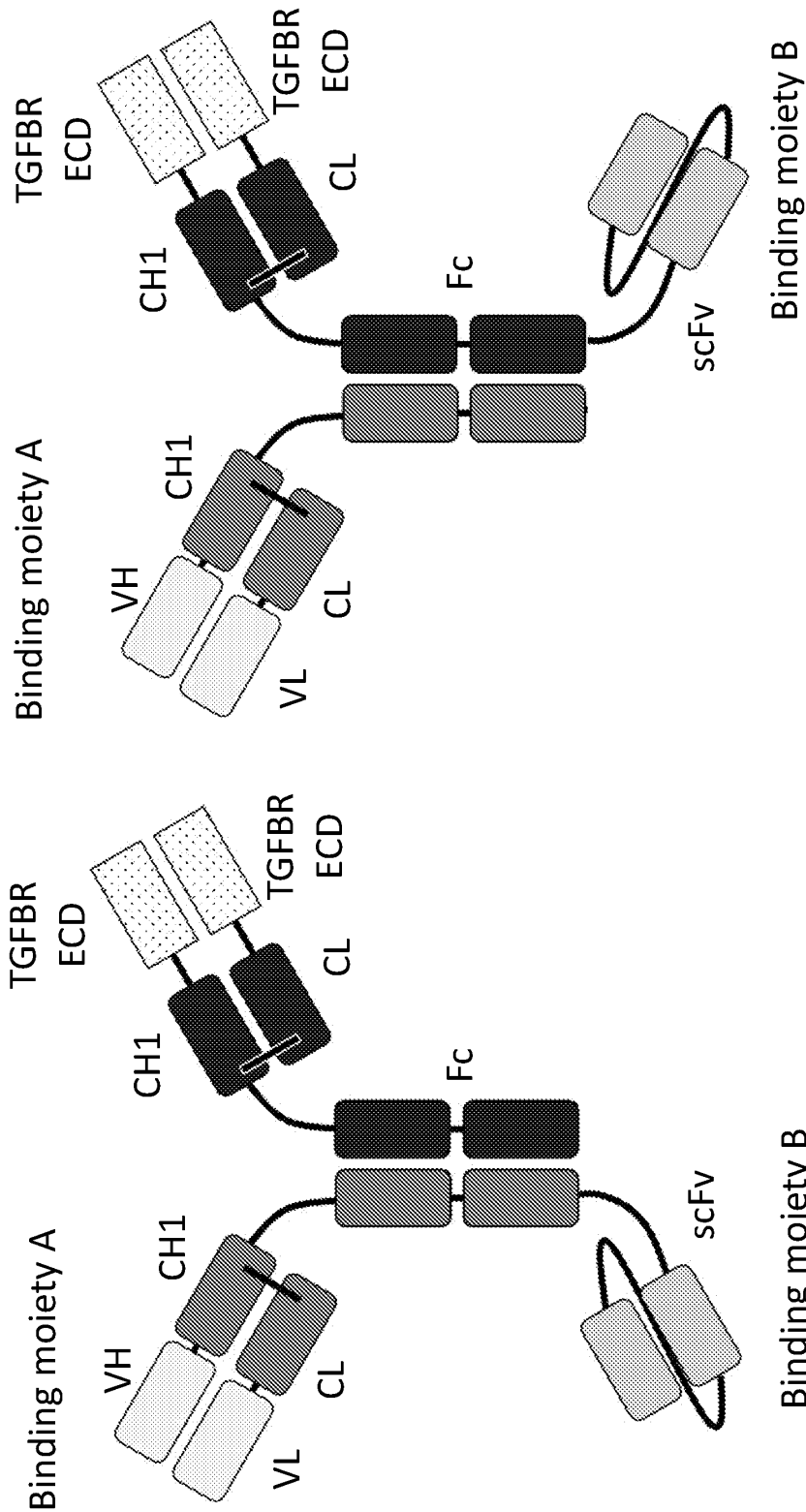


FIG. 24D

FIG. 24C