

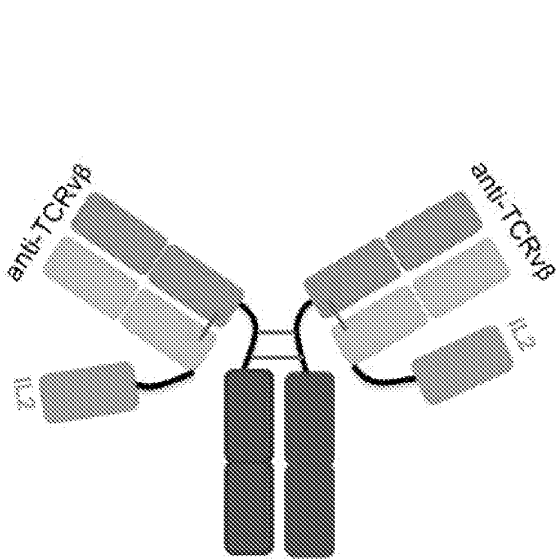


FIG. 1A

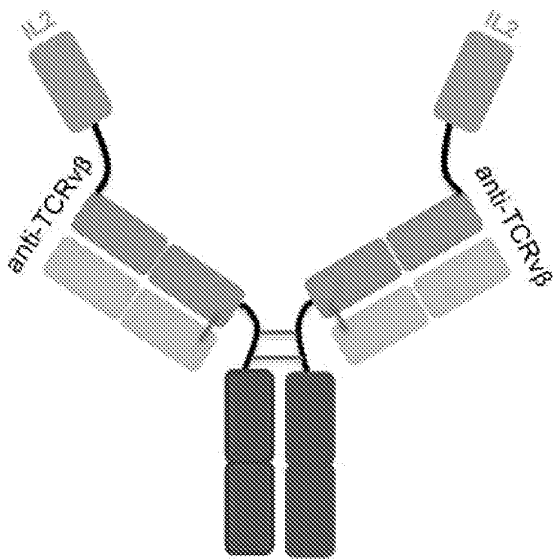


FIG. 1B

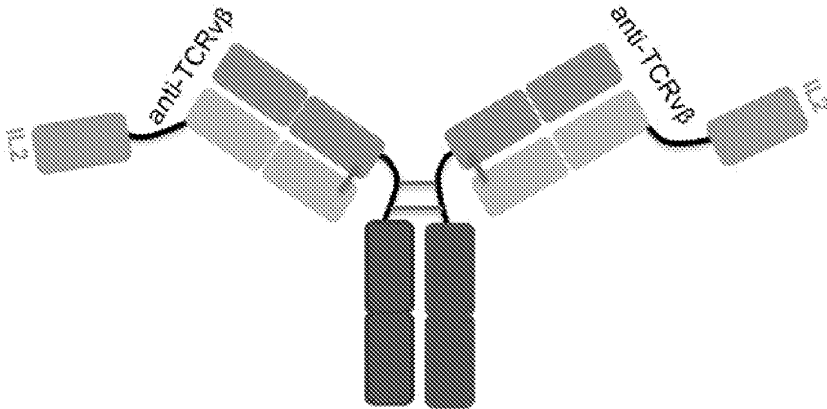


FIG. 1C

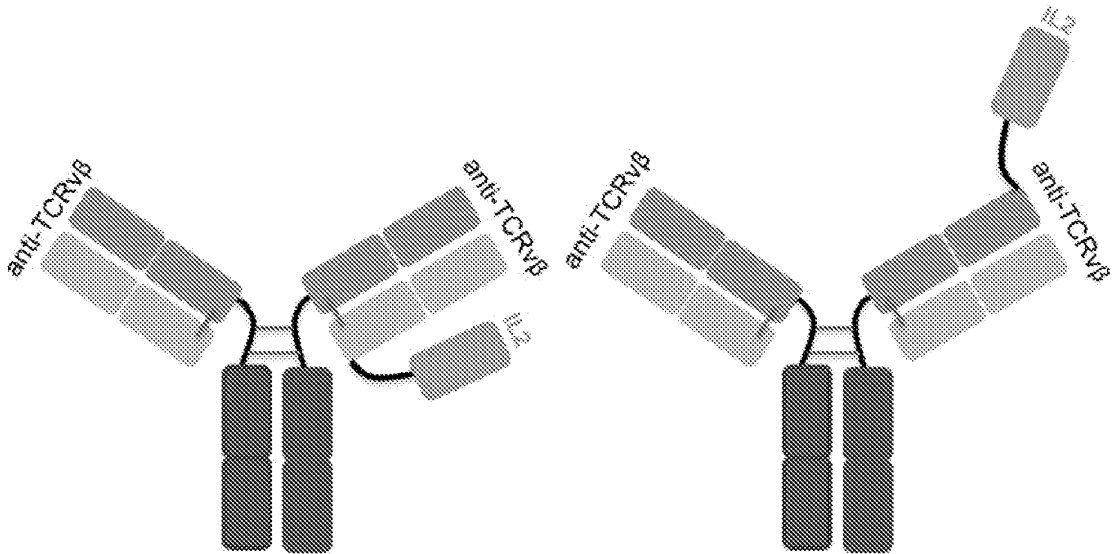


FIG. 1D

FIG. 1E

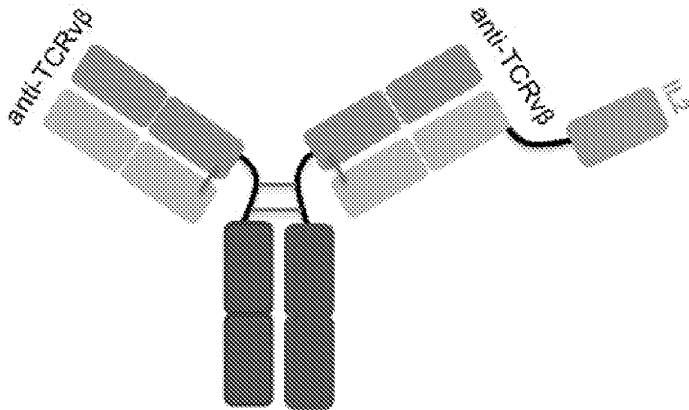


FIG. 1F

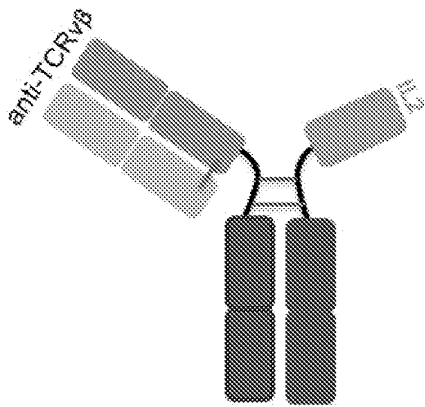


FIG. 1G

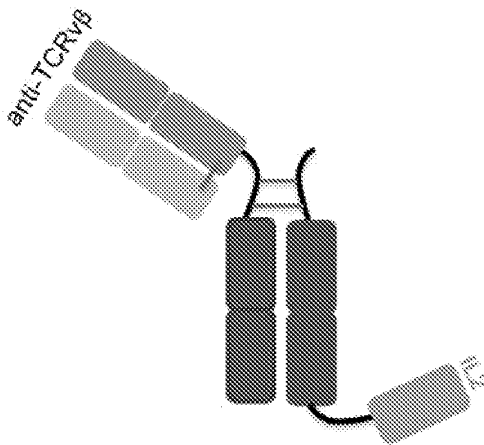


FIG. 1H

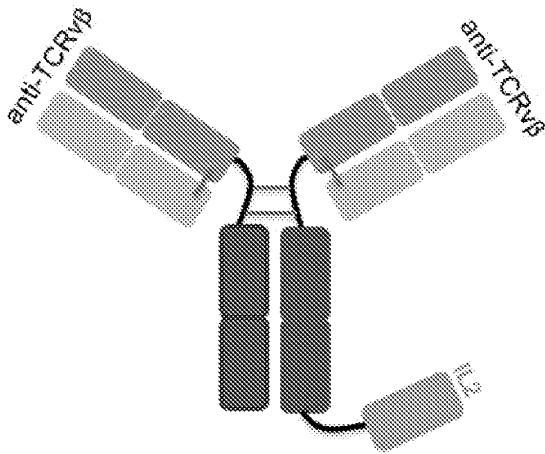


FIG. 1I

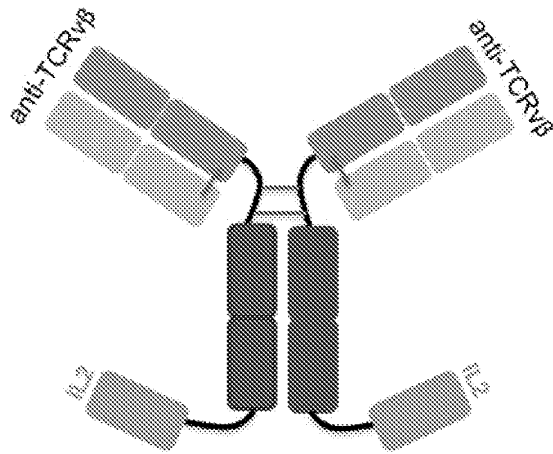
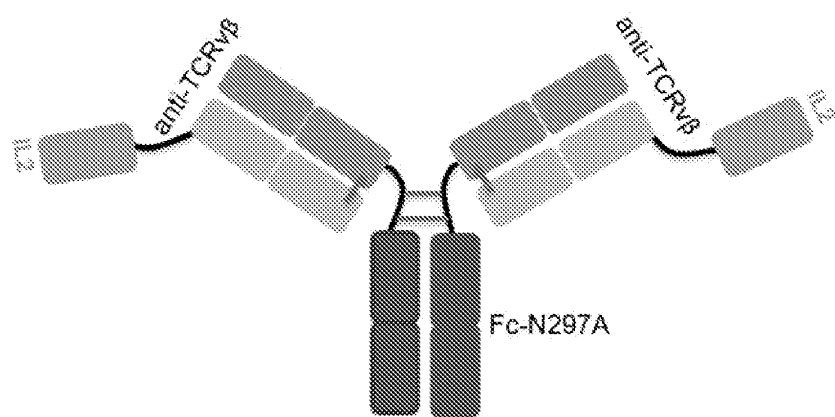
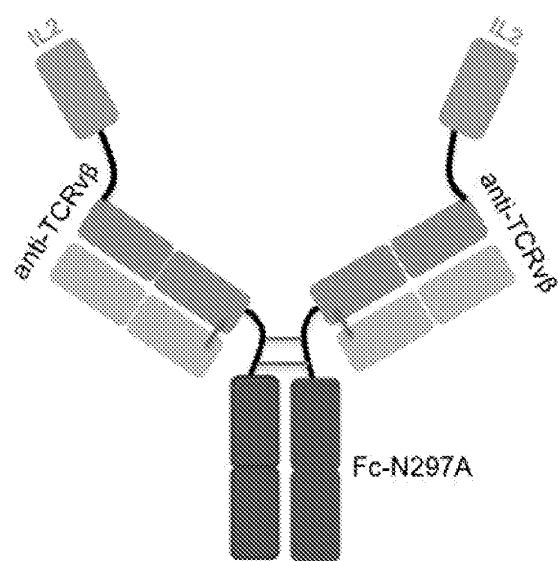
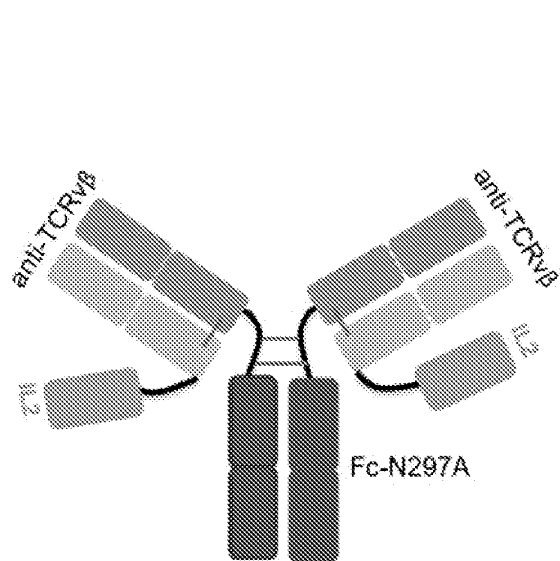


FIG. 1J



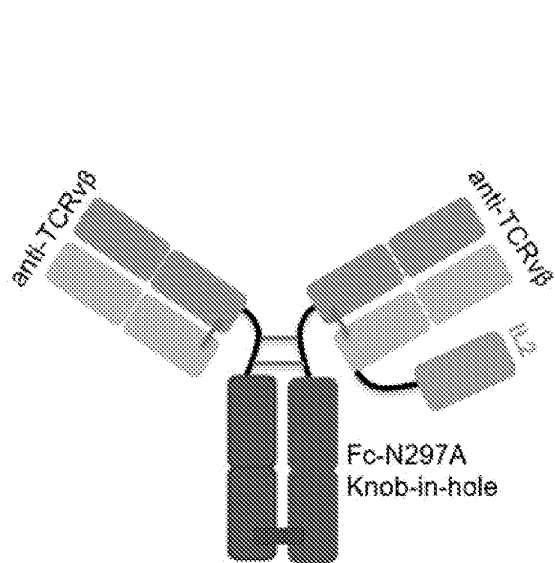


FIG. 1N

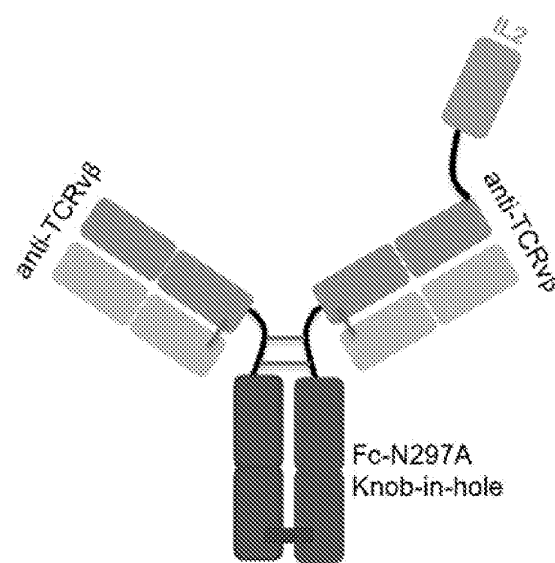


FIG. 1O

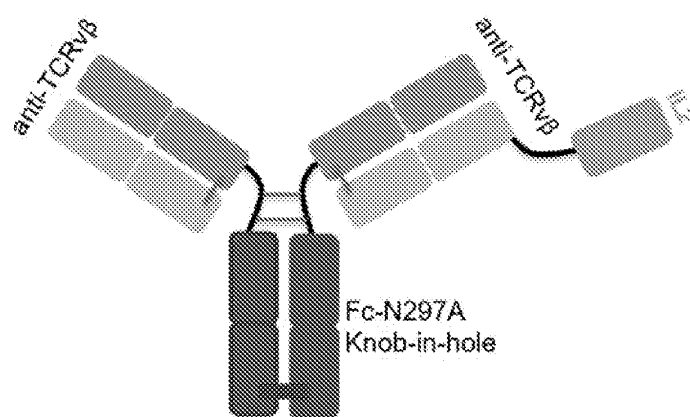


FIG. 1P

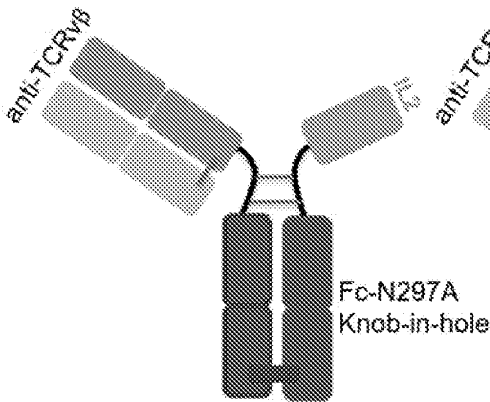


FIG. 1Q

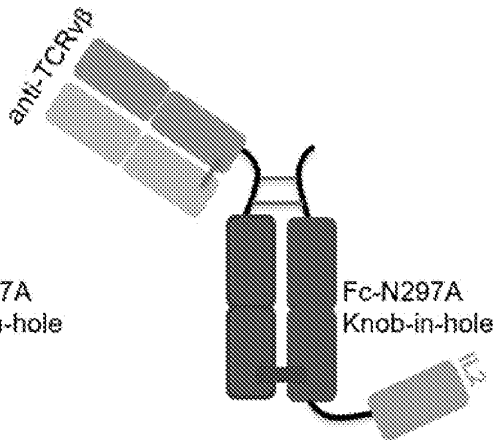


FIG. 1R

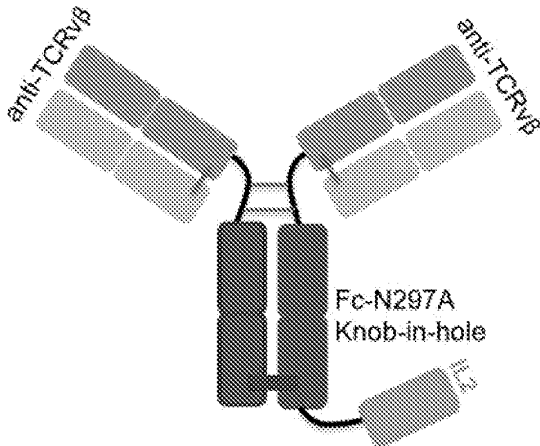


FIG. 1S

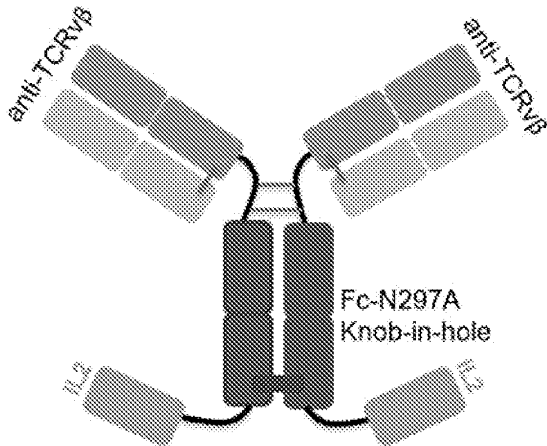


FIG. 1T

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	53a	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

	CDR 3										CDR 4																				
SEQ ID NO: 1	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83a	83c	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	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

	Framework 4										CDR 3										
SEQ ID NO: 1	95	96	97	98	99	100	101a	101b	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. 2A

VL	Framework 1										CDR 1																							
SEQ ID NO: 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	30	31	32	33	34
SEQ ID NO: 10	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: 11	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
	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											
SEQ ID NO: 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: 10	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: 11	W	H	Q	Q	K	P	G	K	A	P	K	A	L	I	Y	S	S	S	H	R	Y	S
	W	H	Q	Q	K	P	G	K	V	P	K	A	L	I	Y	S	S	S	H	R	Y	S

	Framework 3																															
SEQ ID NO: 2	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: 10	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: 11	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
	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									
SEQ ID NO: 2	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	
SEQ ID NO: 10	Q	Q	F	K	S	Y	P	L	T	F	G	A	G	T	K	L	E	L	K	
SEQ ID NO: 11	Q	Q	F	K	S	Y	P	L	T	F	G	Q	G	T	K	L	E	I	K	
	Q	Q	F	K	S	Y	P	L	T	F	G	Q	G	T	K	L	E	I	K	

FIG. 2B

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: 23		Q	V	Q	L	V	E	S	G	G	V	V	Q	P	G	R	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	
SEQ ID NO: 25		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: 23		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: 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				
SEQ ID NO: 25		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	C	A	R				
SEQ ID NO: 23		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	C	A	R				
SEQ ID NO: 24		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	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	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: 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																
SEQ ID NO: 25		R	G	E	G	A	M	D	Y	W	G	Q	G	T	T	V	T	V	S	S																

FIG. 3A

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: 16	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	V	I	Y		
SEQ ID NO: 26	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	V	I	Y		
SEQ ID NO: 27	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	V	I	Y		
SEQ ID NO: 28	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	V	I	Y		
SEQ ID NO: 29	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	V	I	Y		
SEQ ID NO: 30	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	V	I	Y		

			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: 16	W	Y	Q	Q	K	S	D	A	S	P	K	L	W	I	Y	Y	Y	T	S	N	L	A	P											
SEQ ID NO: 26	W	Y	Q	Q	K	P	G	K	A	P	K	L	L	I	Y	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	Y	T	S	N	L	A	P											
SEQ ID NO: 28	W	Y	Q	Q	K	P	G	Q	A	P	R	L	L	I	Y	Y	Y	T	S	N	L	A	P											
SEQ ID NO: 29	W	Y	Q	Q	L	P	G	T	A	P	K	L	L	I	Y	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	Y	T	S	N	L	A	P											

FIG. 3B

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	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	D	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	I	P	E	R	F	S	G	S	G	S	G	N	M	Y	T	L	T	I	S	G	A	Q	V	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	Q	G	T	K	L	E	I	K													
SEQ ID NO: 30	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. 3B
(Continued)

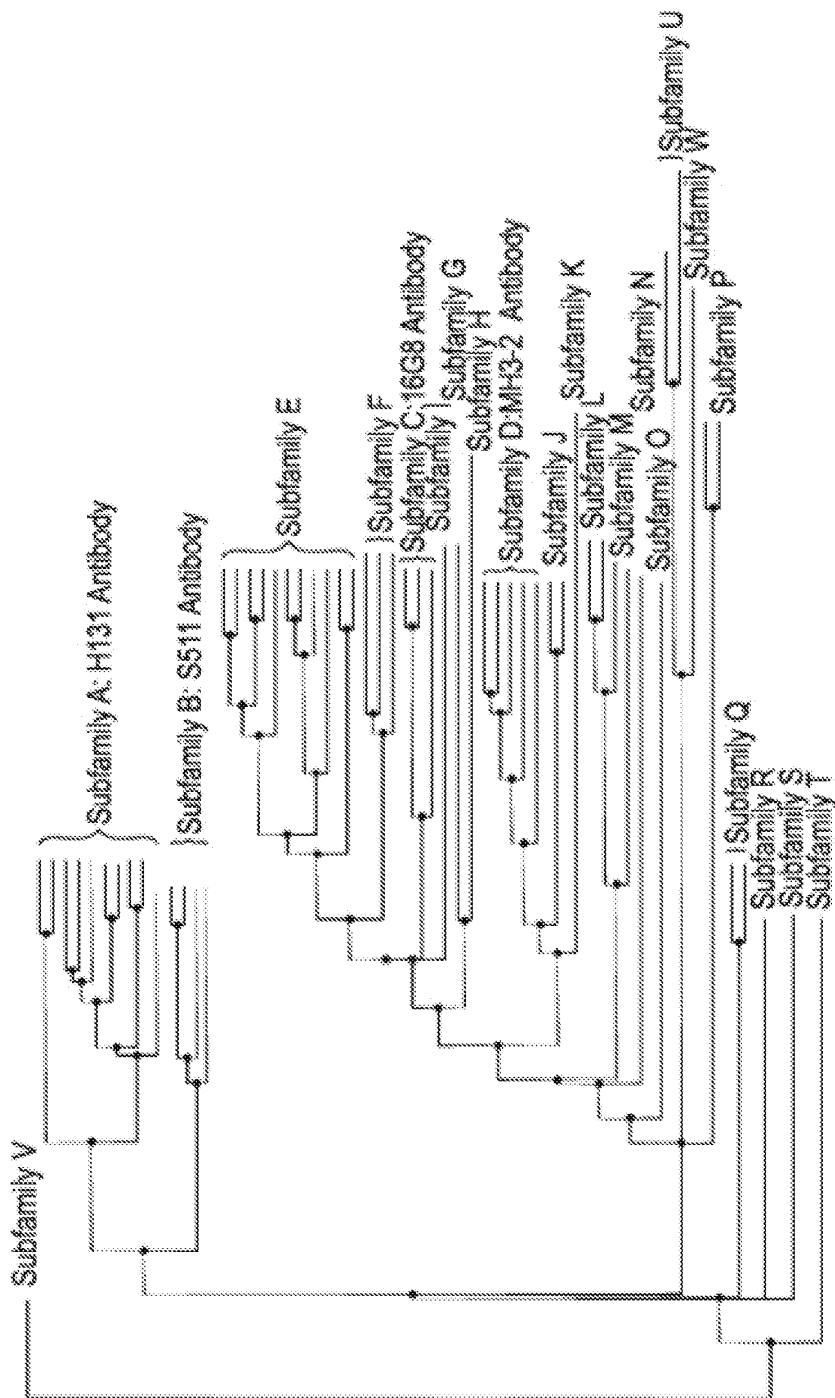


FIG. 4

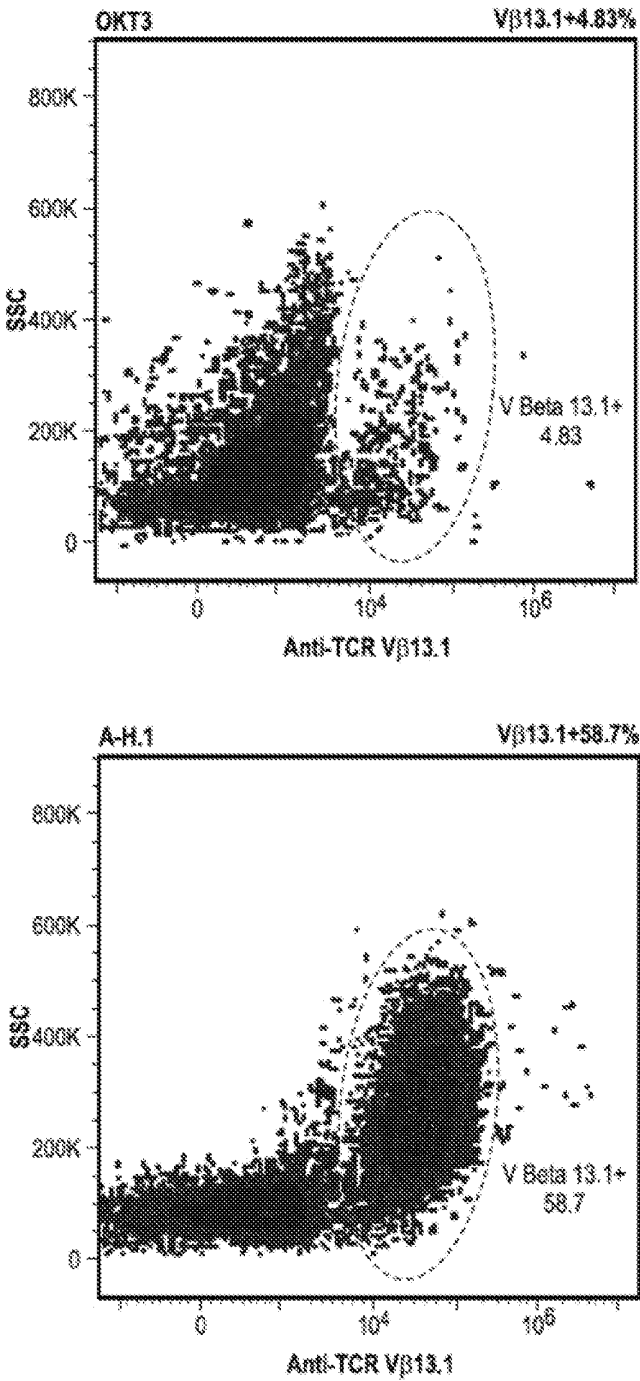


FIG. 5A

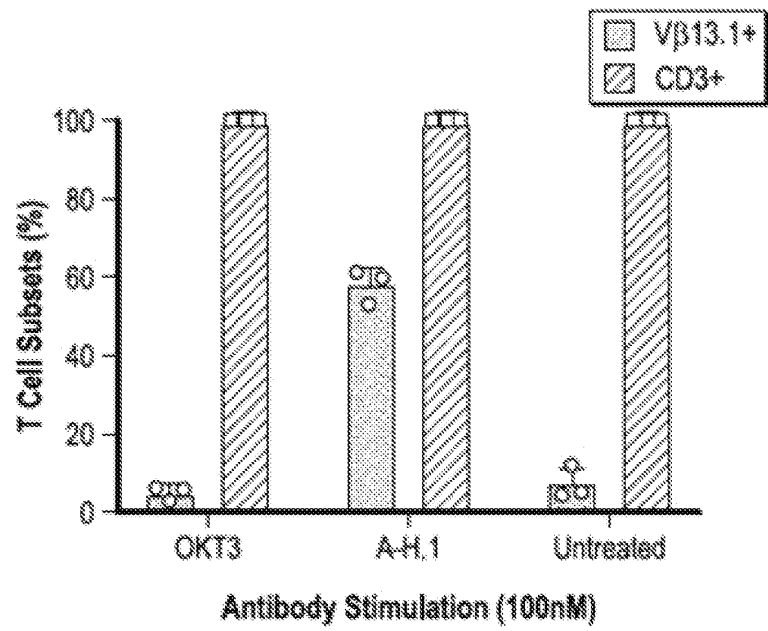


FIG. 5B

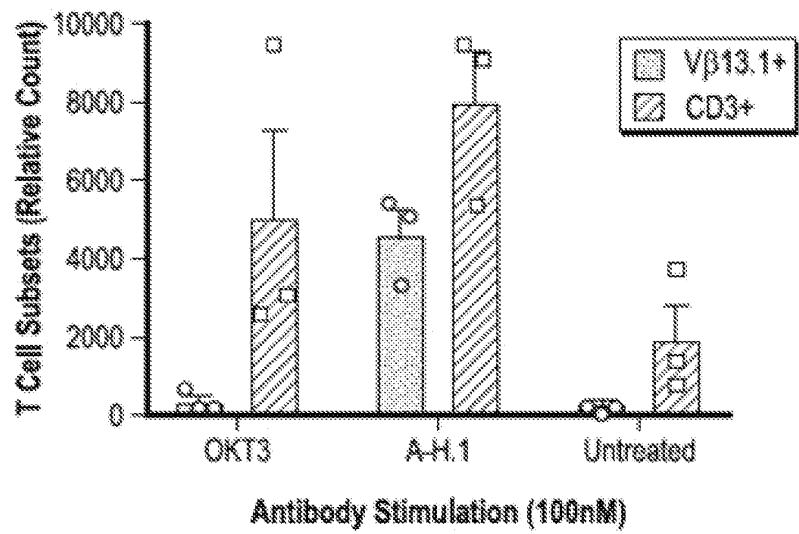


FIG. 5C

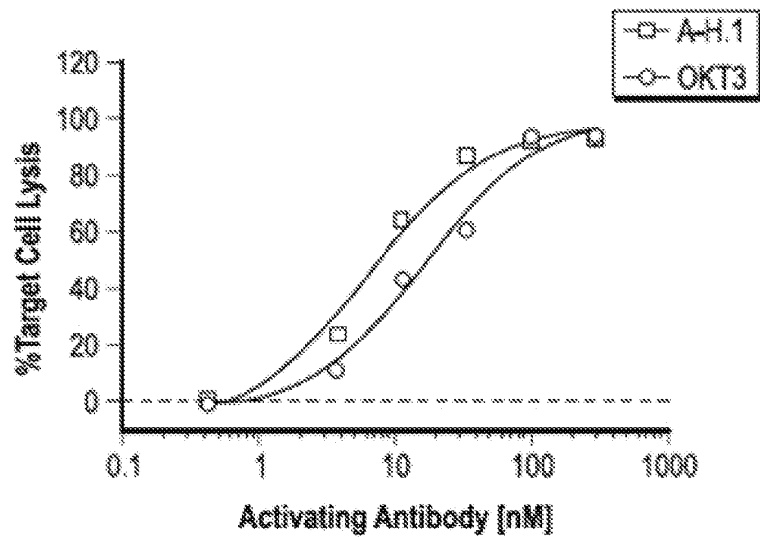


FIG. 6A

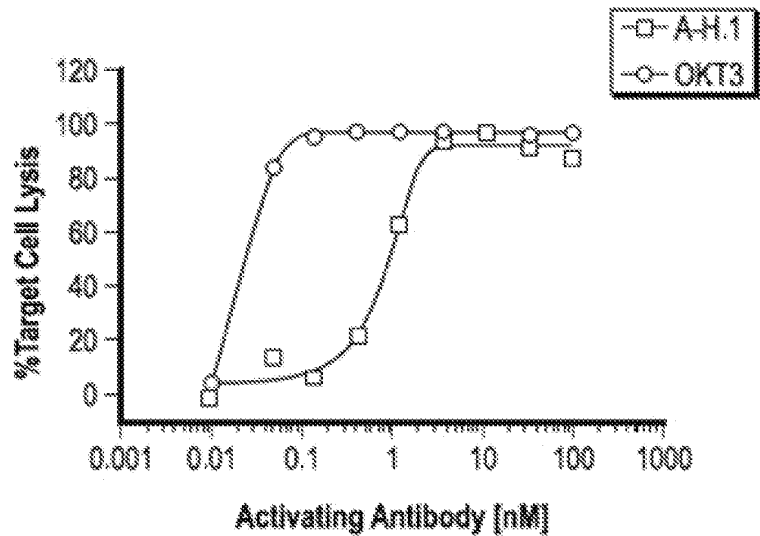


FIG. 6B

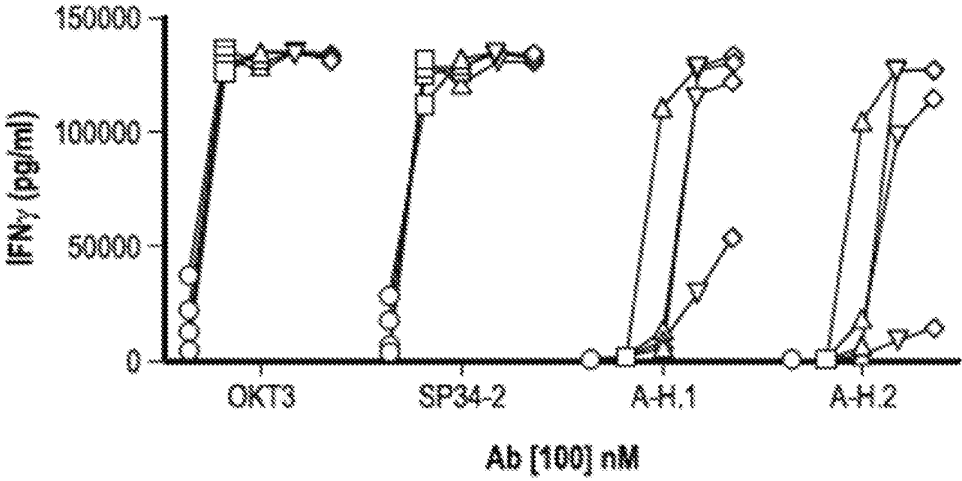


FIG. 7A

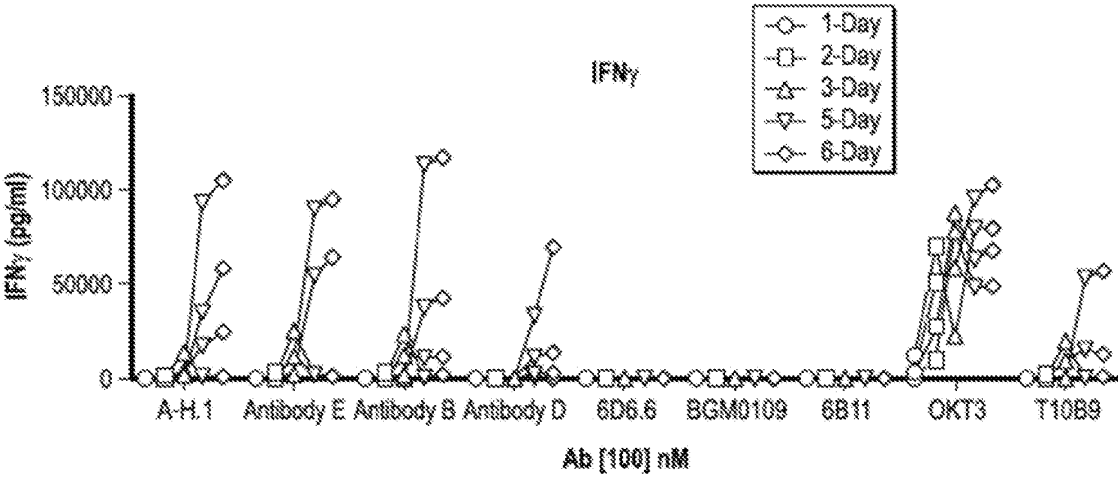


FIG. 7B

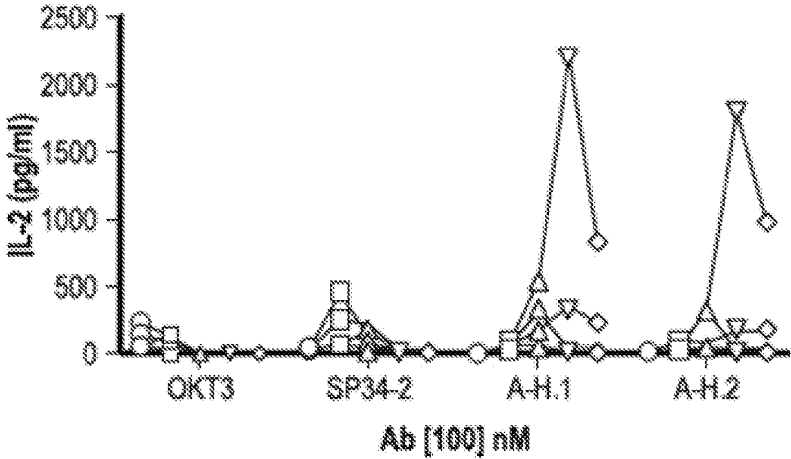


FIG. 8A

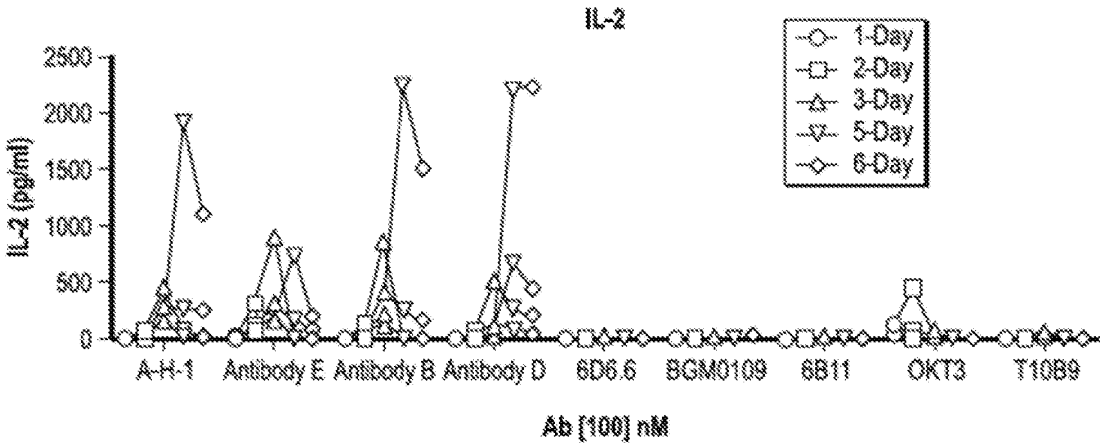


FIG. 8B

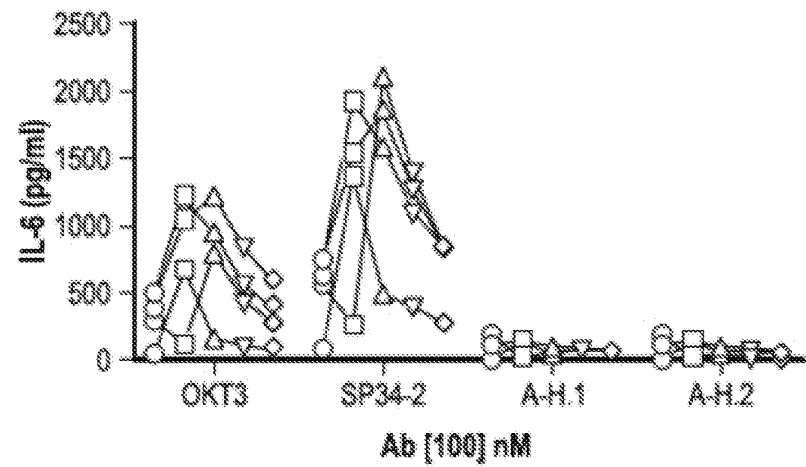


FIG. 9A

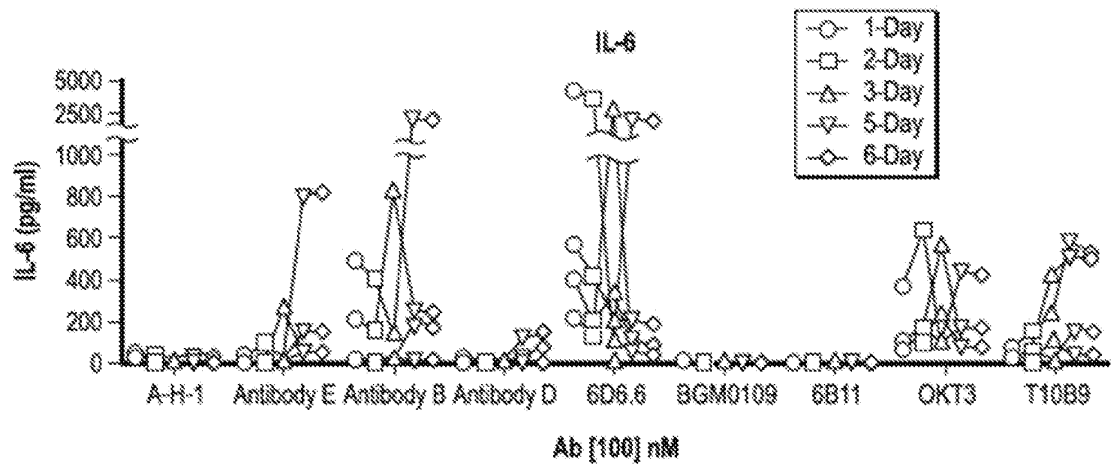


FIG. 9B

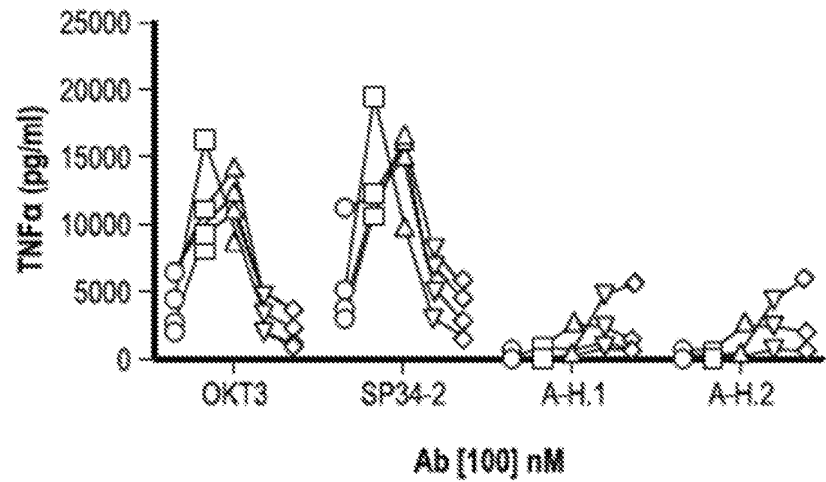


FIG. 10A

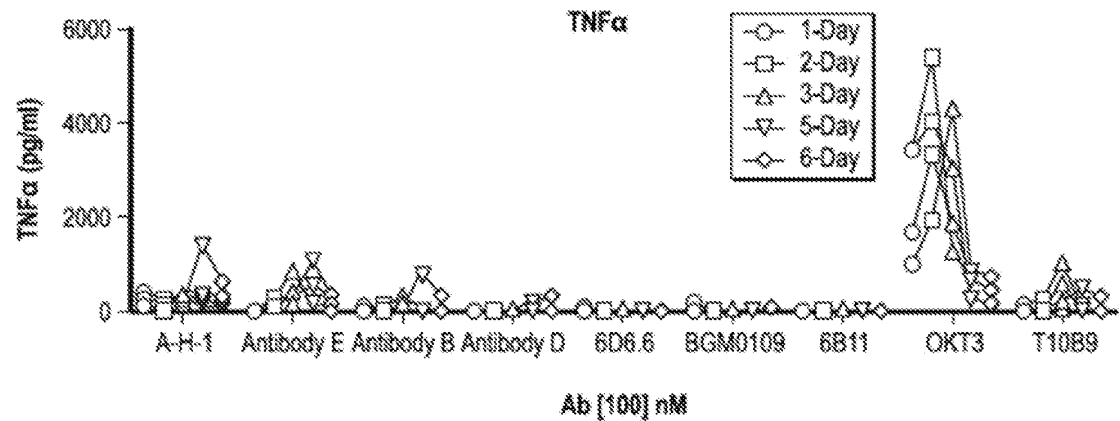


FIG. 10B

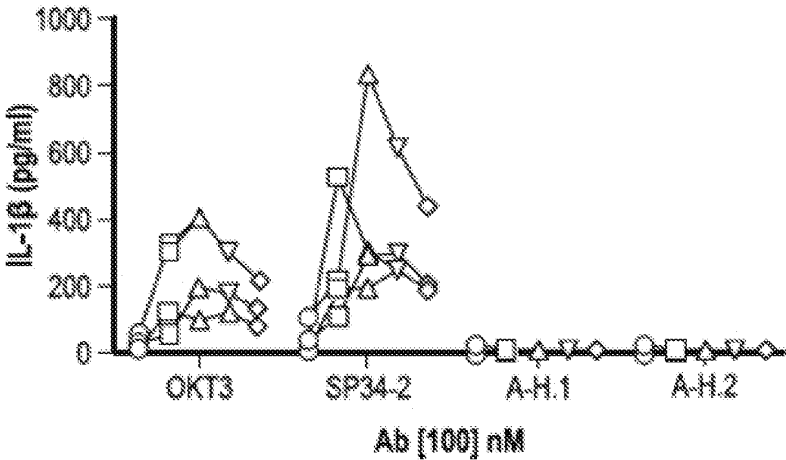


FIG. 11A

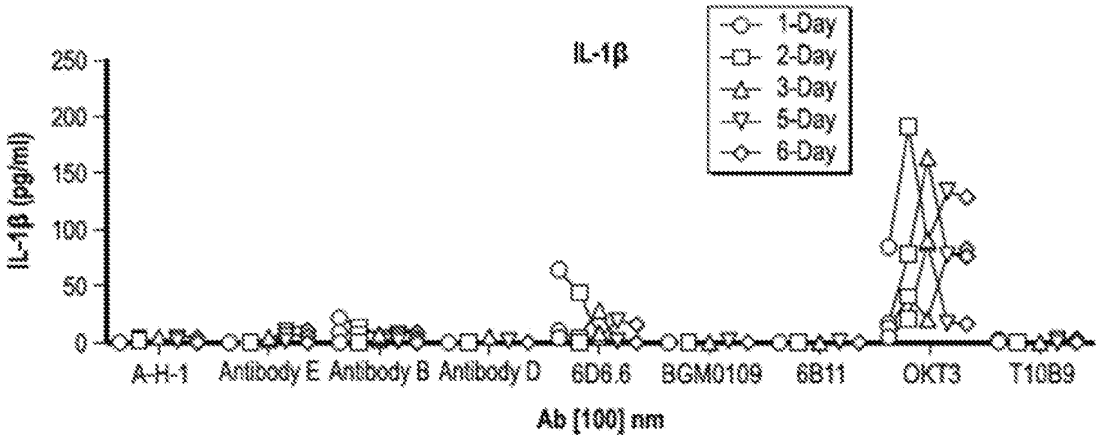


FIG. 11B

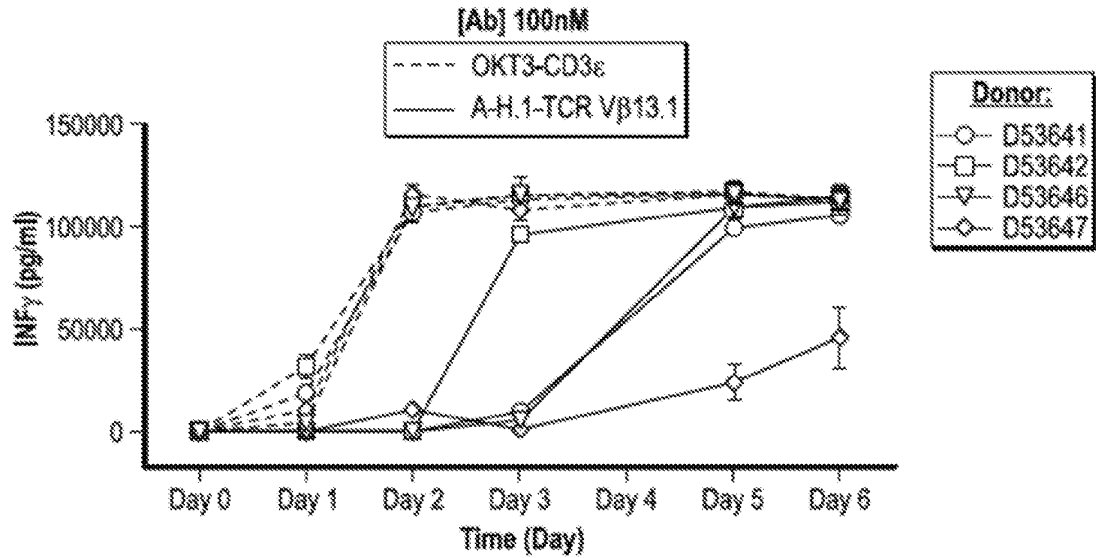


FIG. 12A

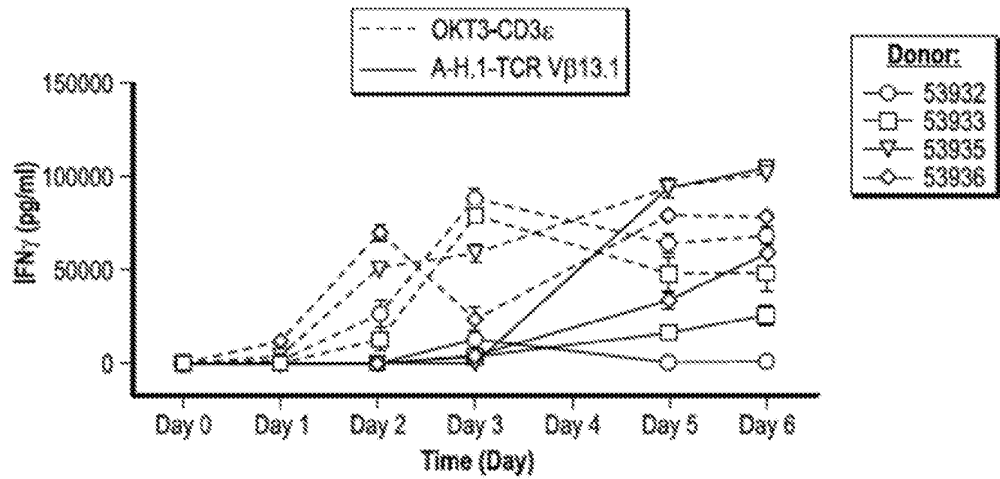


FIG. 12B

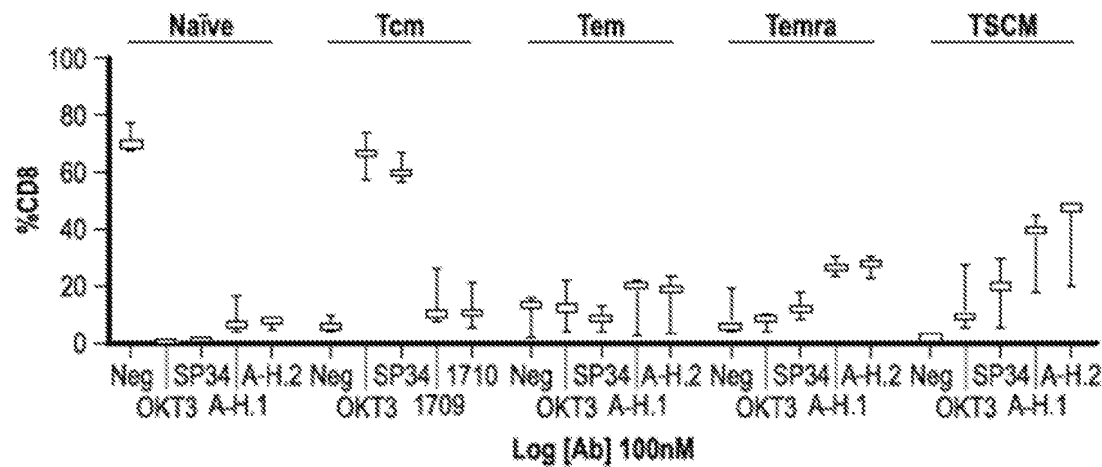


FIG. 13

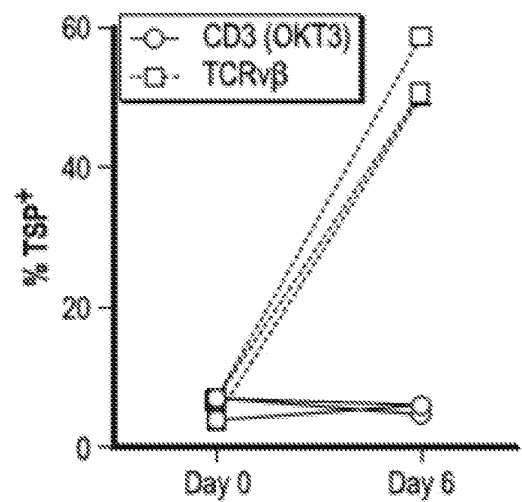


FIG. 14A

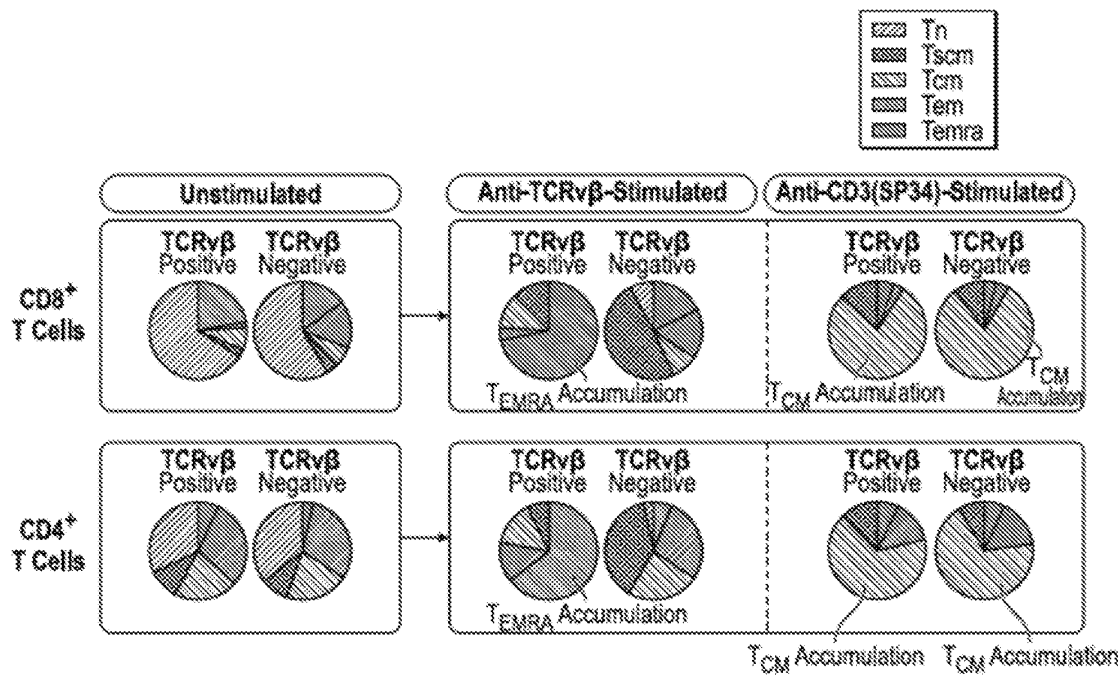


FIG. 14B

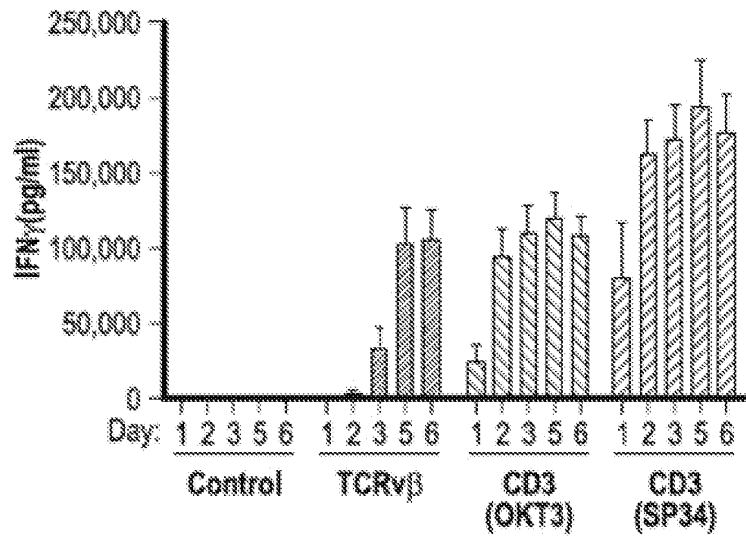


FIG. 14C

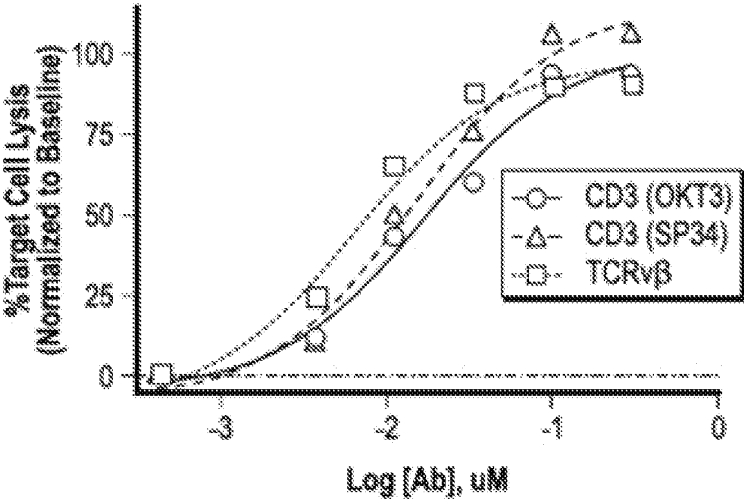


FIG. 14D

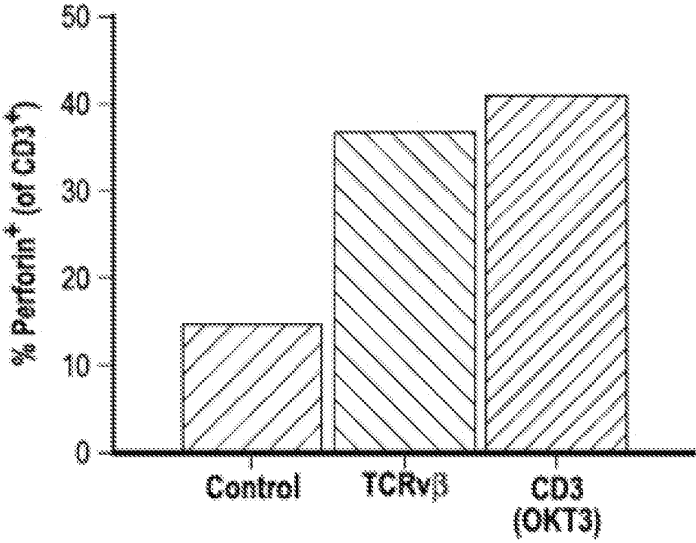


FIG. 14E

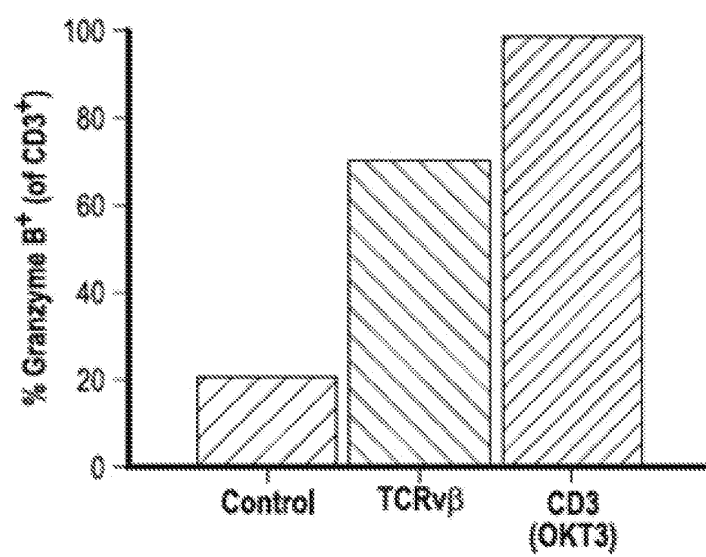


FIG. 14F

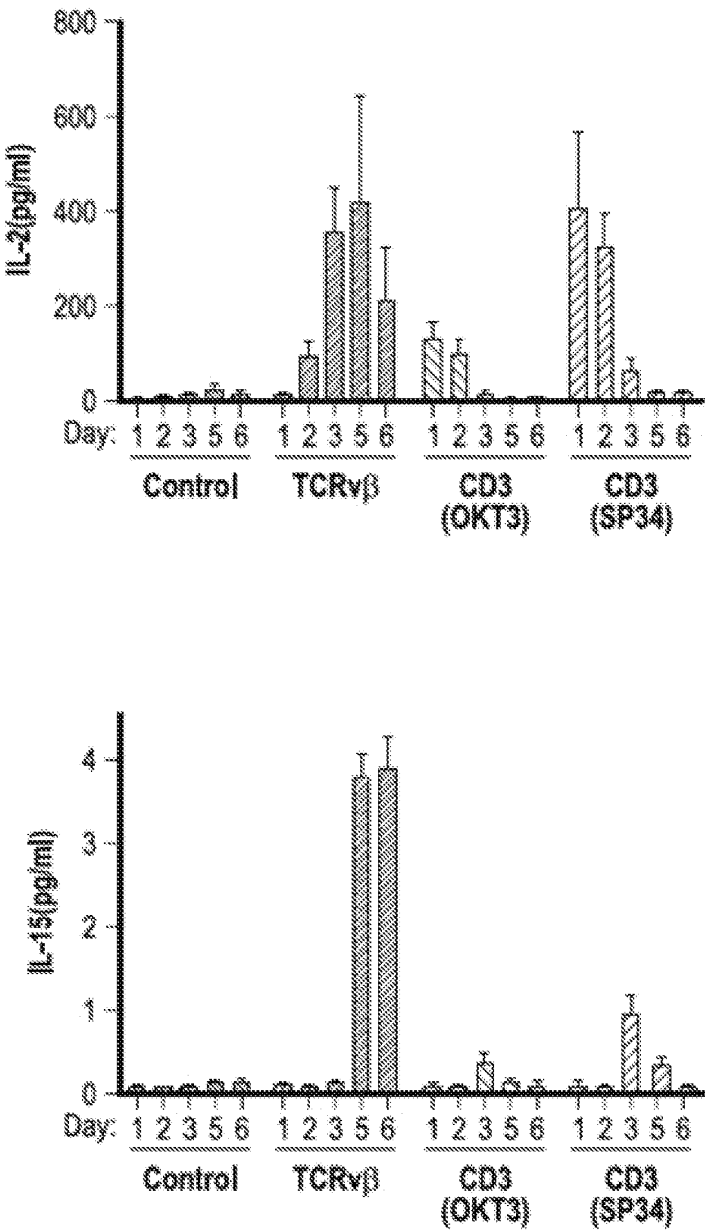


FIG. 15A

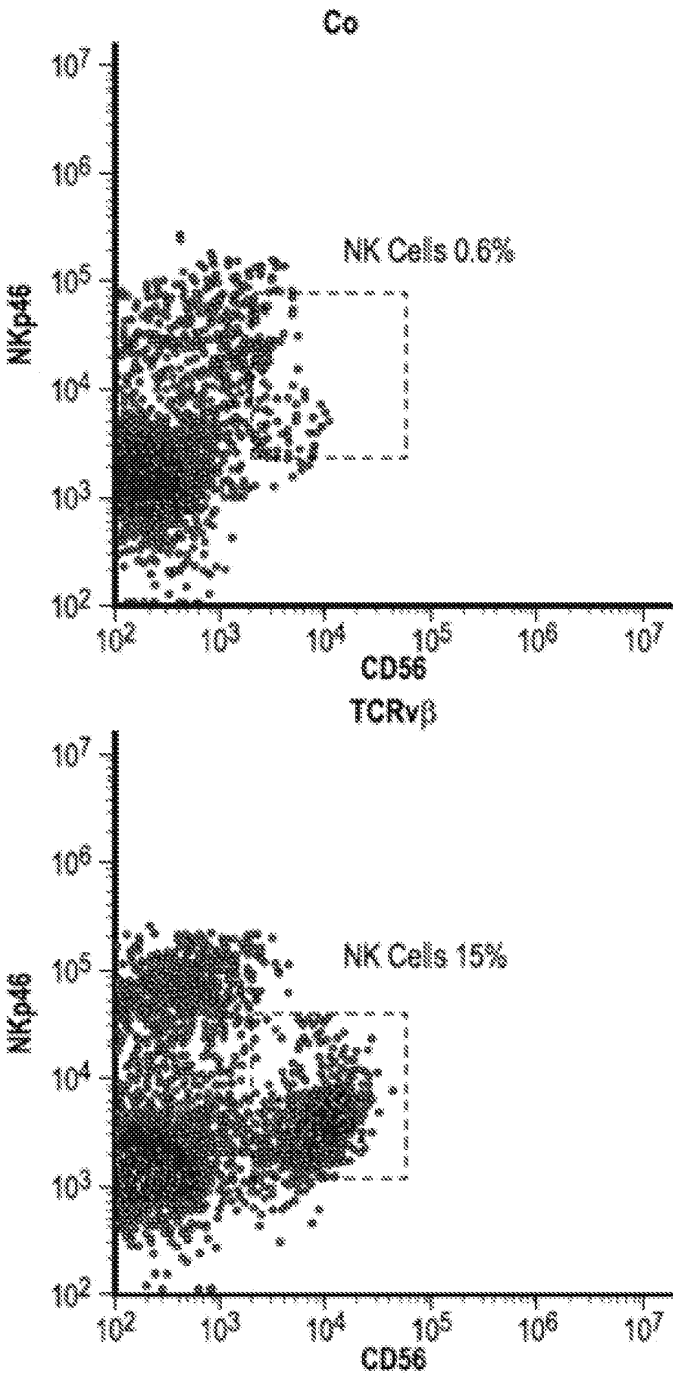


FIG. 15B

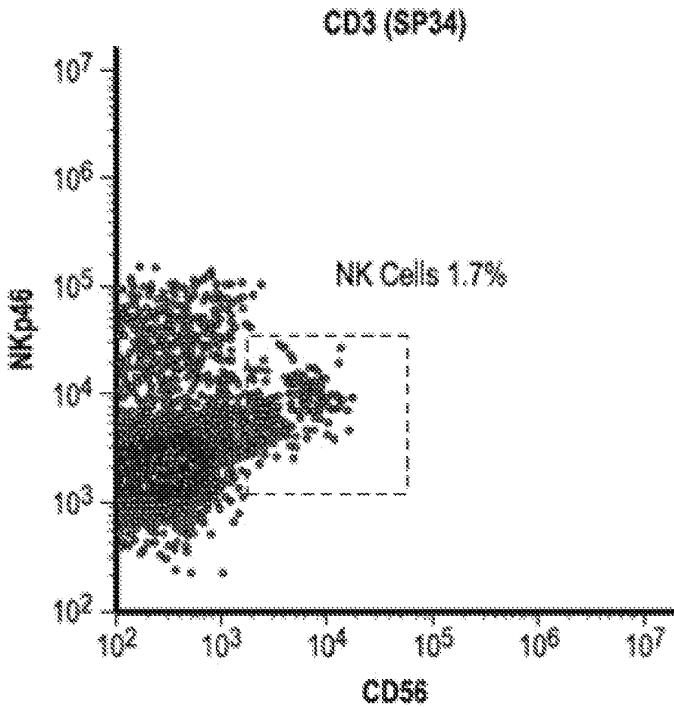


FIG. 15B
(Continued)

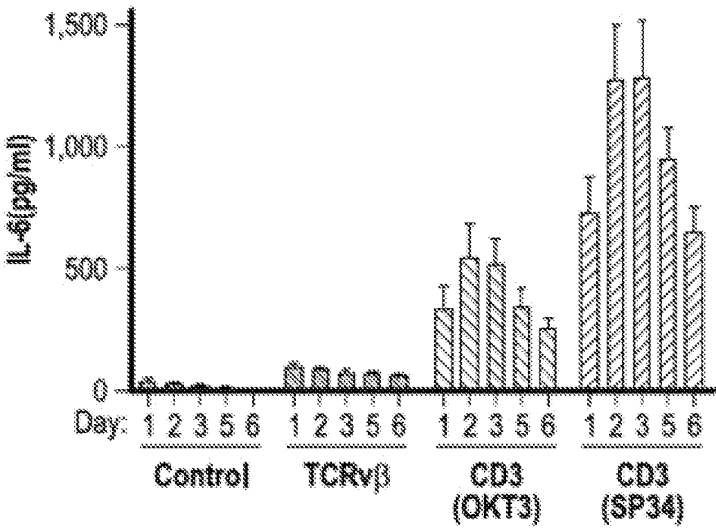


FIG. 16A

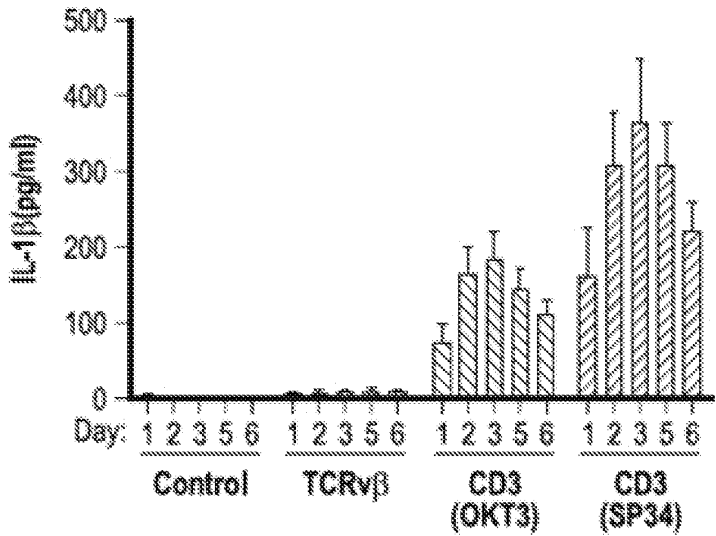


FIG. 16B

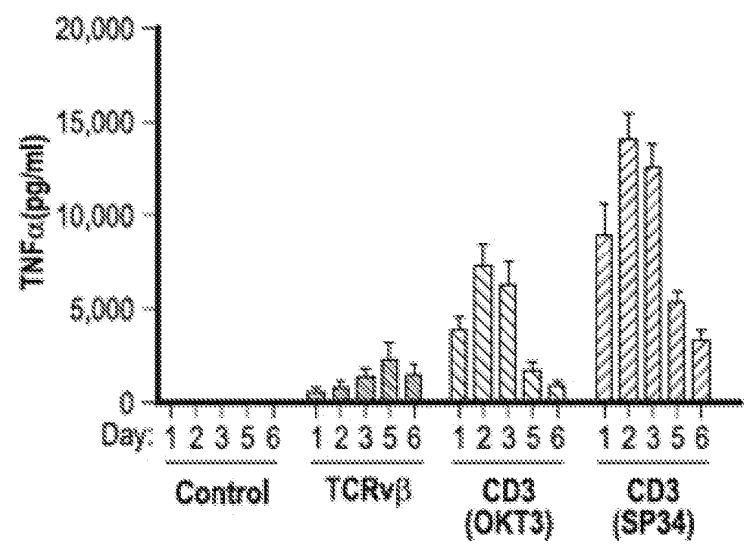


FIG. 16C

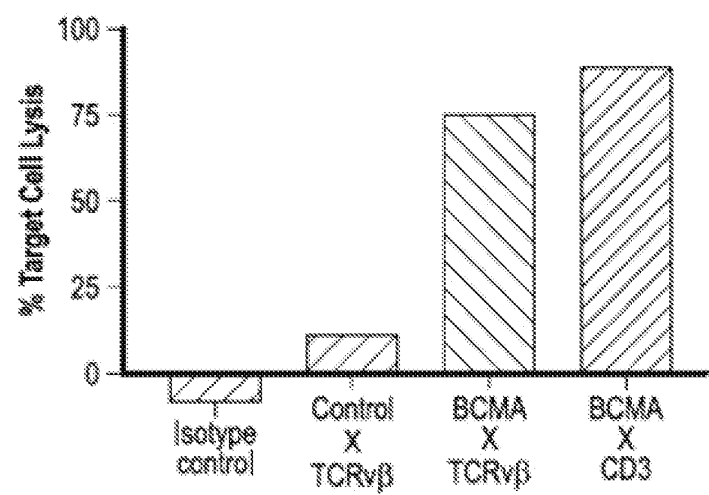


FIG. 17A

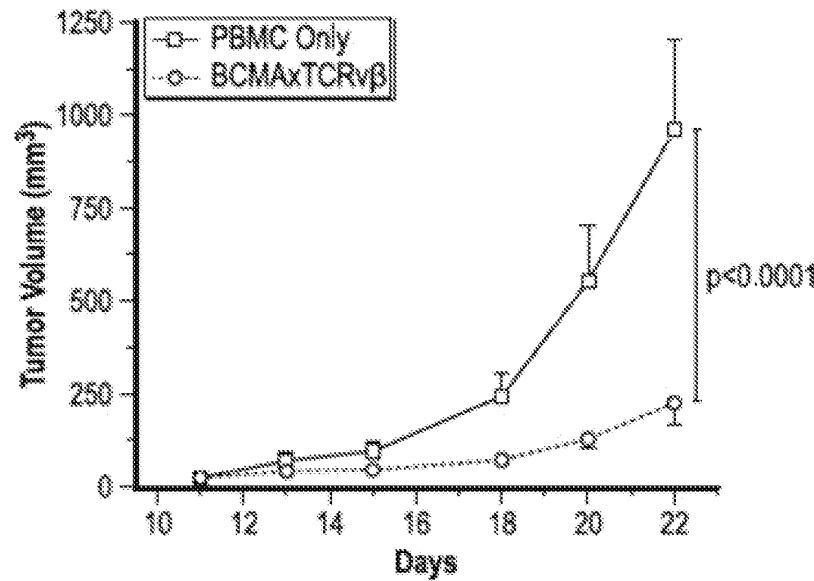


FIG. 17B

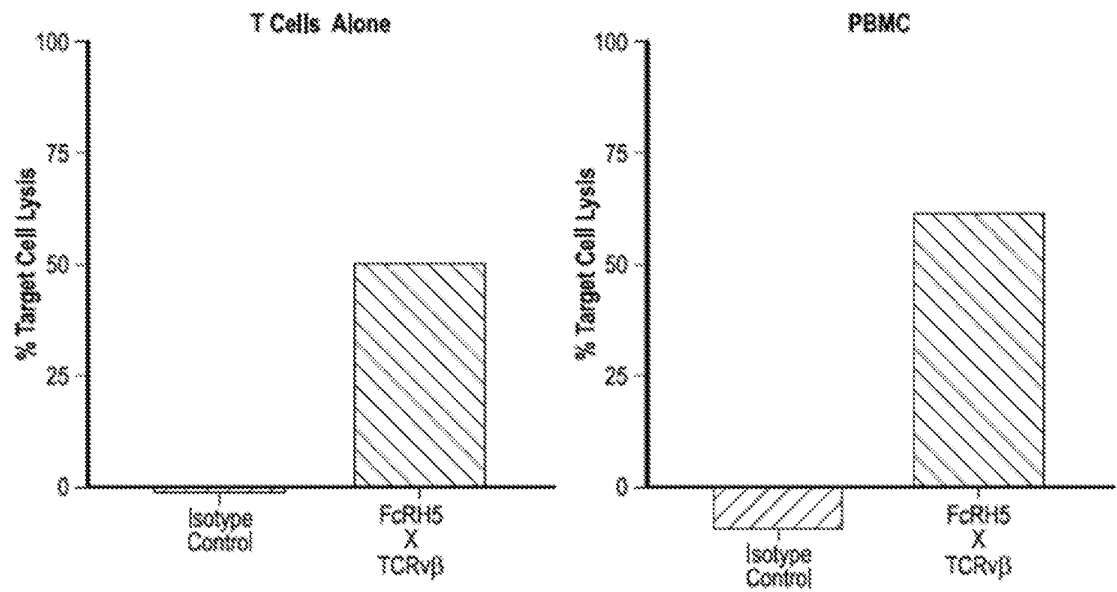


FIG. 18

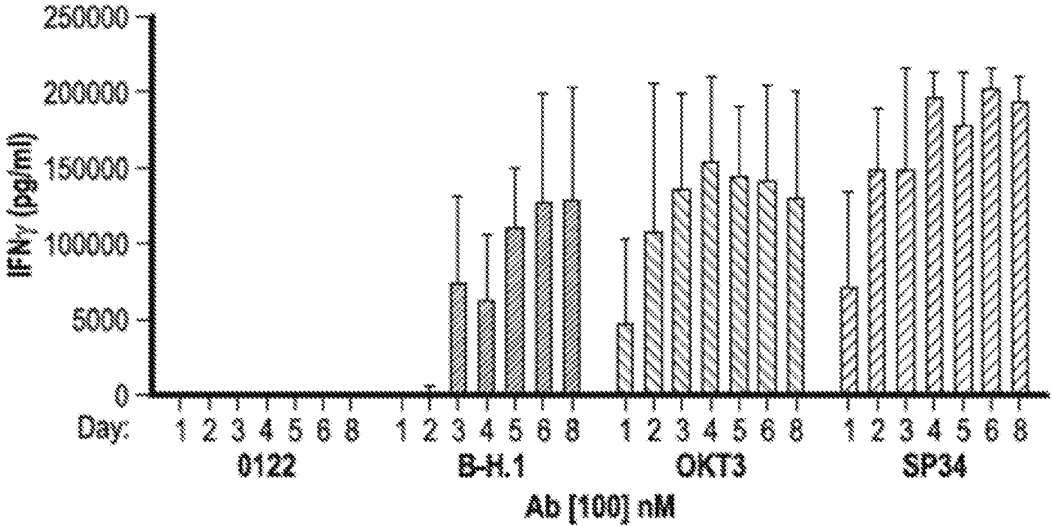


FIG. 19A

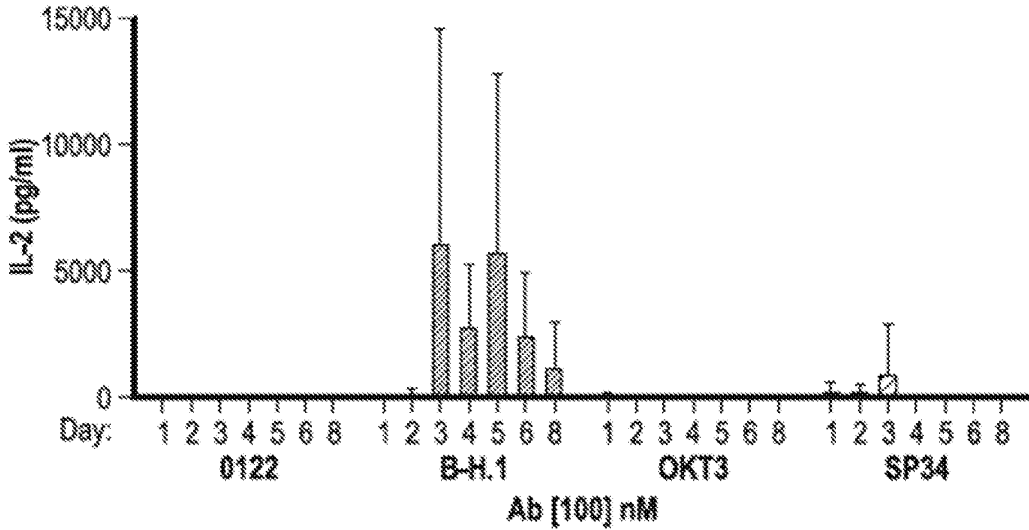


FIG. 19B

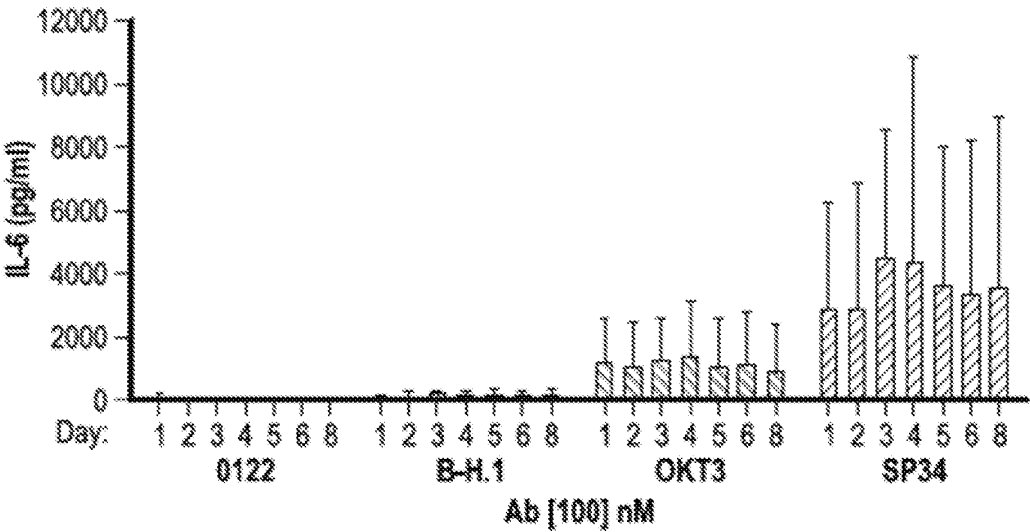


FIG. 20A

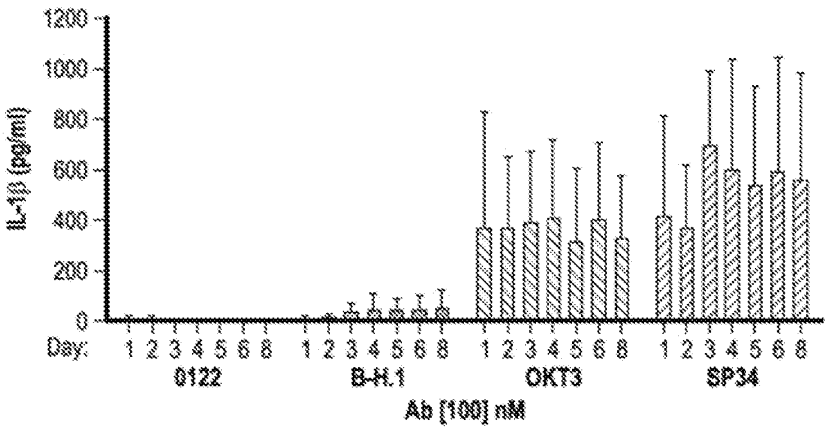


FIG. 20B

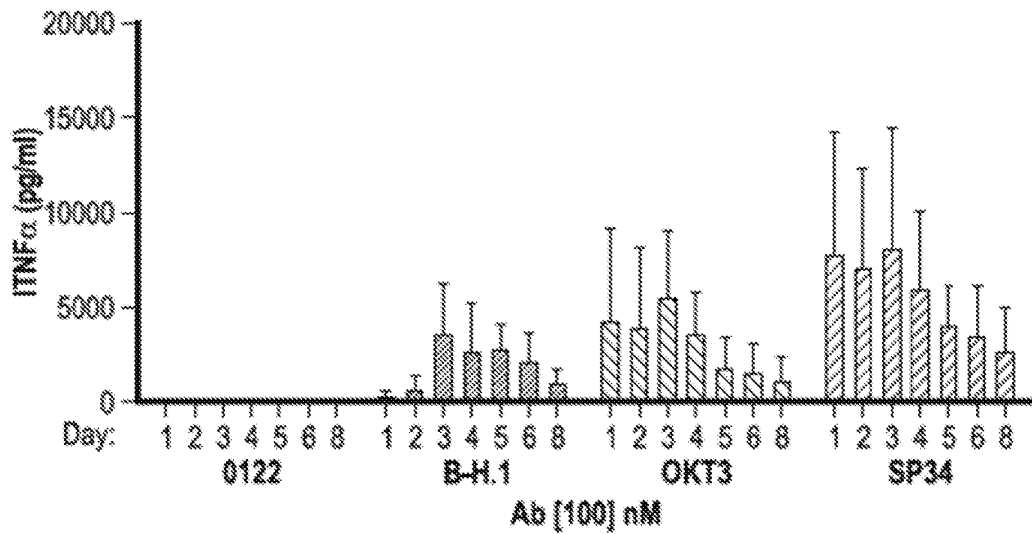


FIG. 20C

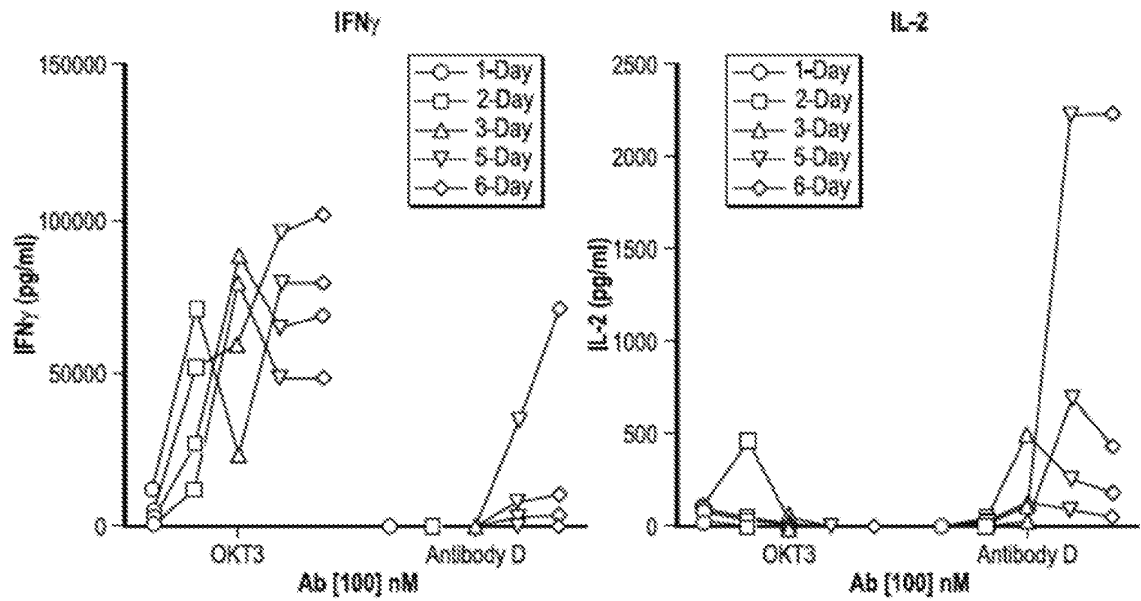


FIG. 21A

FIG. 21B

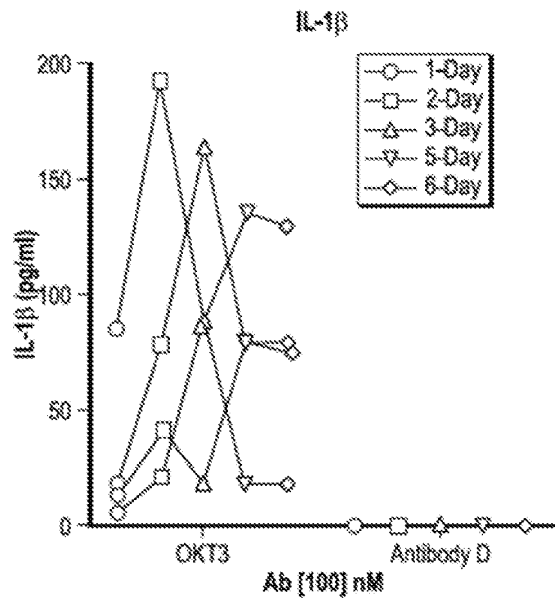


FIG. 21C

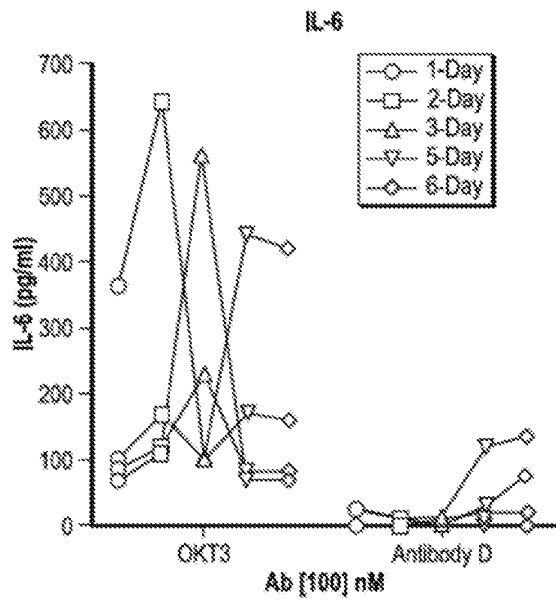


FIG. 21D

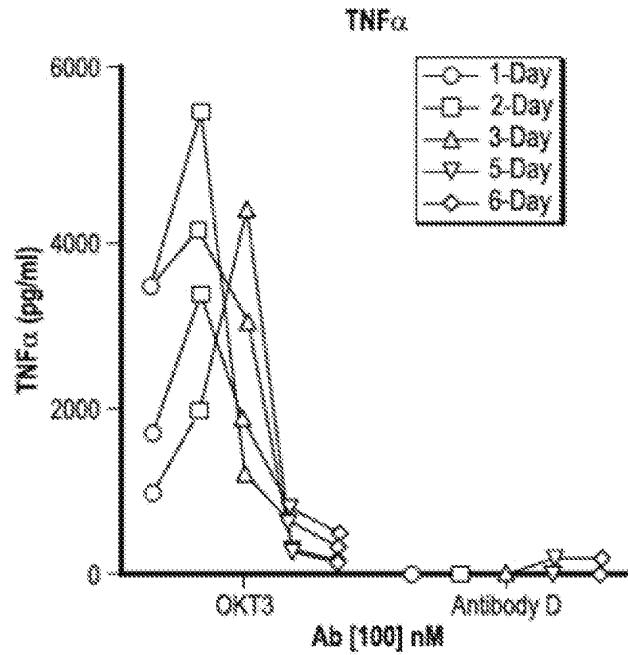


FIG. 21E

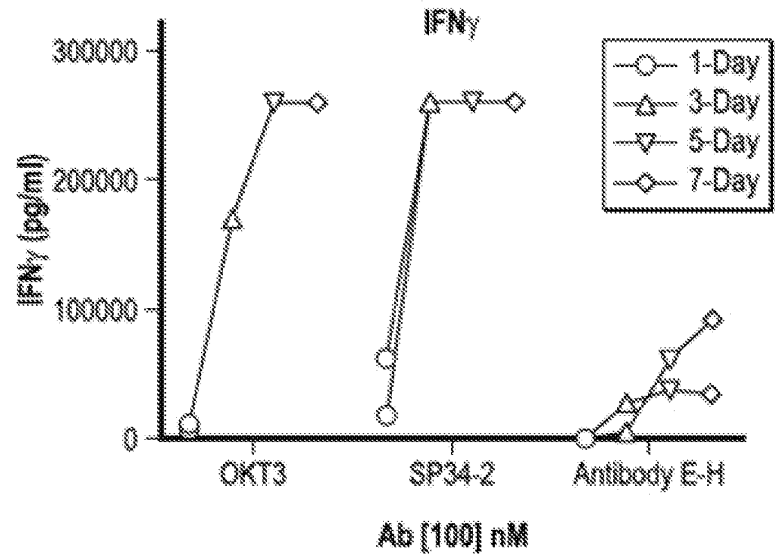


FIG. 22A

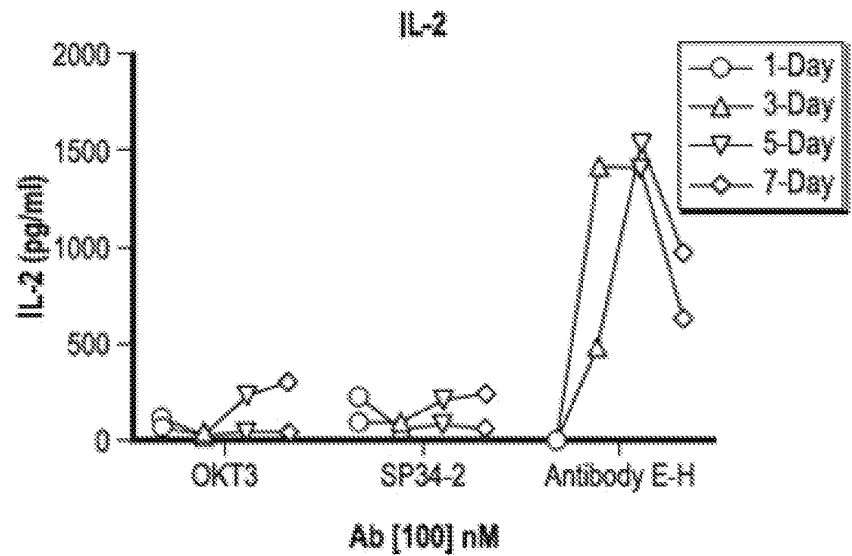


FIG. 22B

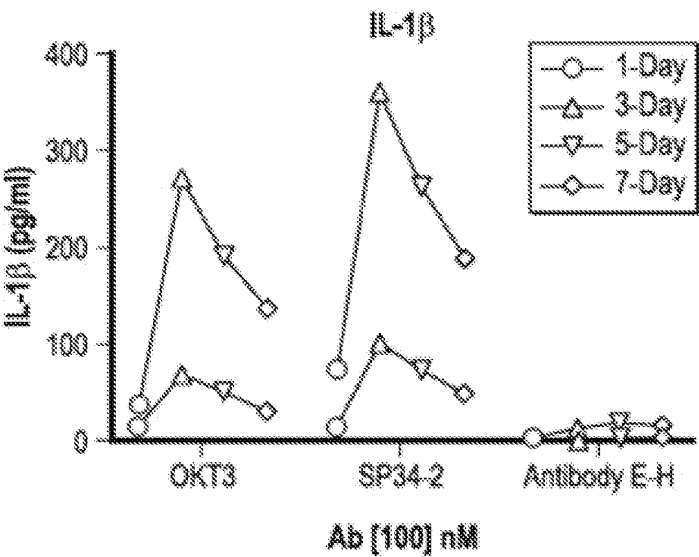


FIG. 23A

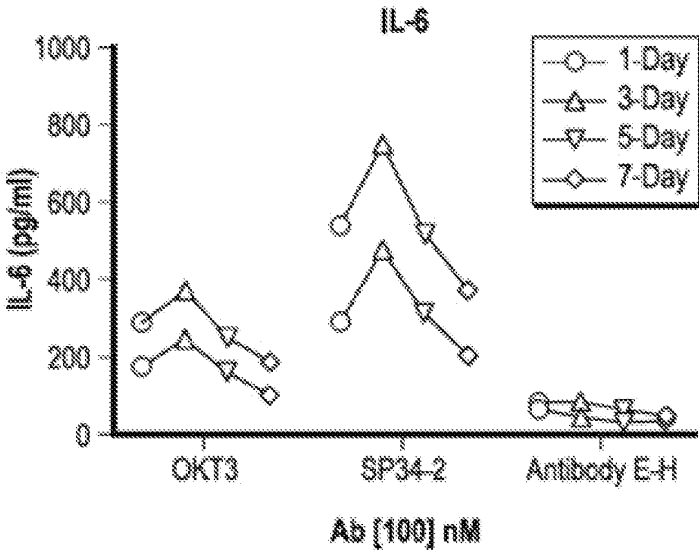


FIG. 23B

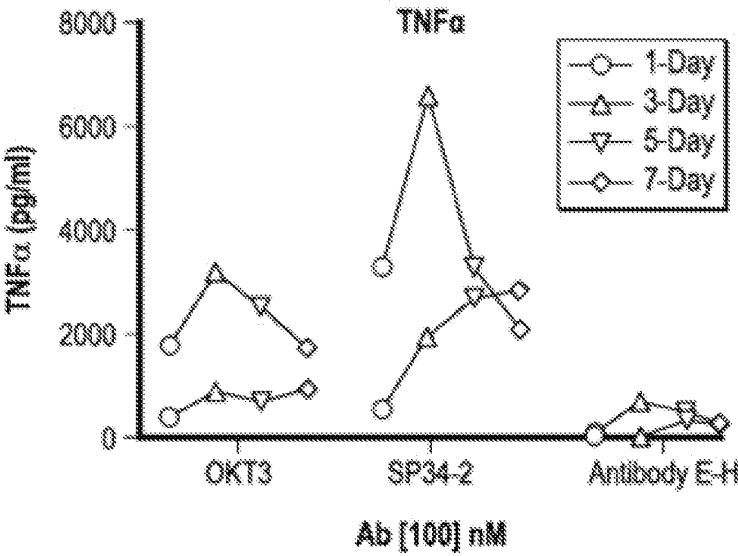


FIG. 23C

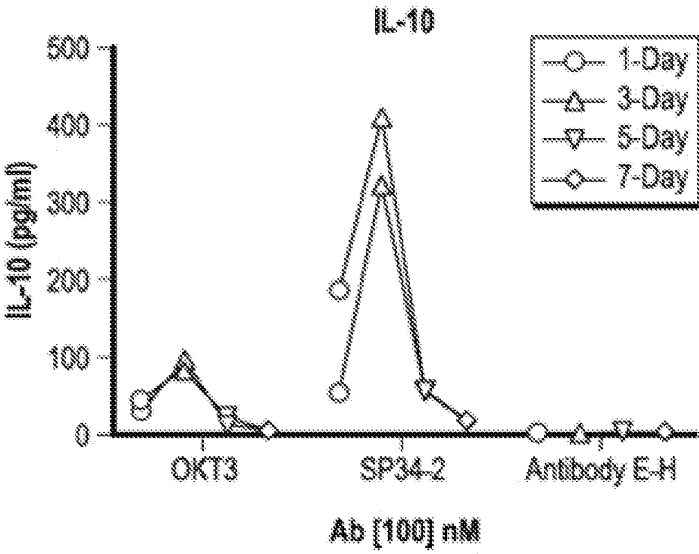


FIG. 23D

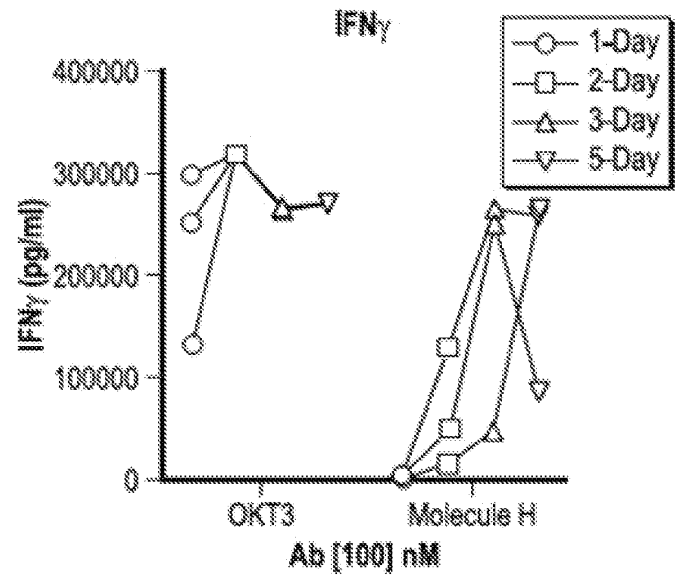


FIG. 24A

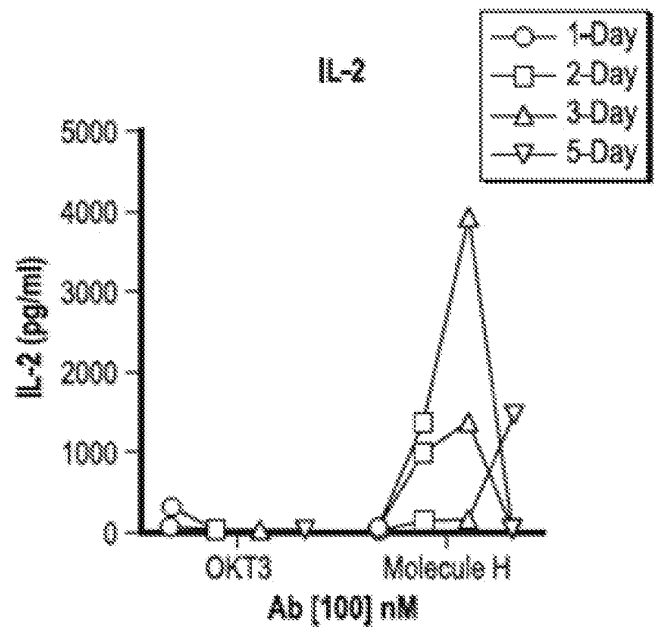


FIG. 24B

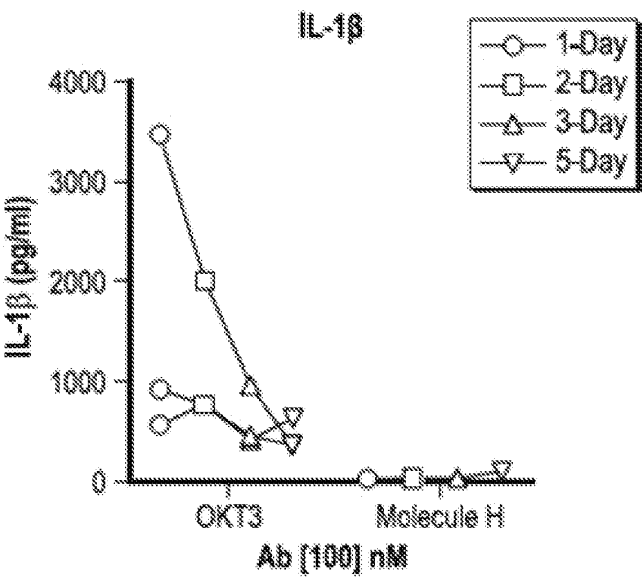


FIG. 24C

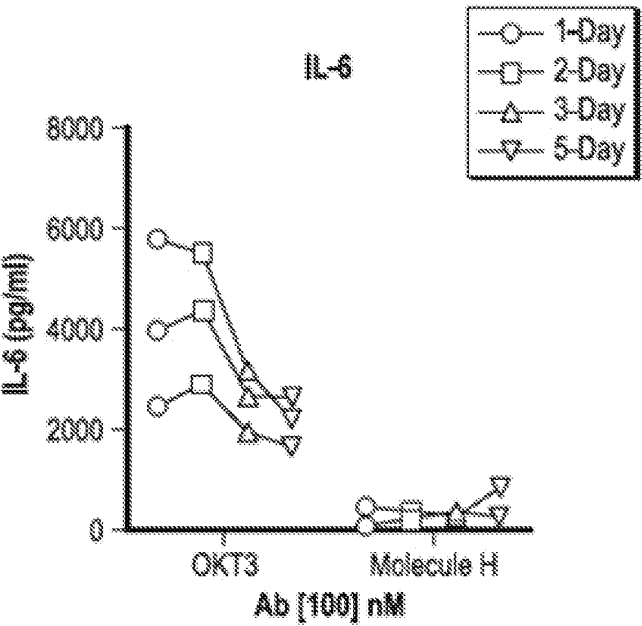


FIG. 24D

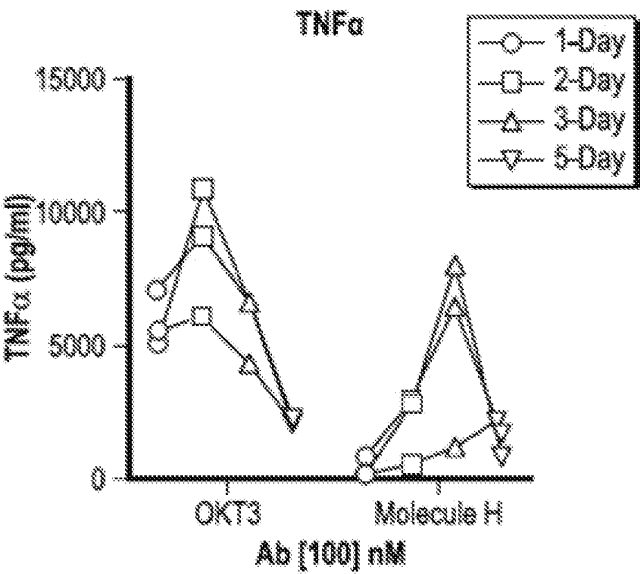


FIG. 24E

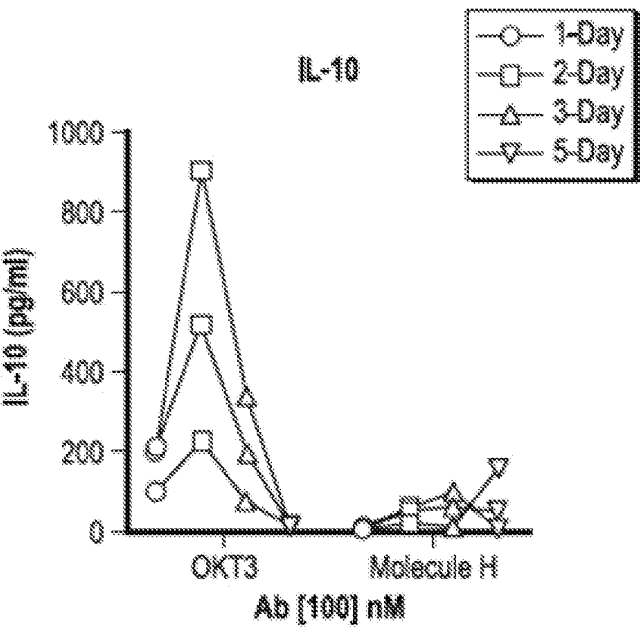


FIG. 24F

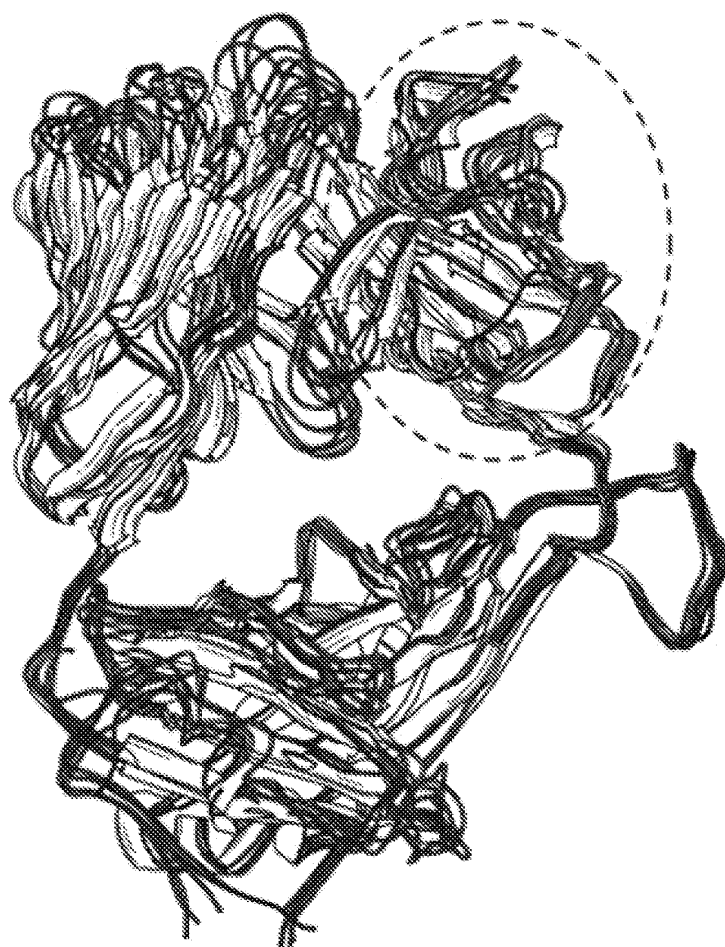


FIG. 25A

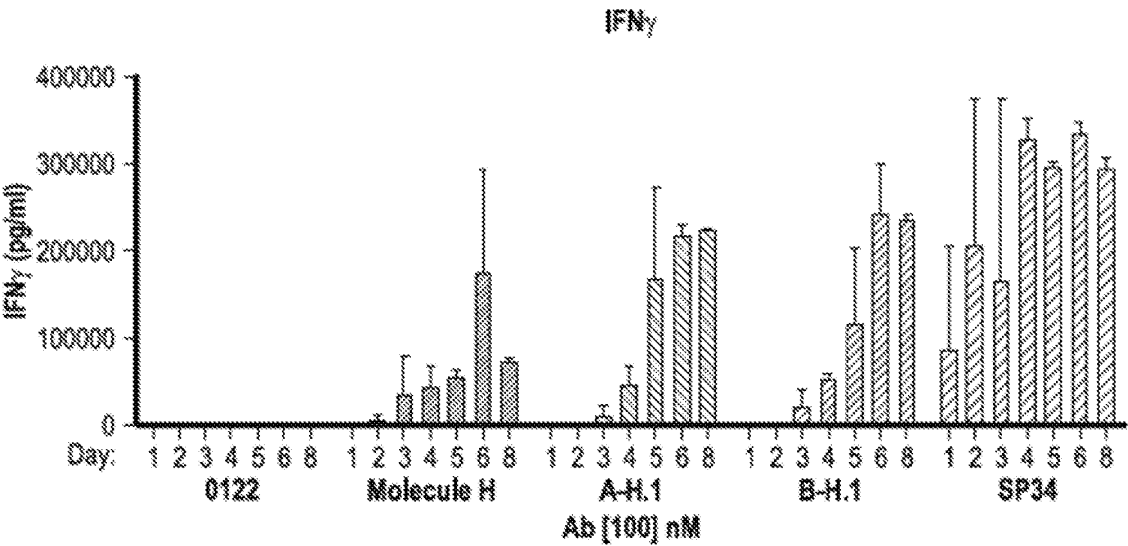


FIG. 26A

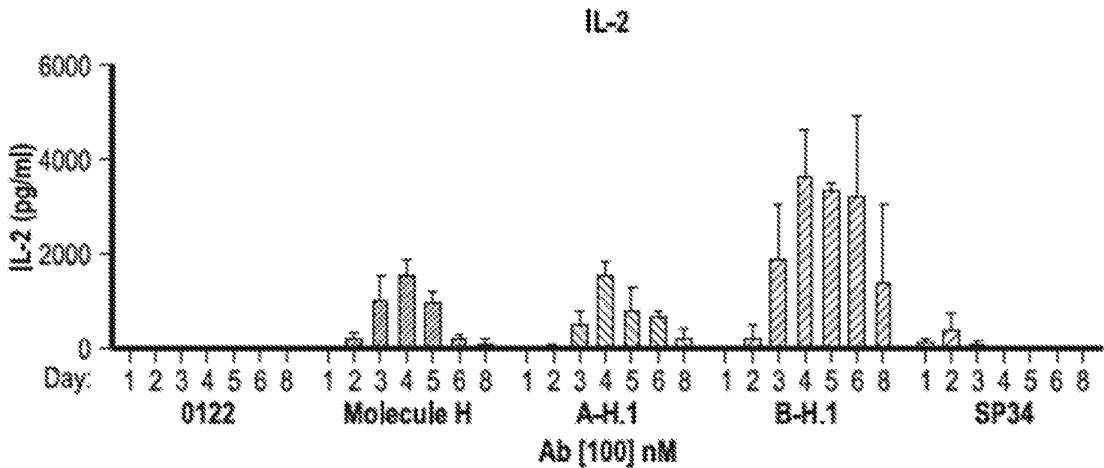


FIG. 26B

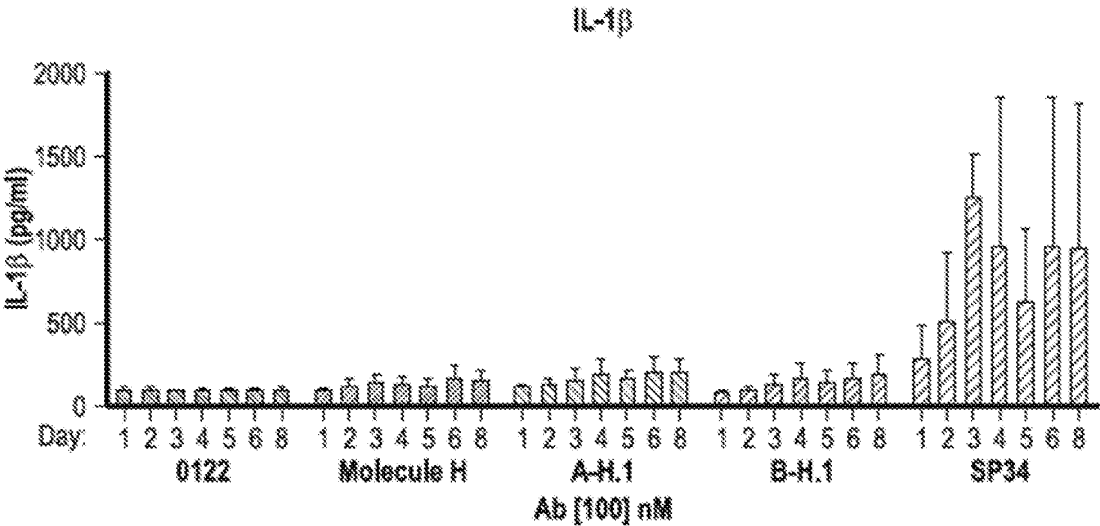


FIG. 26C

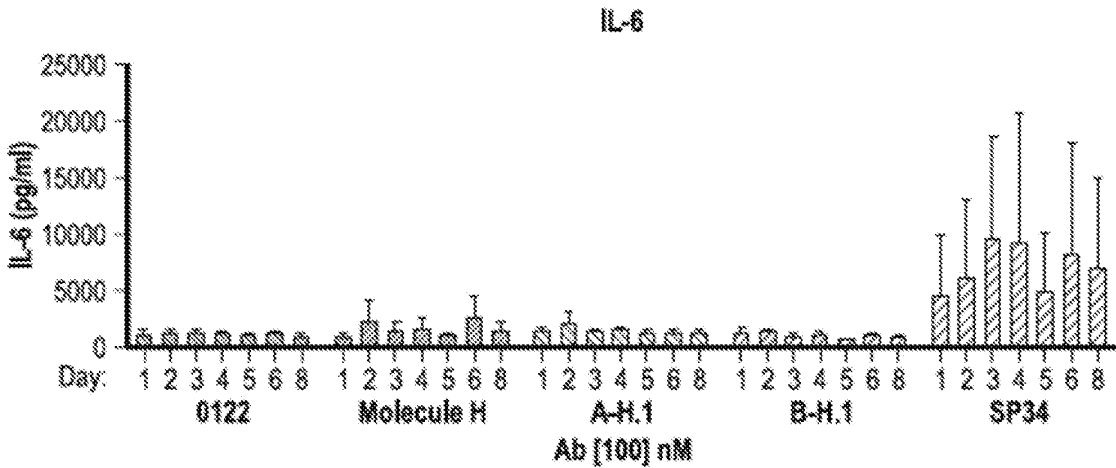


FIG. 26D

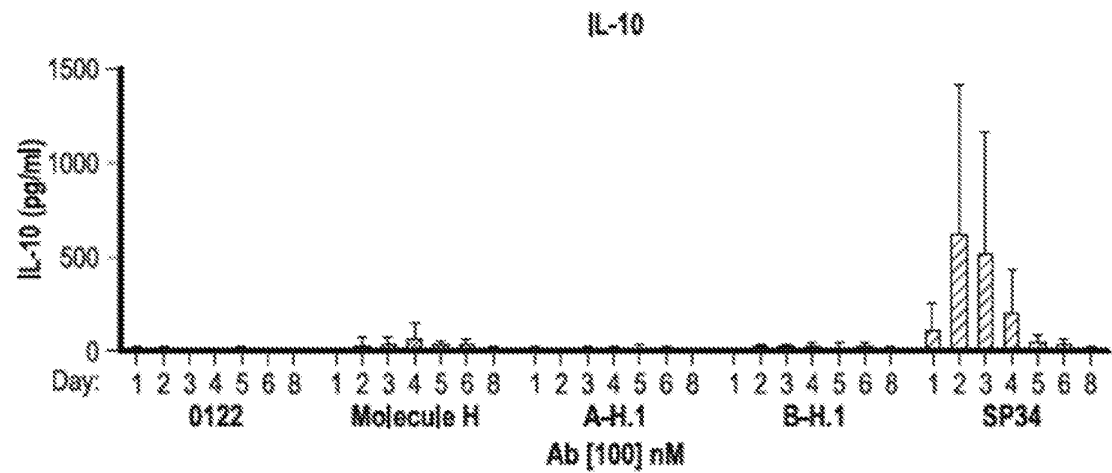


FIG. 26E

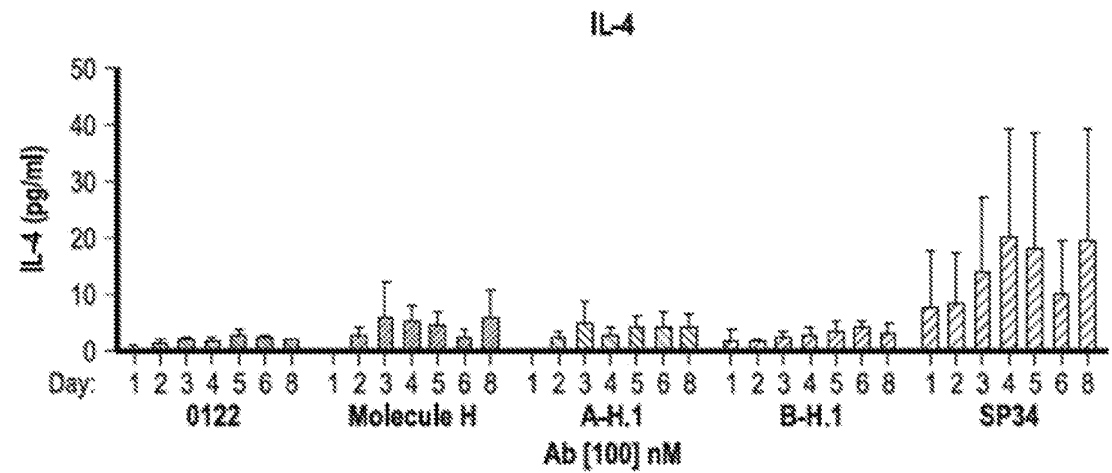


FIG. 26F

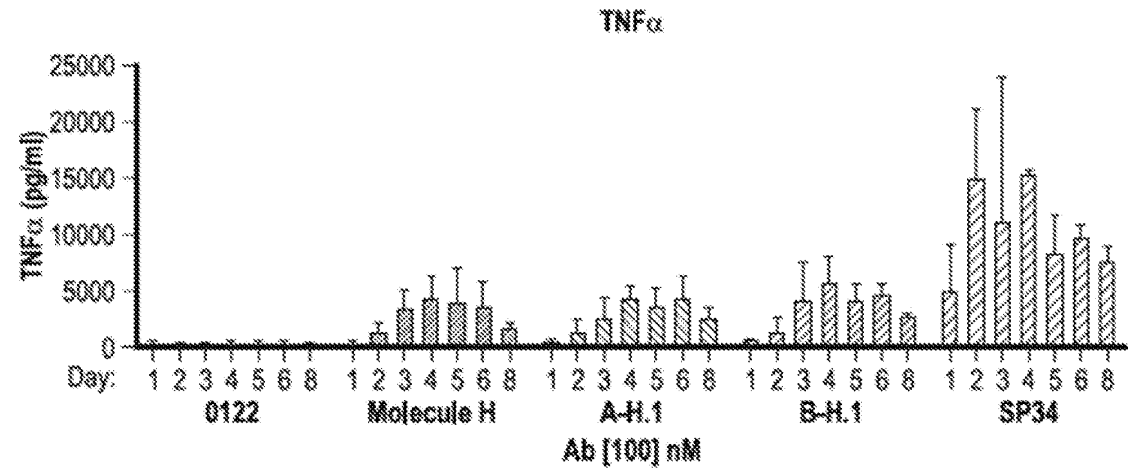


FIG. 26G

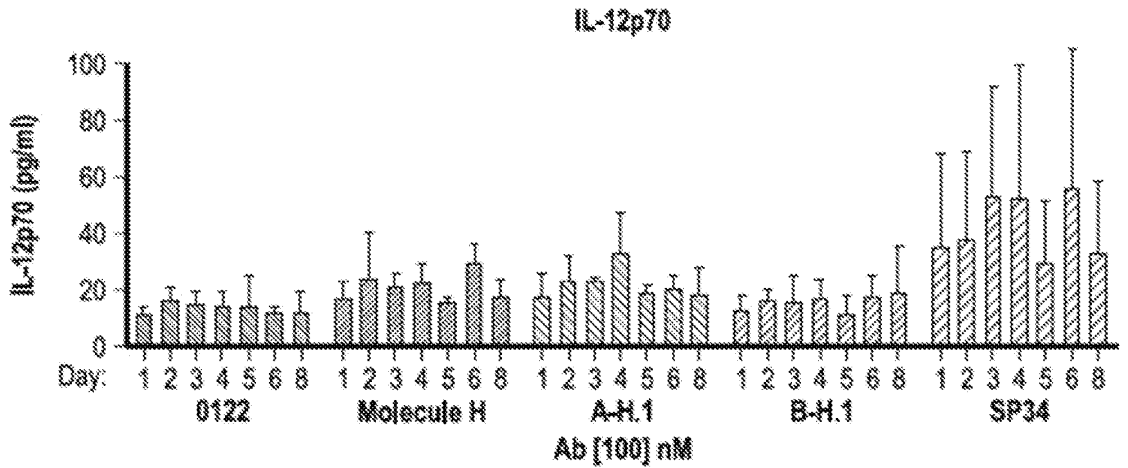


FIG. 26H

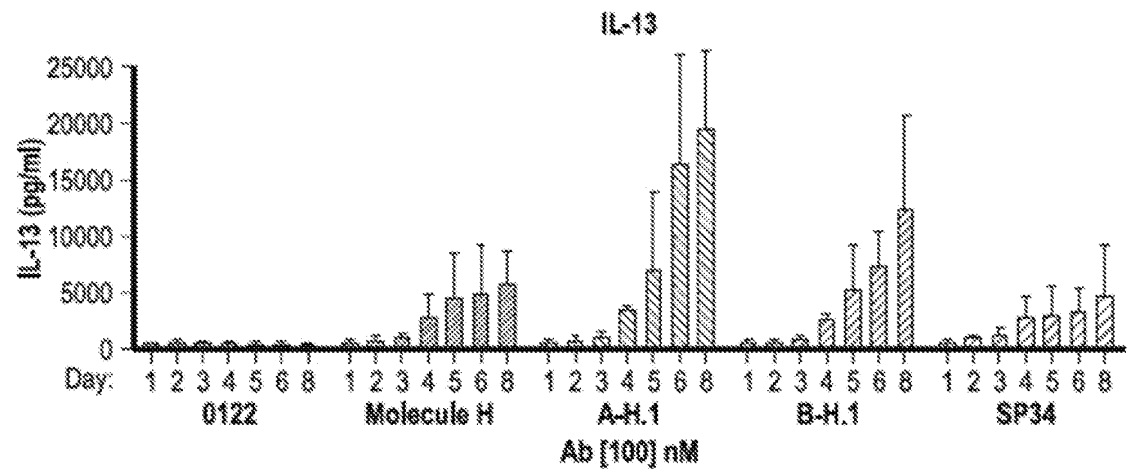


FIG. 26I

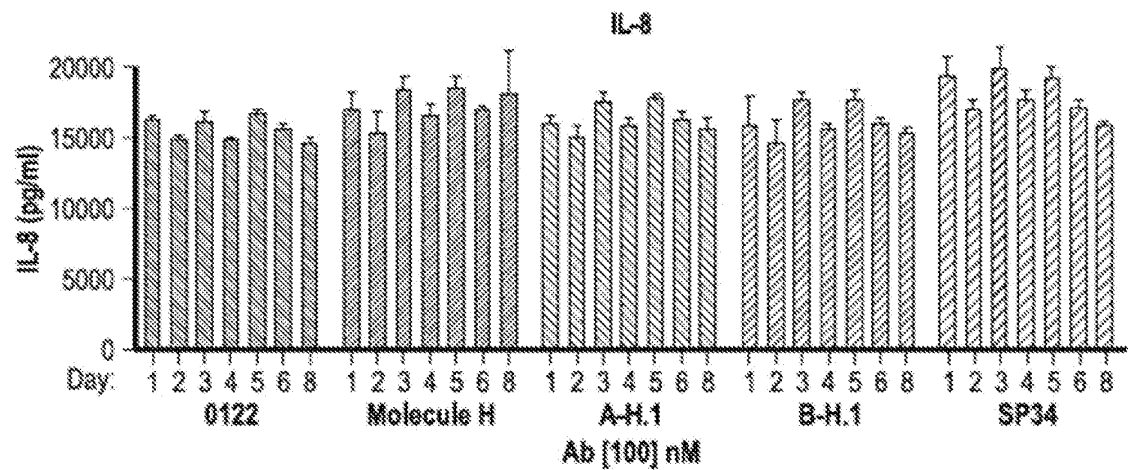


FIG. 26J

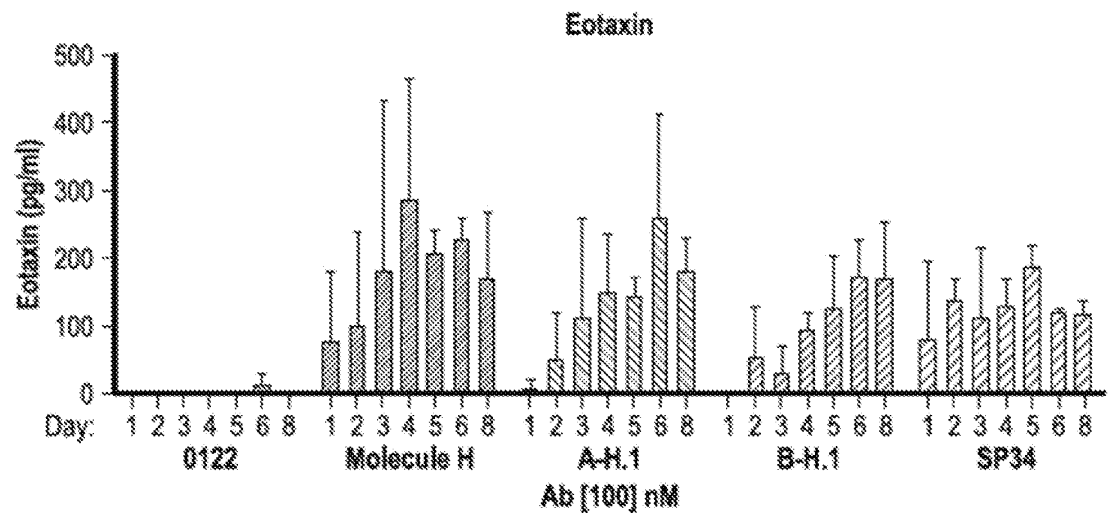


FIG. 27A

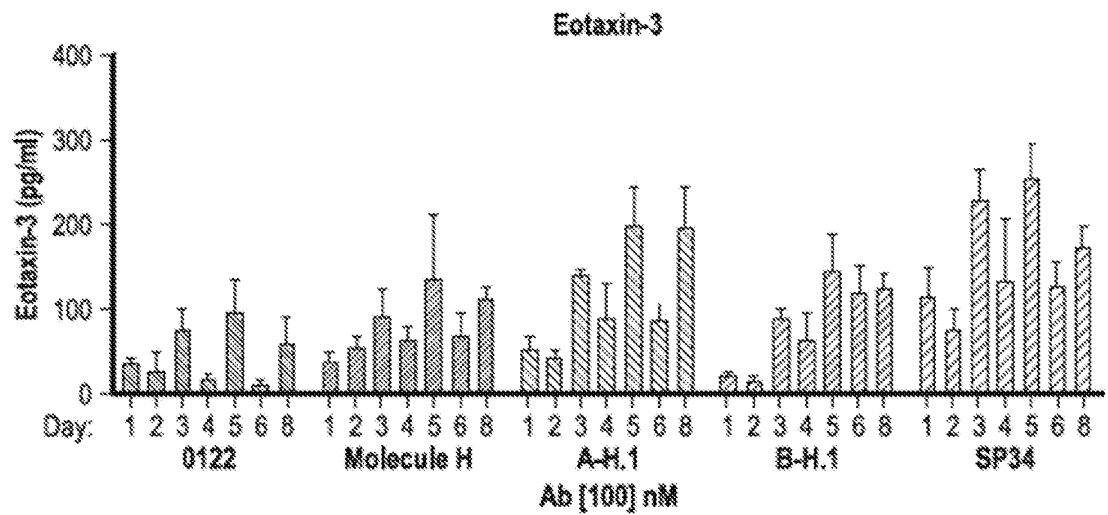


FIG. 27B

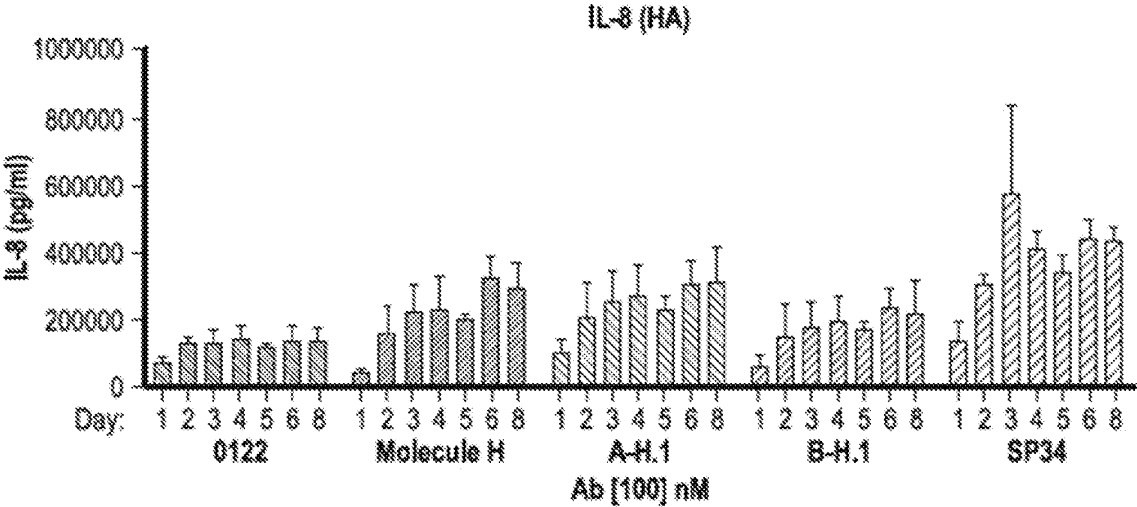


FIG. 27C

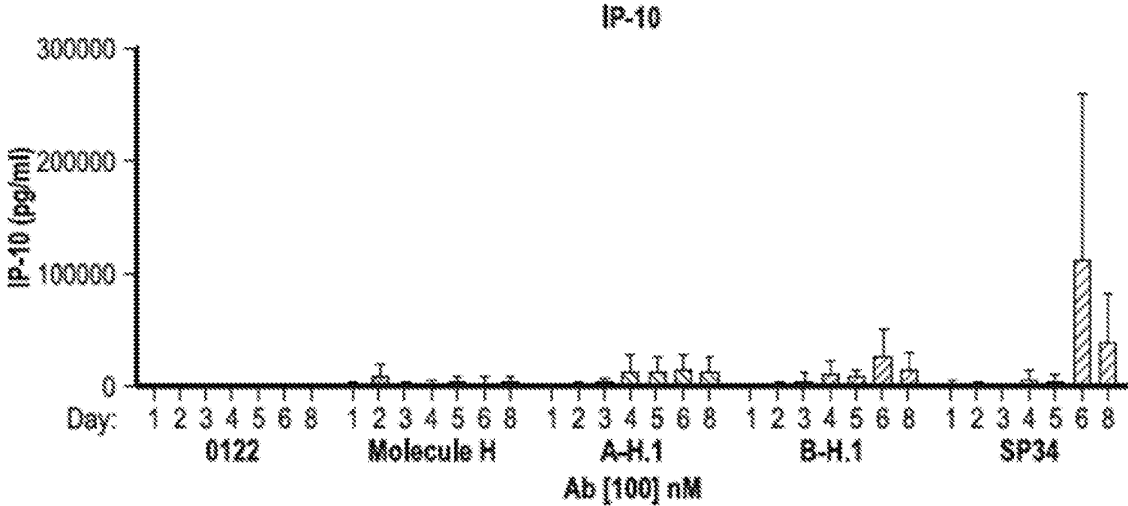


FIG. 27D

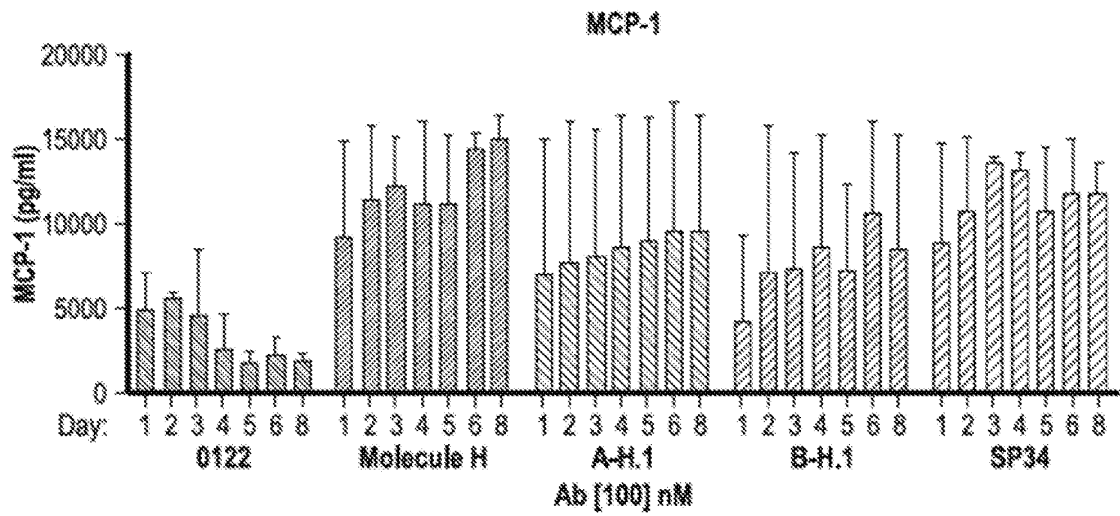


FIG. 27E

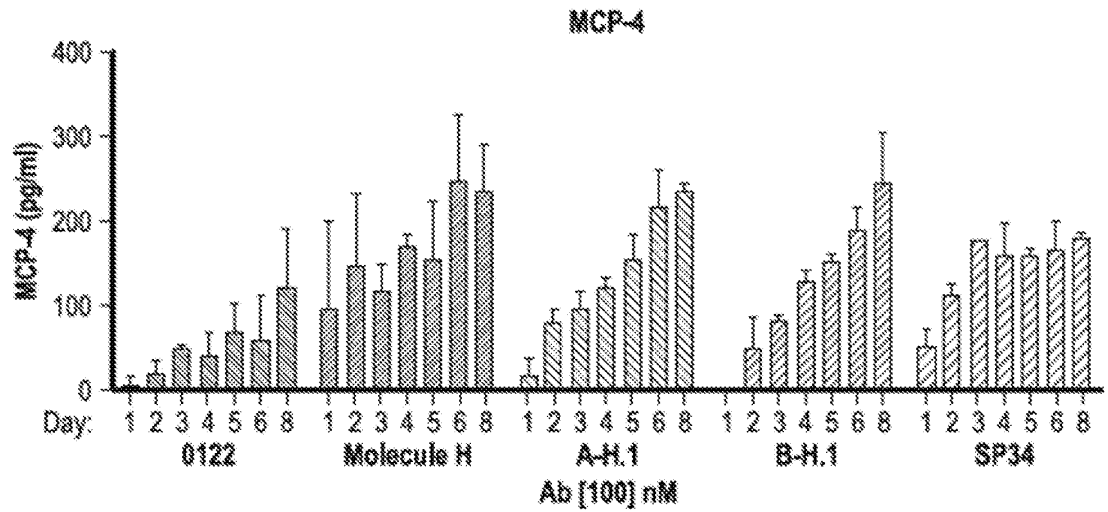


FIG. 27F

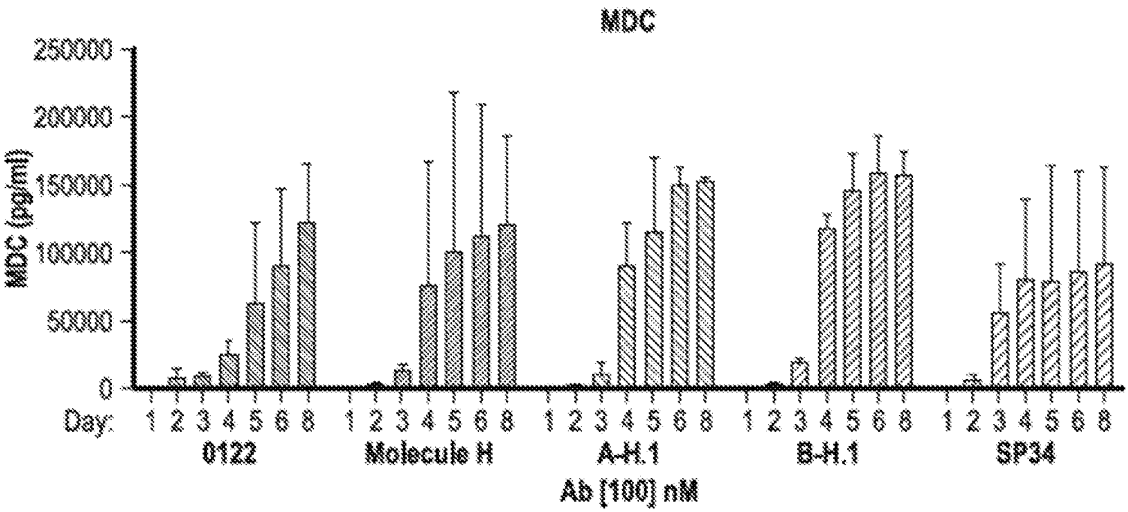


FIG. 27G

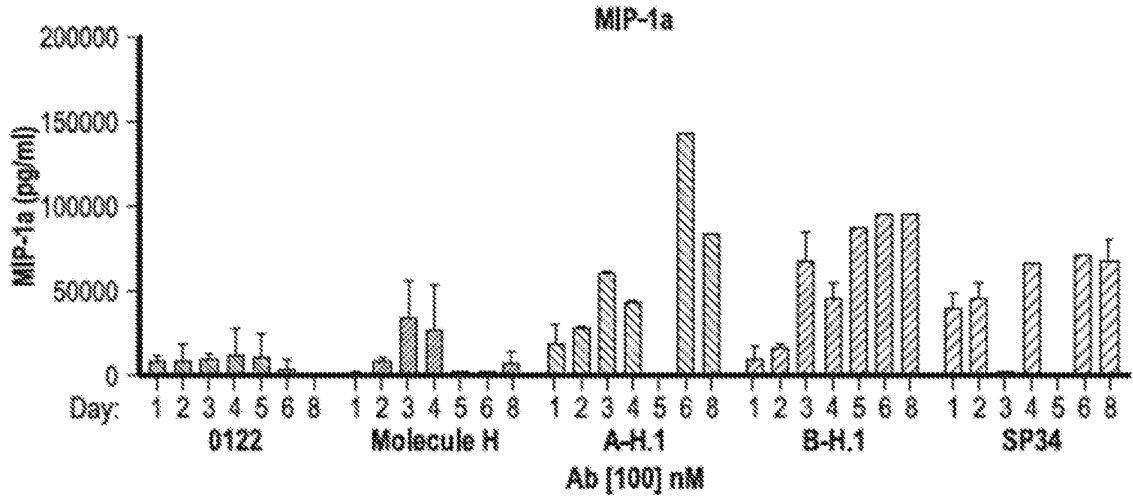


FIG. 27H

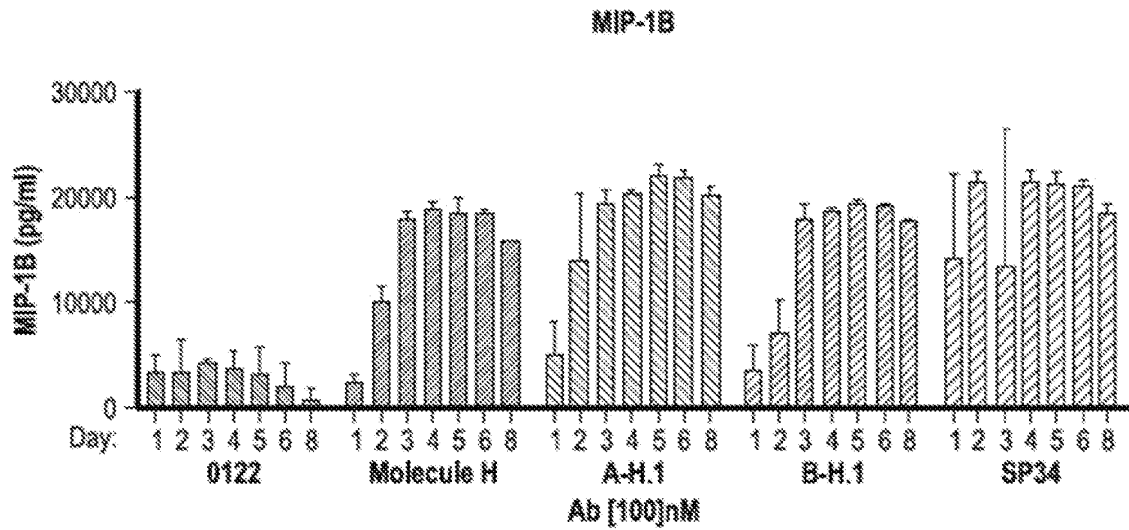


FIG. 28A

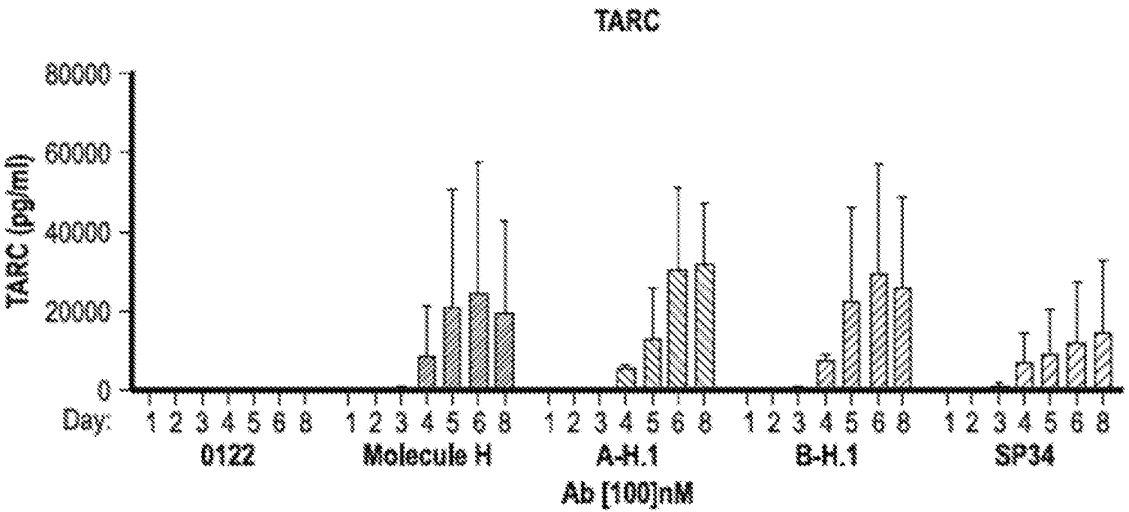


FIG. 28B

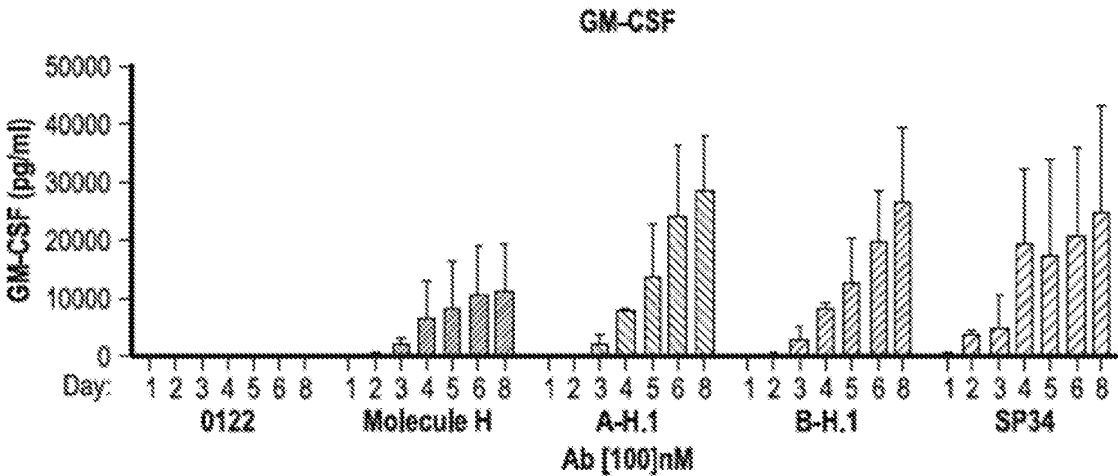


FIG. 28C

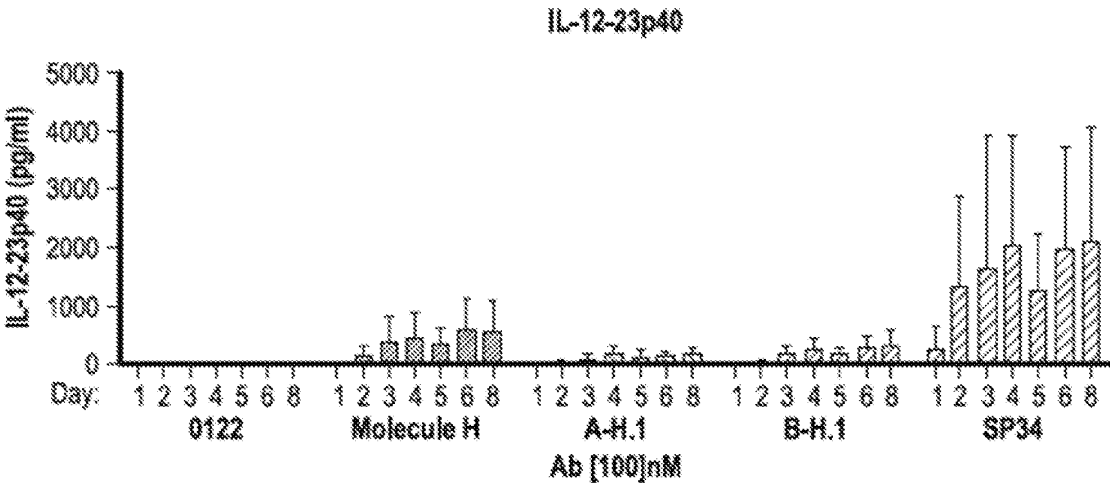


FIG. 28D

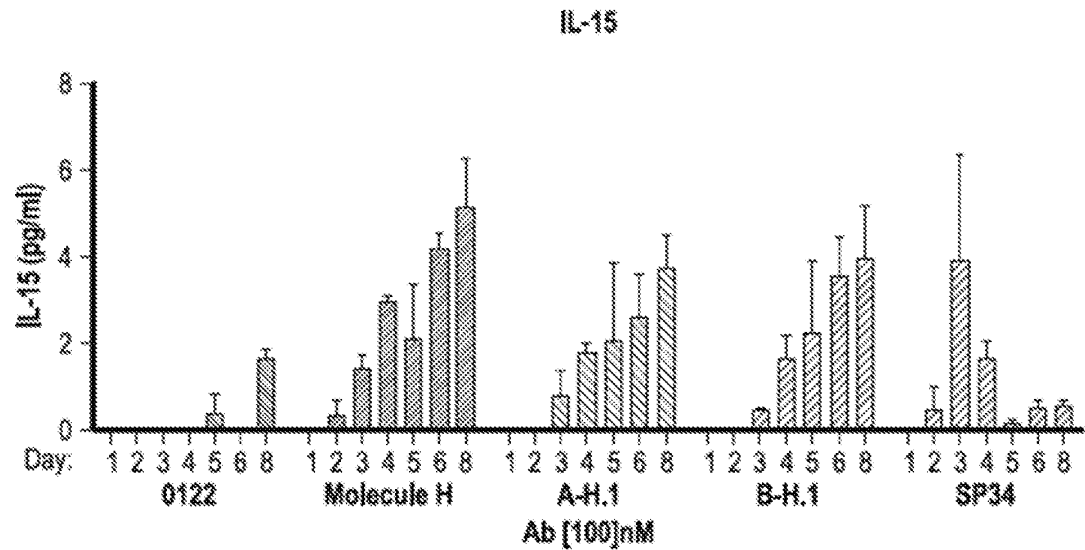


FIG. 28E

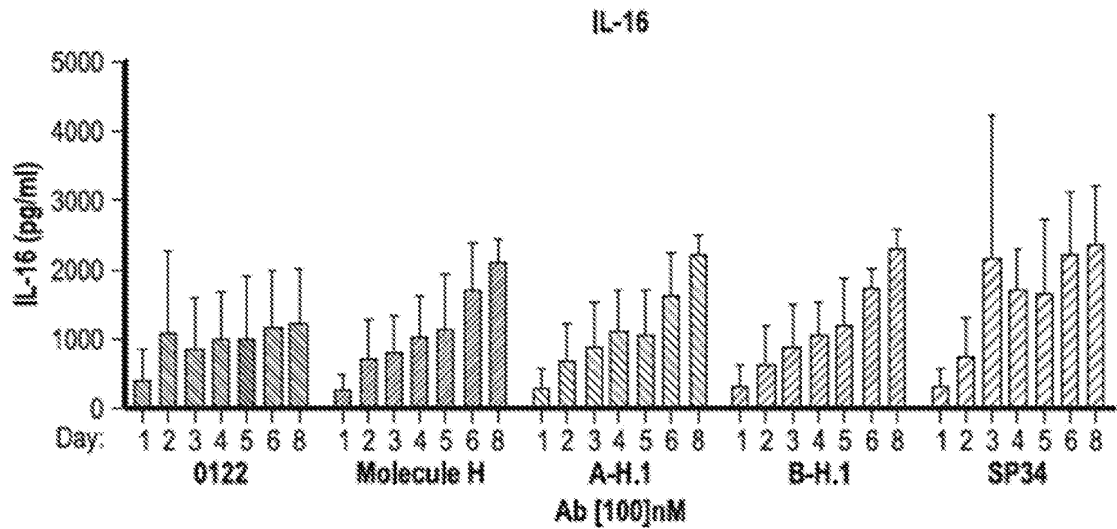


FIG. 28F

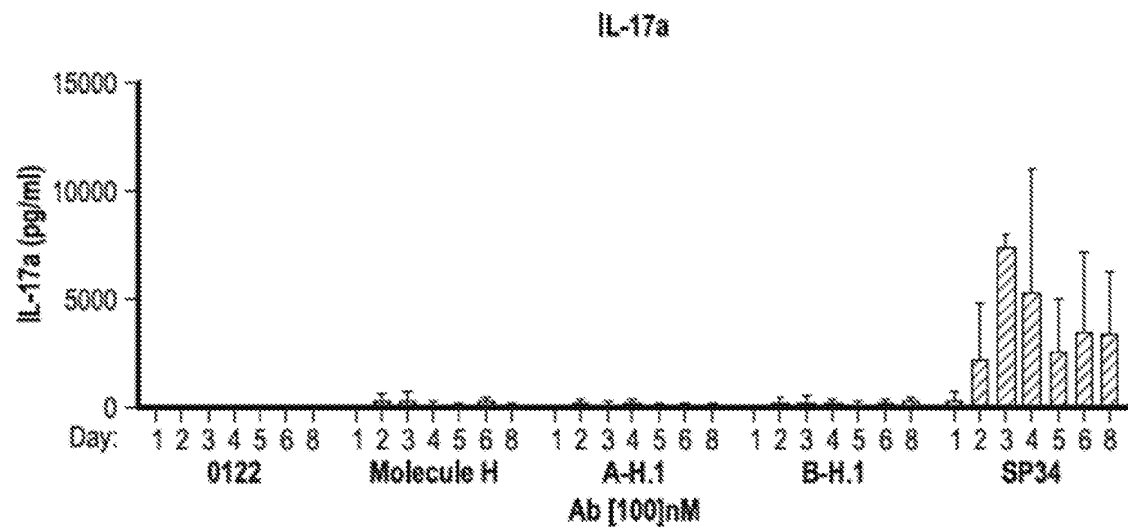


FIG. 28G

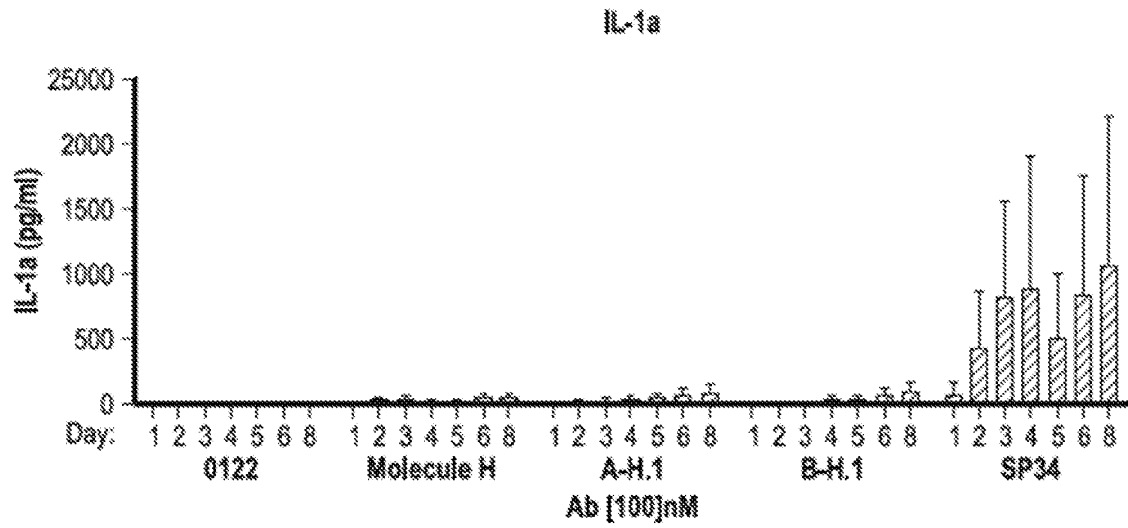


FIG. 28H

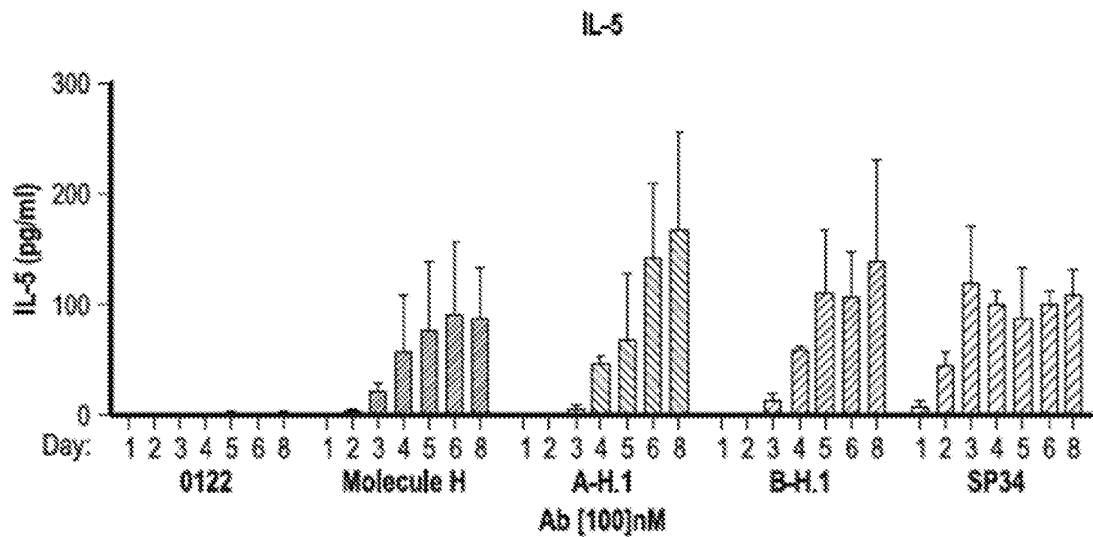


FIG. 28I

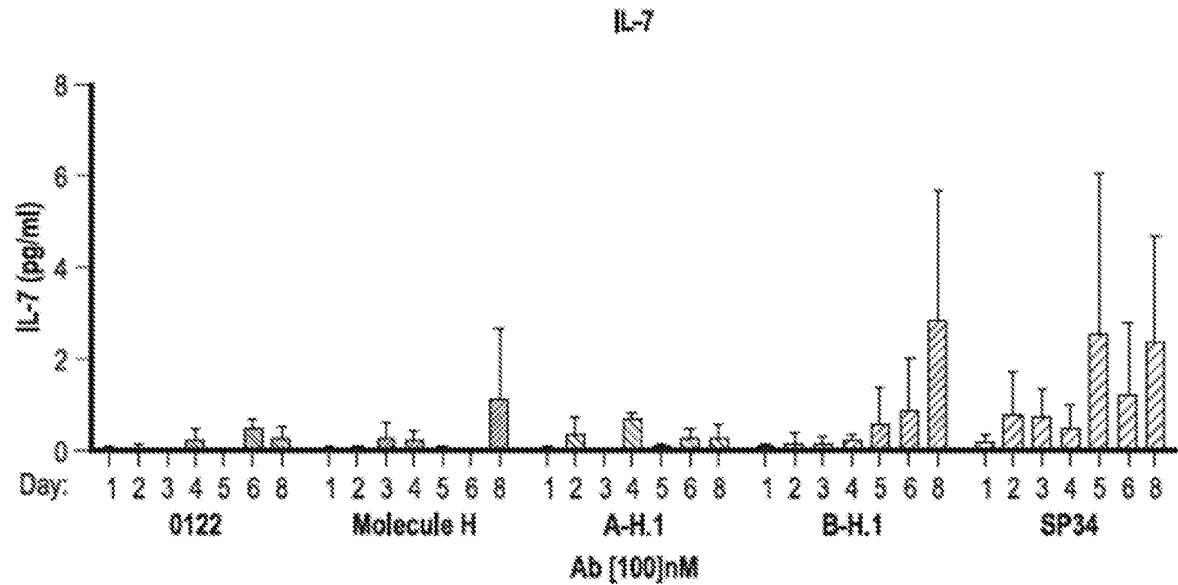


FIG. 28J

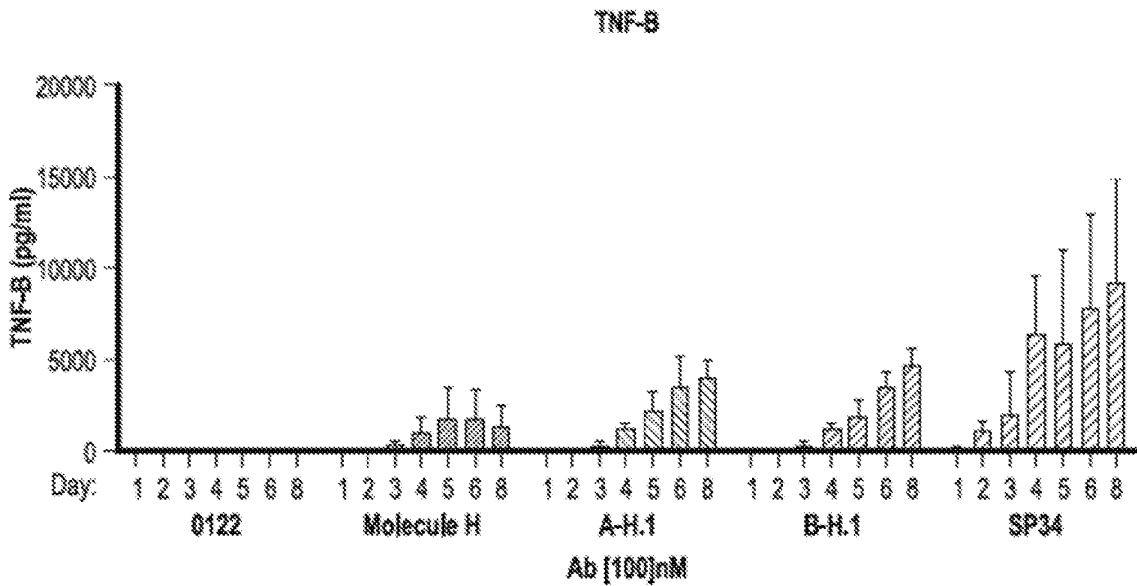


FIG. 28K

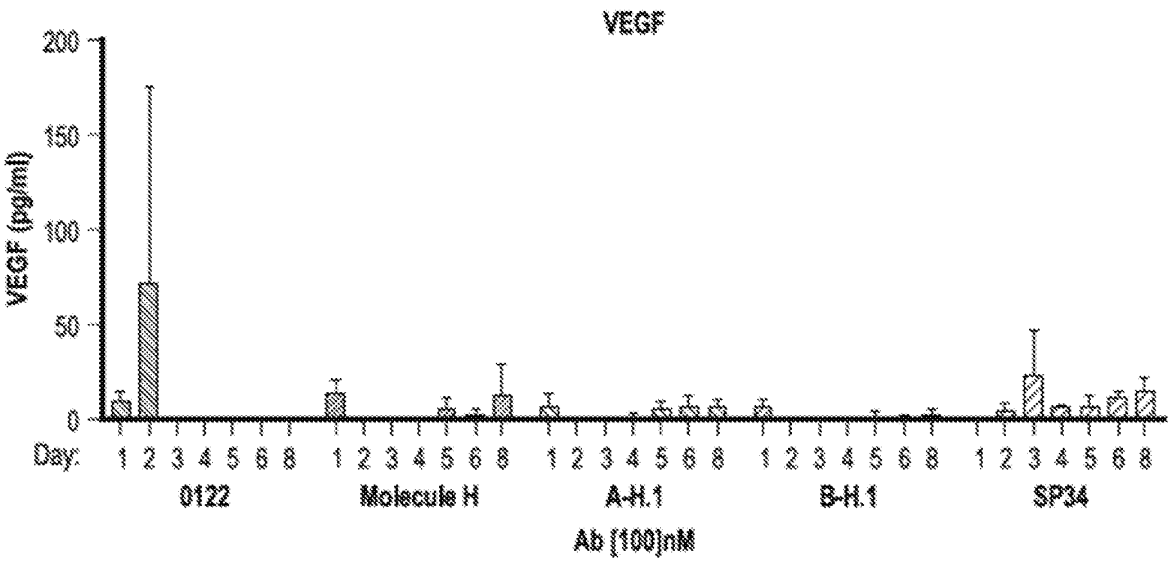


FIG. 28L

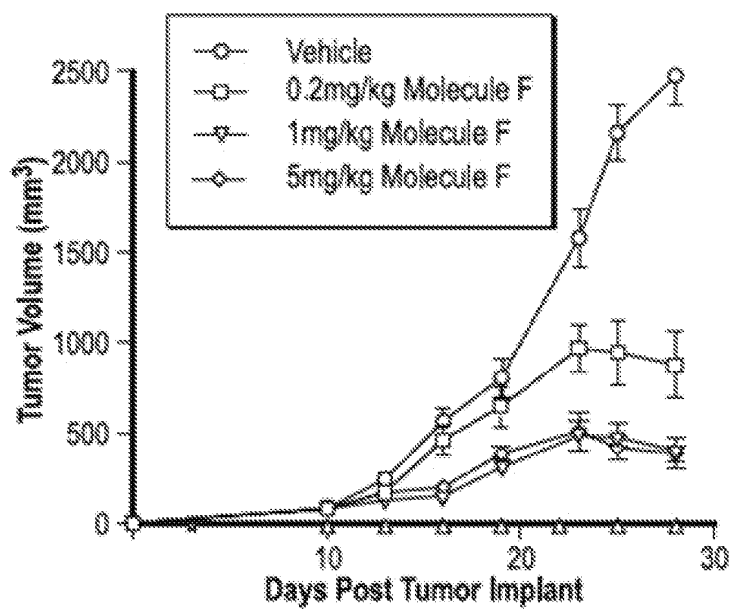


FIG. 29

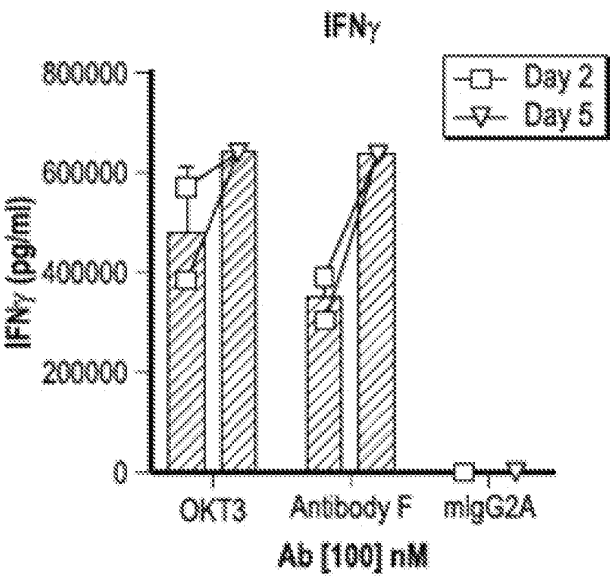


FIG. 30A

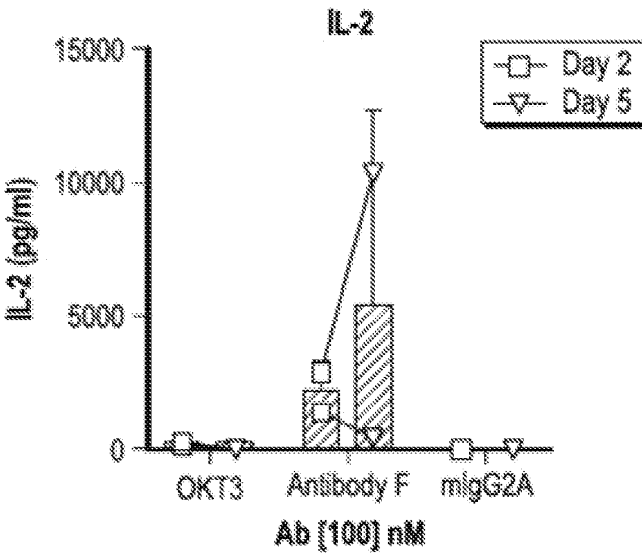


FIG. 30B

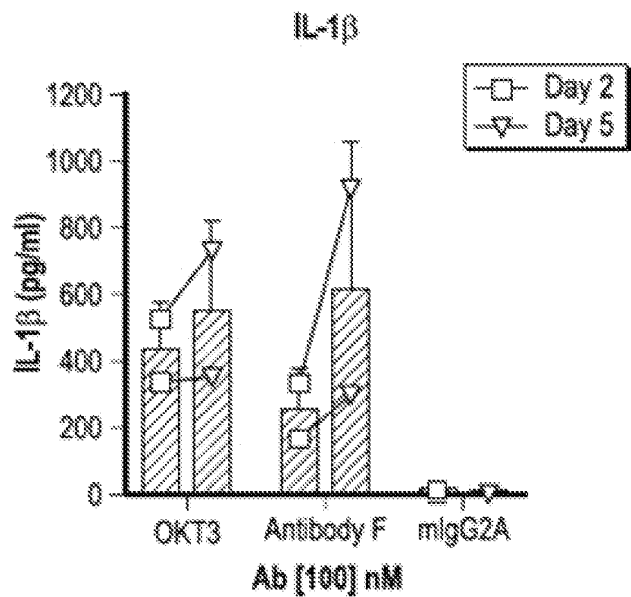


FIG. 30C

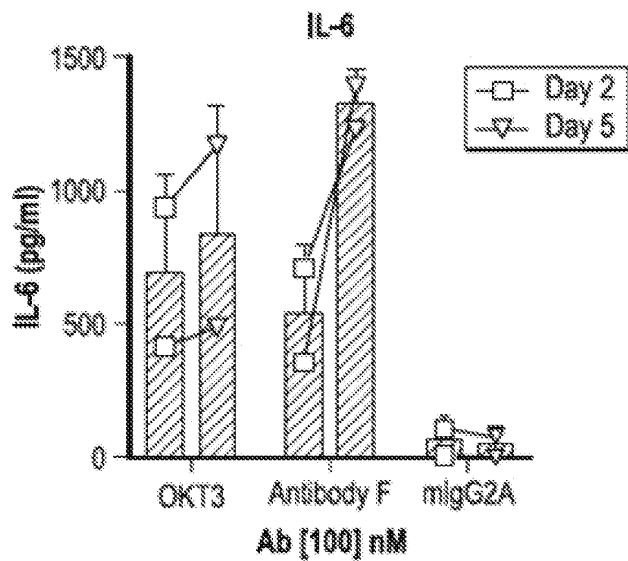


FIG. 30D

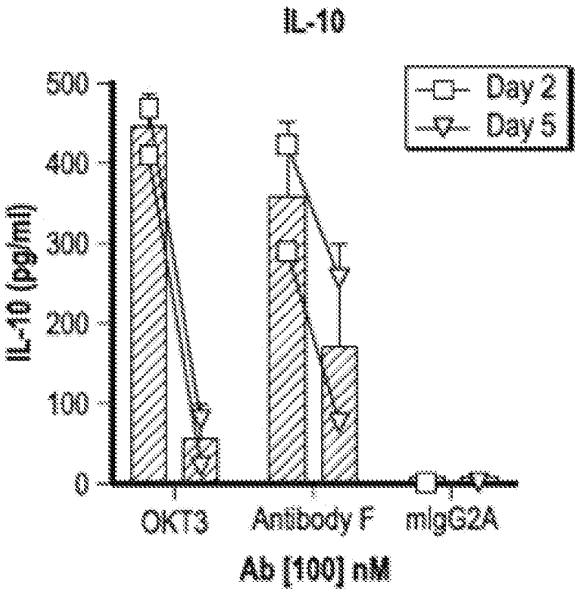


FIG. 30E

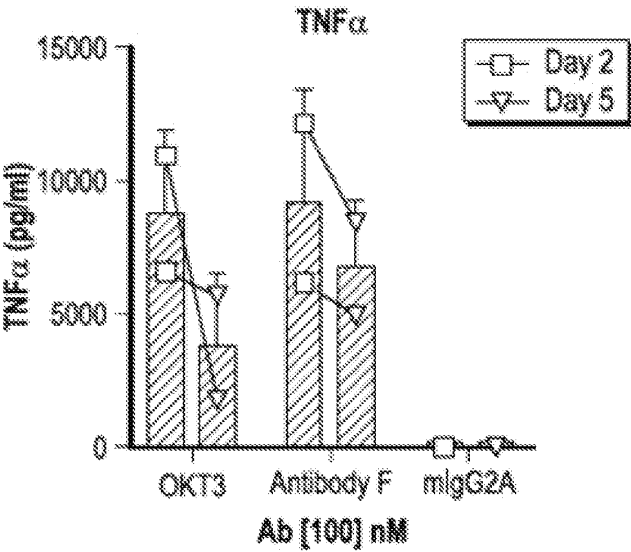


FIG. 30F

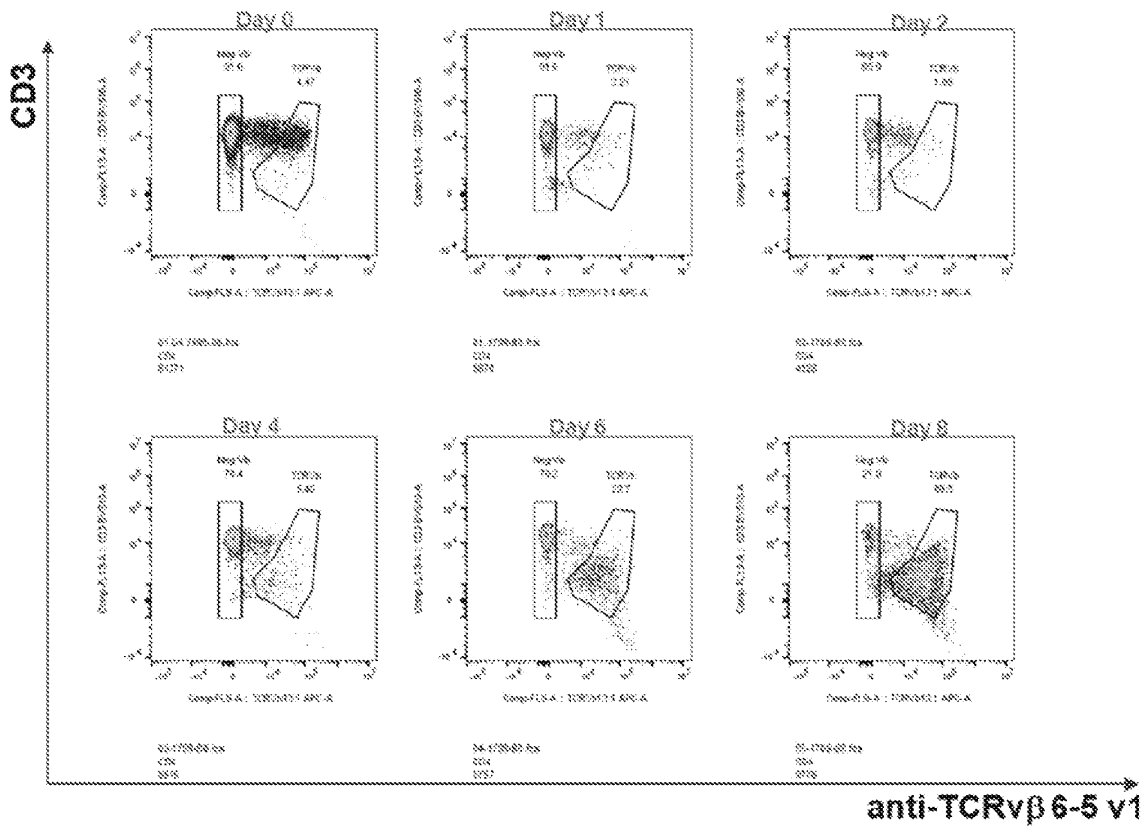


FIG. 31

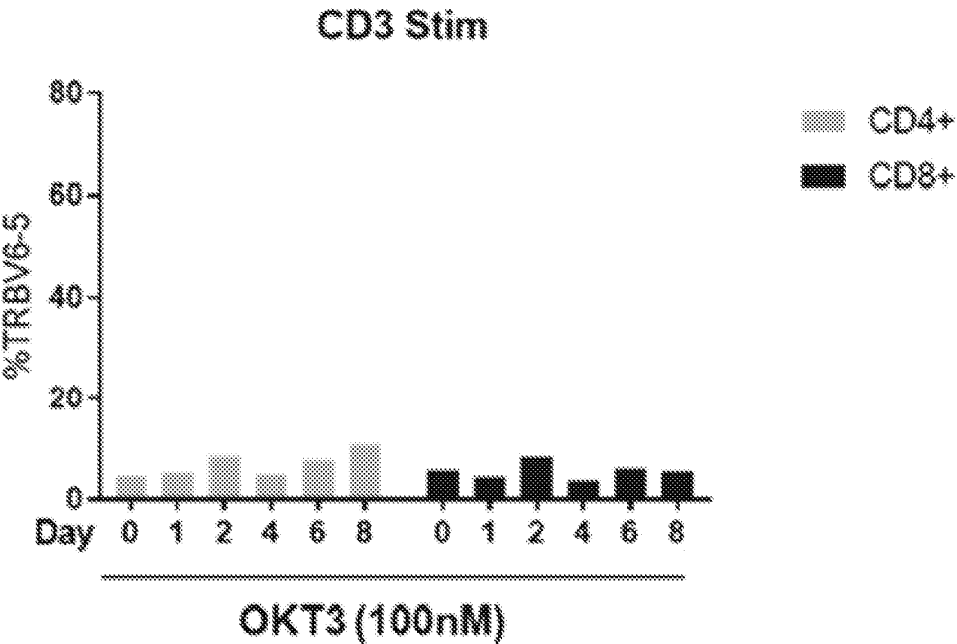


FIG. 32

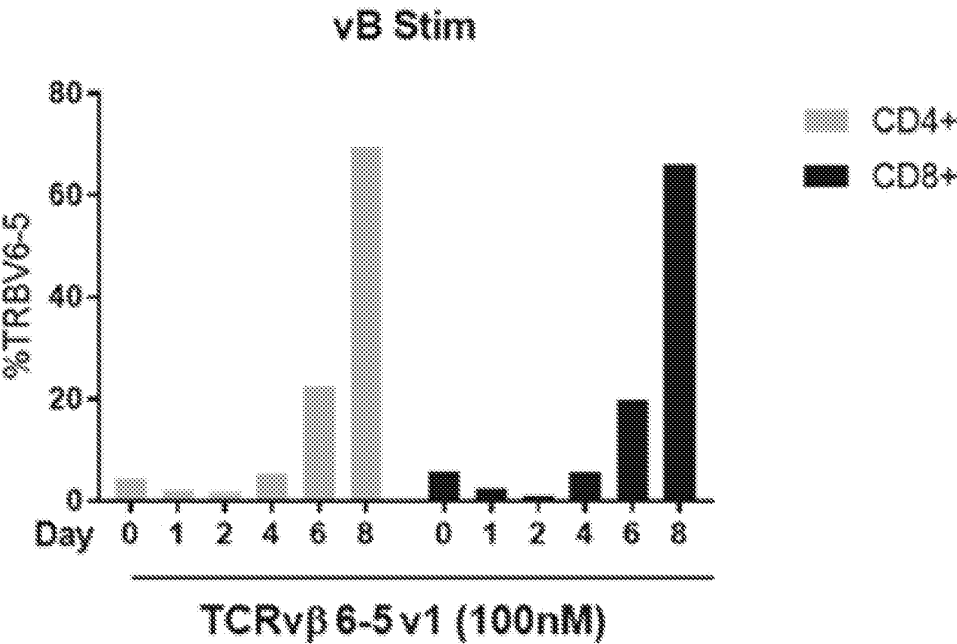


FIG. 33

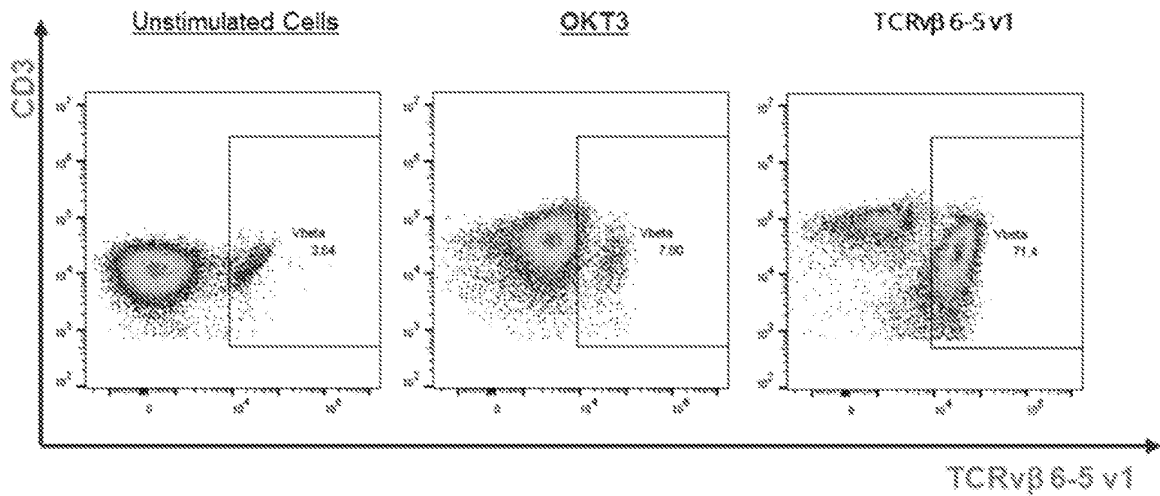


FIG. 34

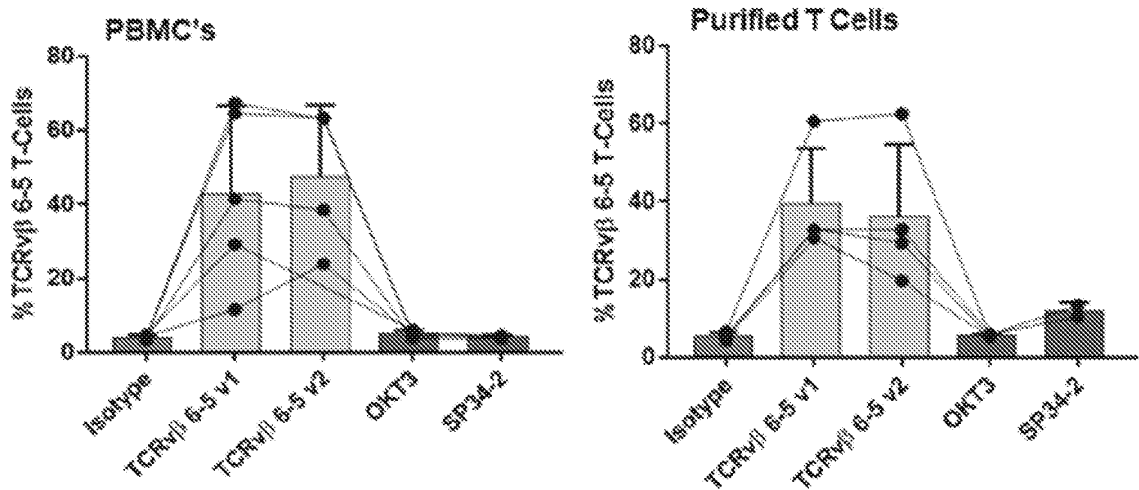


FIG. 35A

FIG. 35B

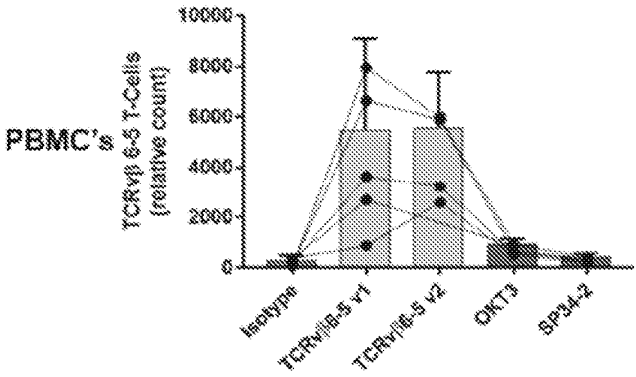


FIG. 36A

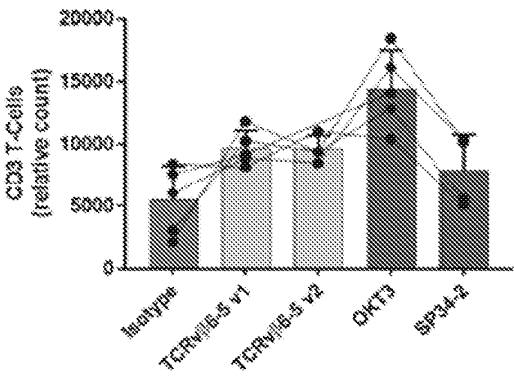


FIG. 36B

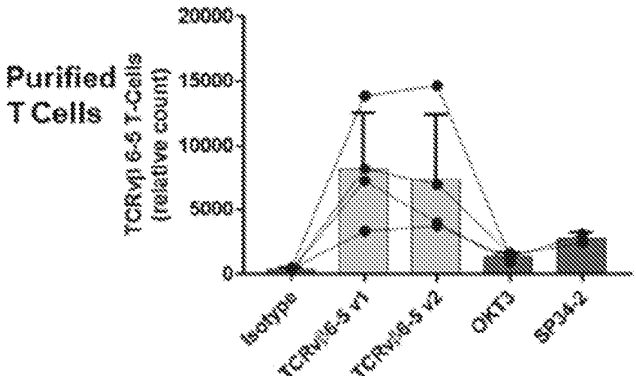


FIG. 37A

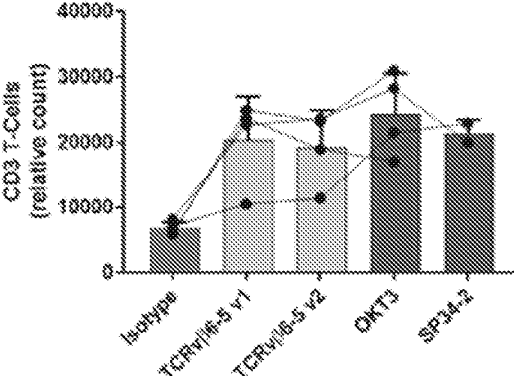


FIG. 37B

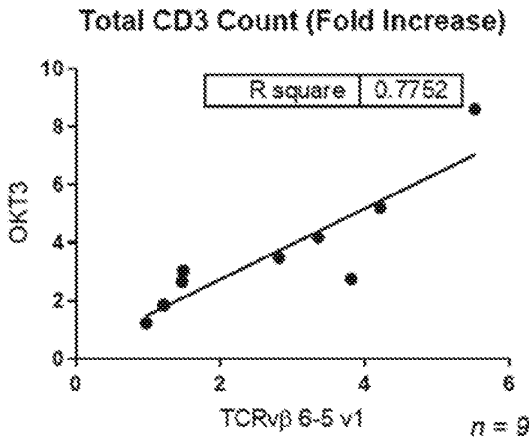


FIG. 38

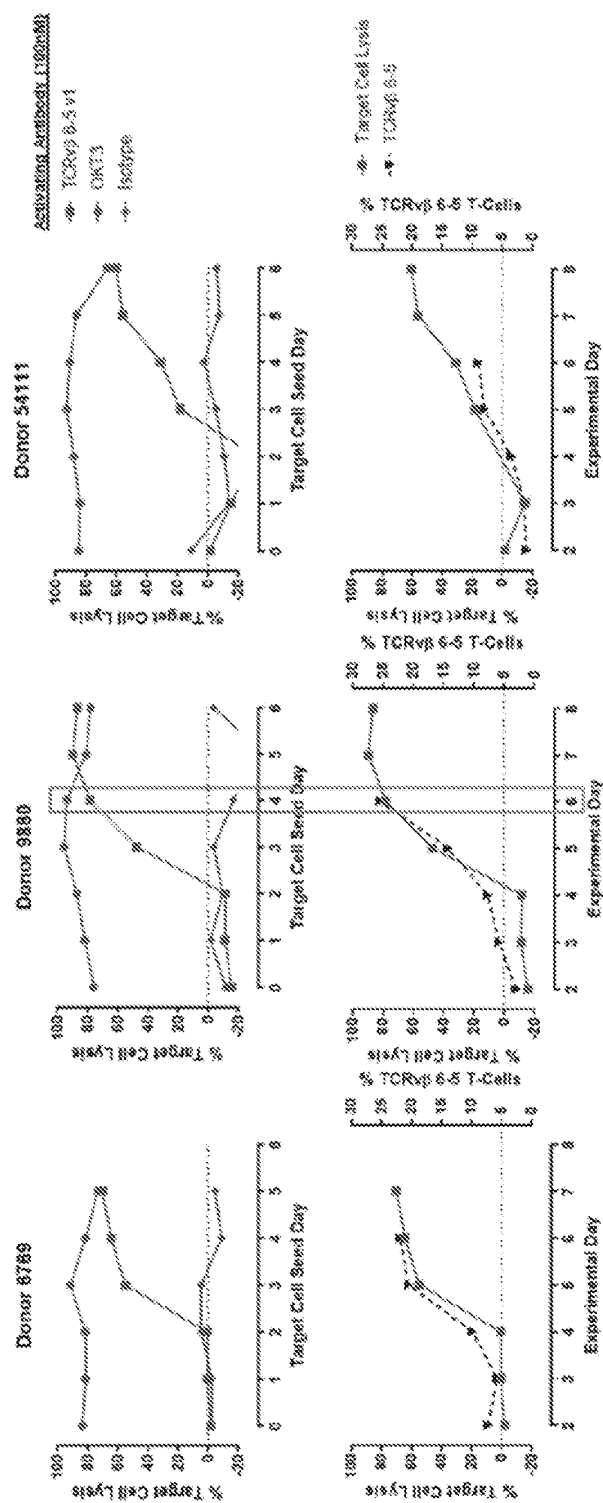


FIG. 39

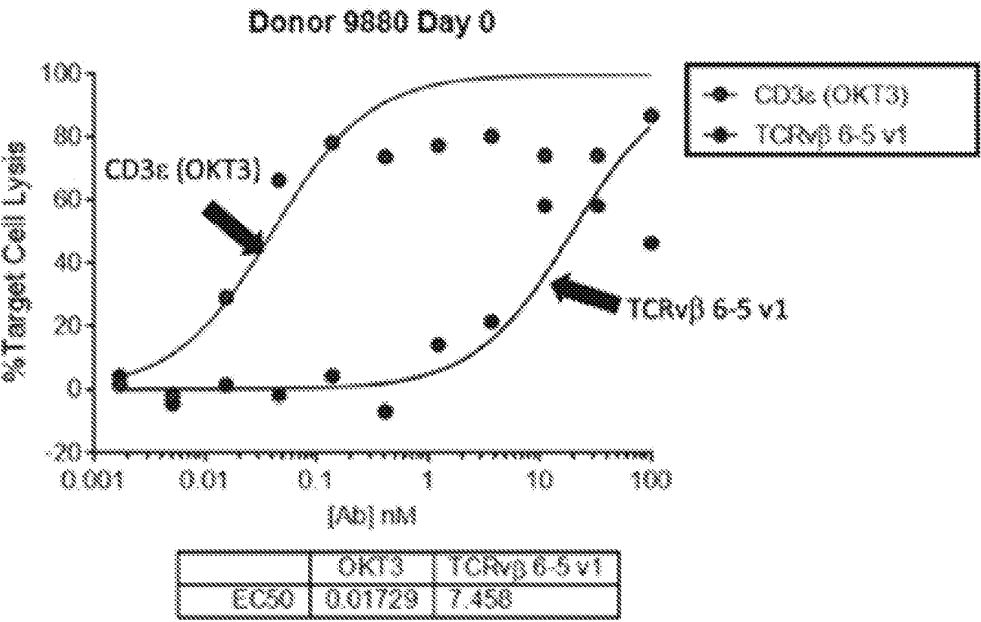


FIG. 40A

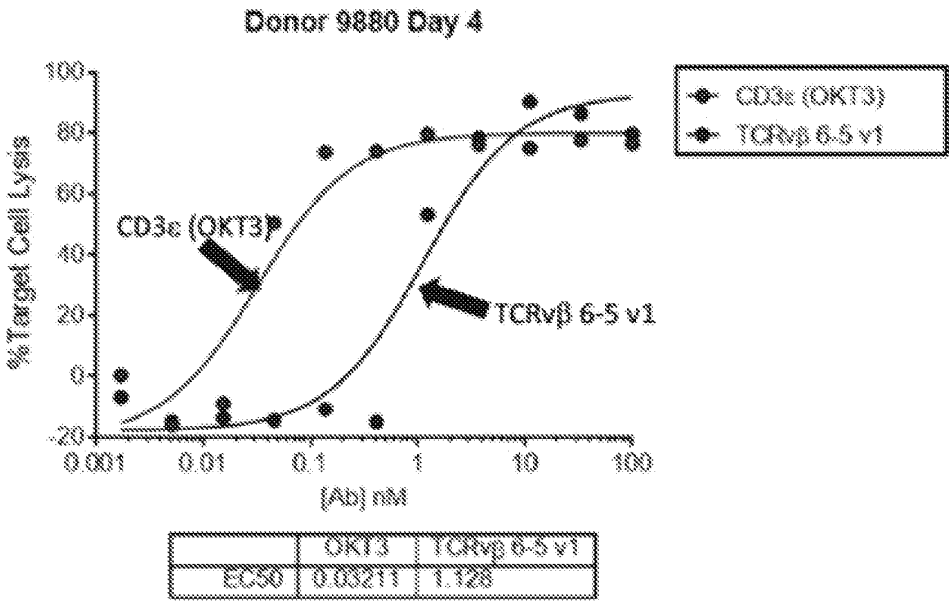


FIG. 40B

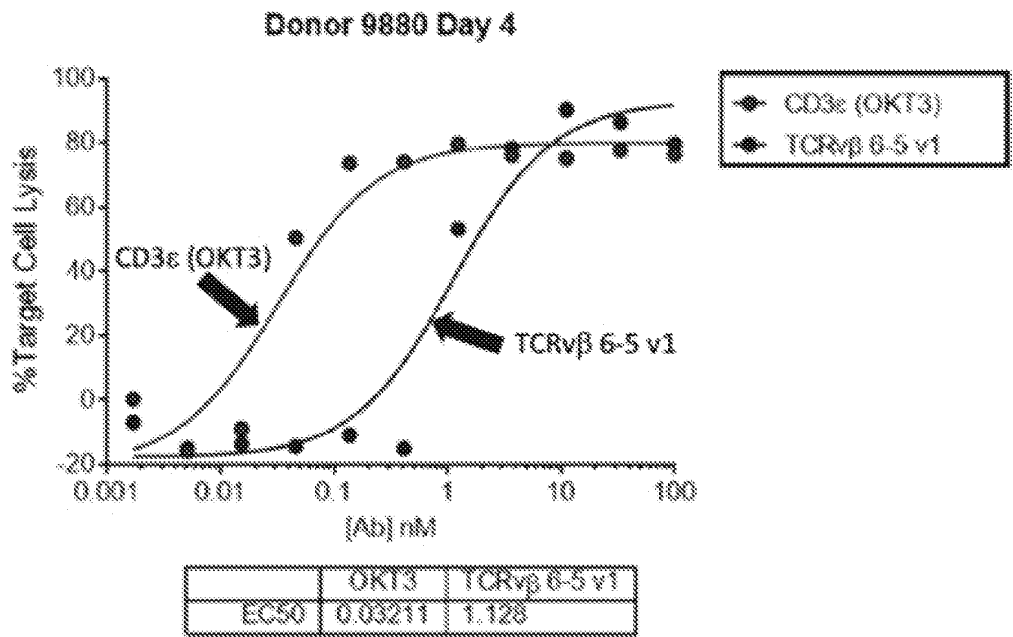


FIG. 41

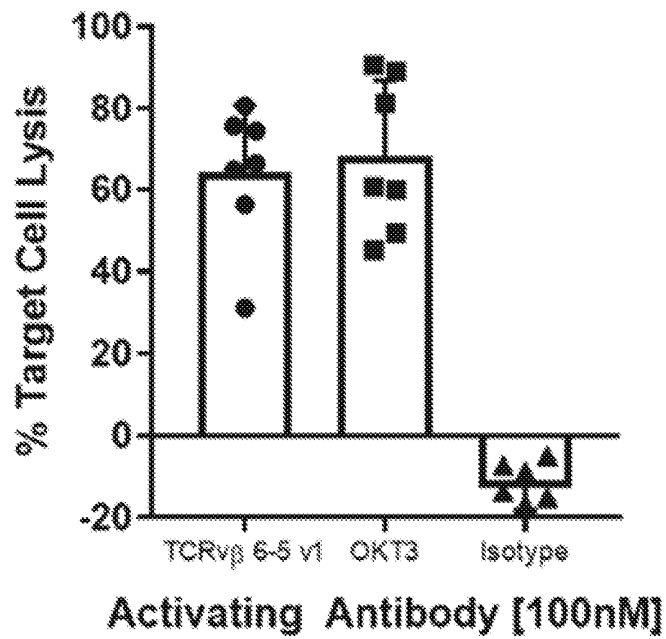


FIG. 42

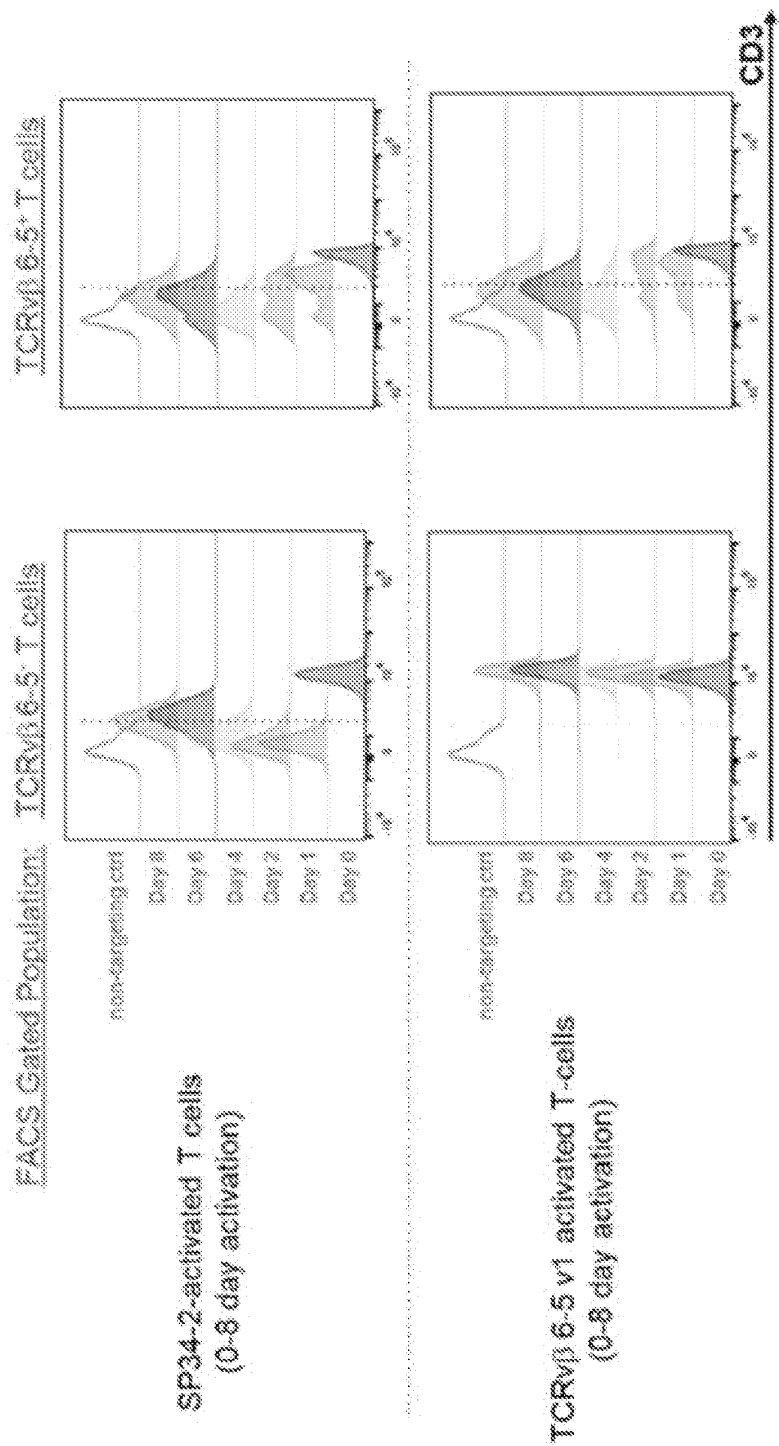


FIG. 43

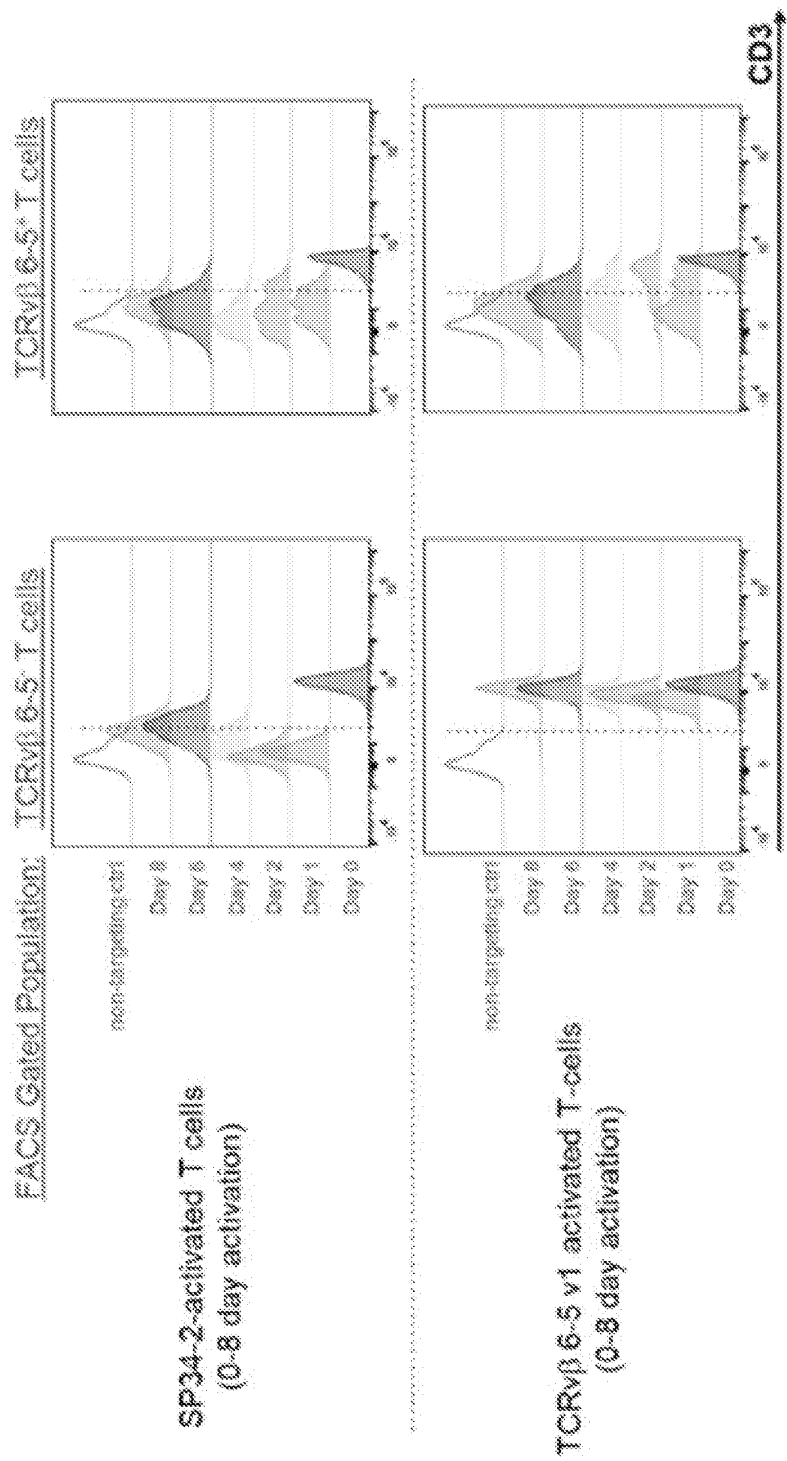


FIG. 44

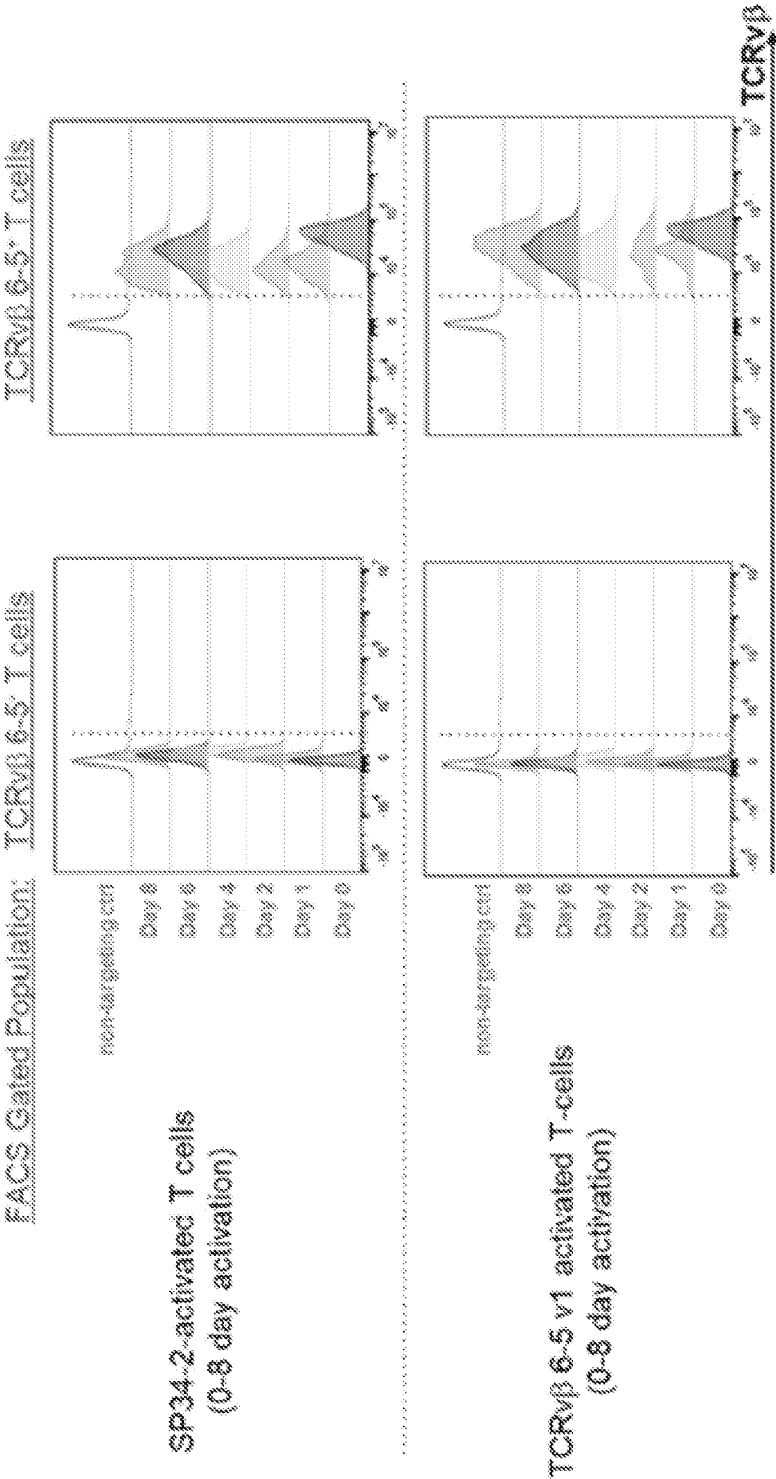


FIG. 45

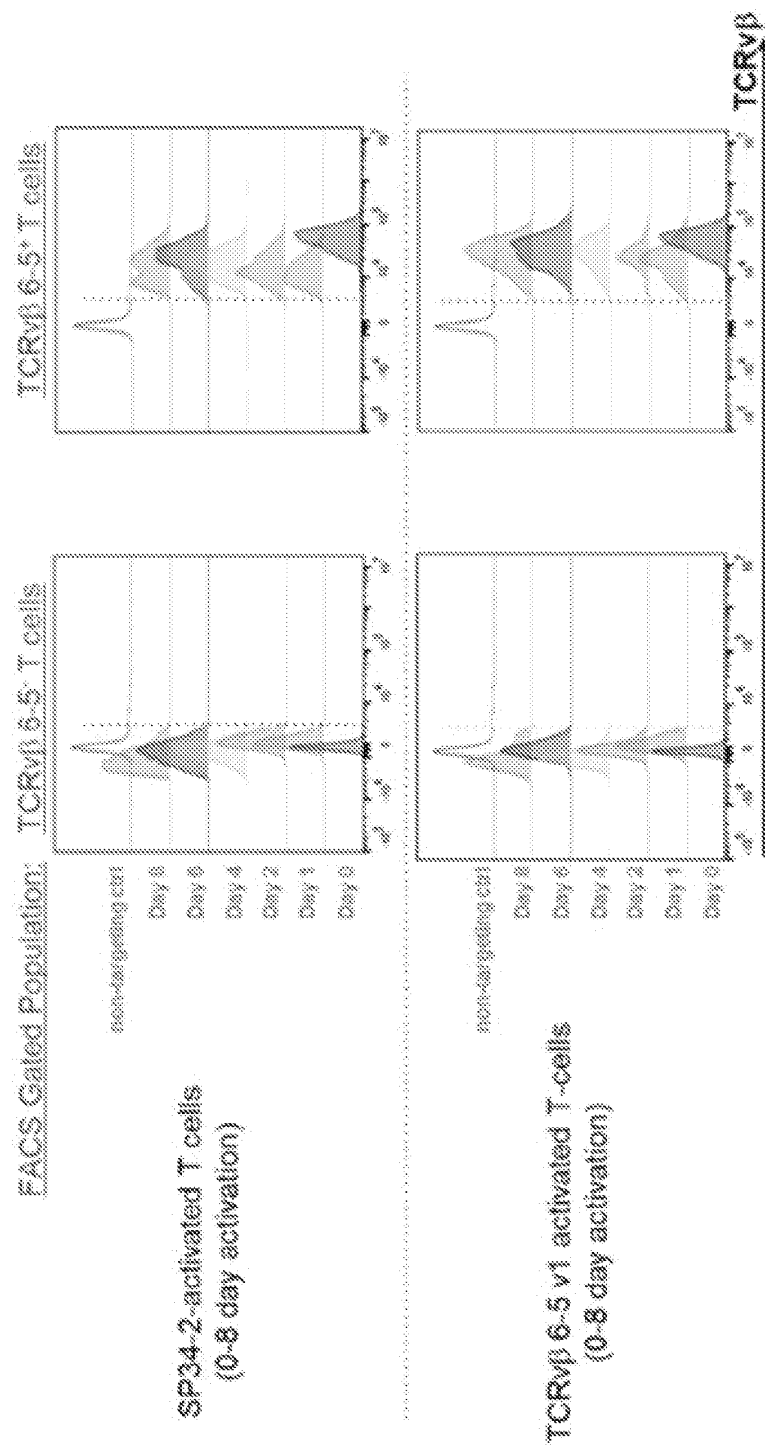


FIG. 46

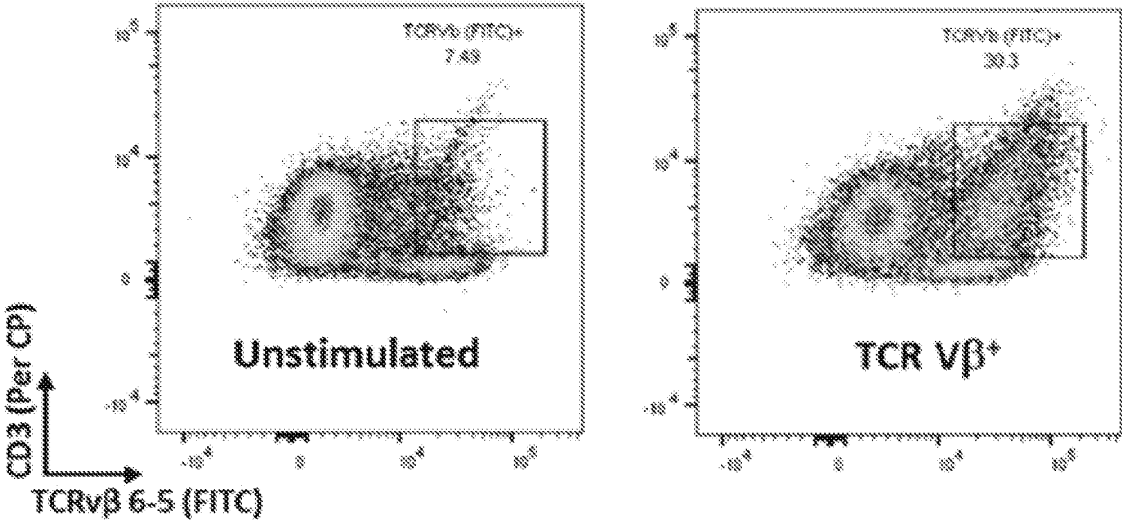


FIG. 47A

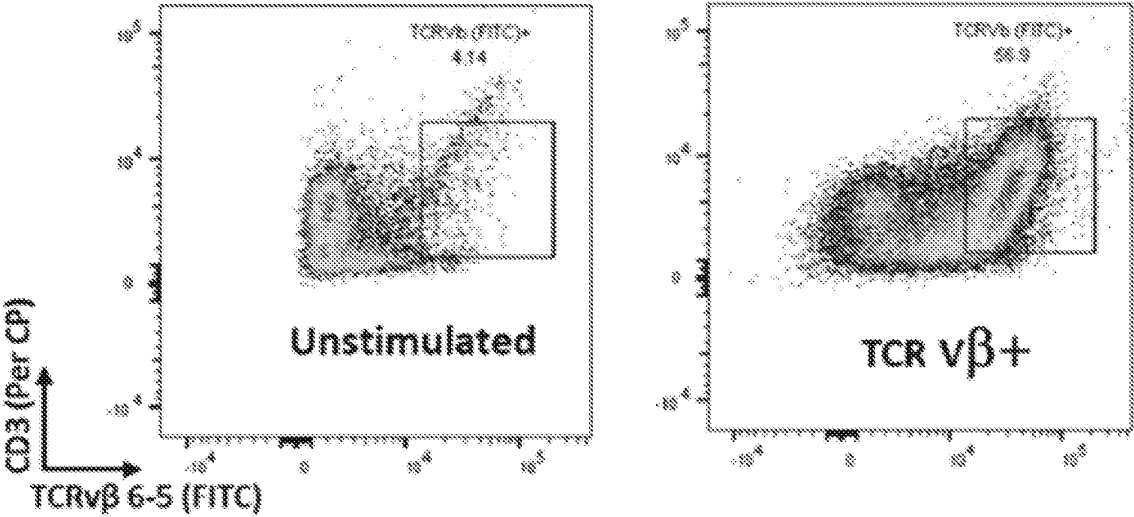


FIG. 47B

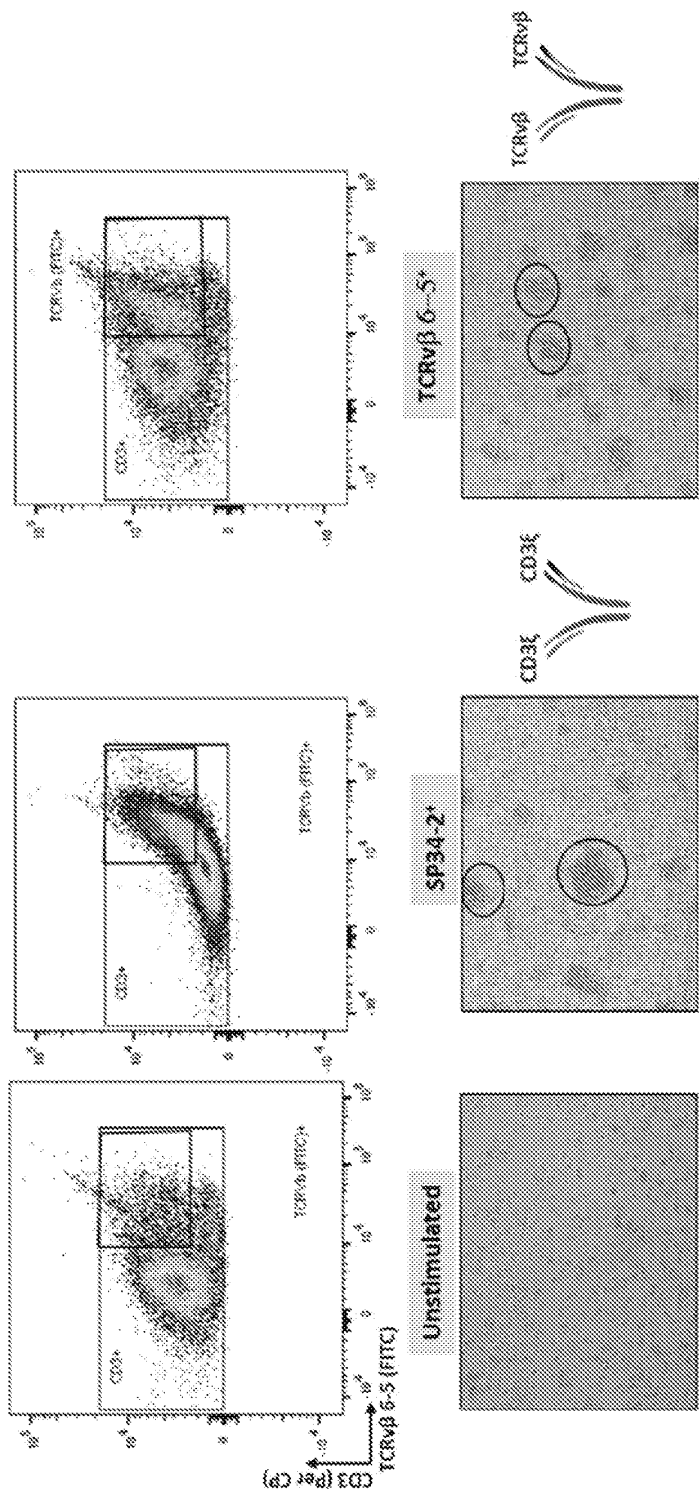


FIG. 48

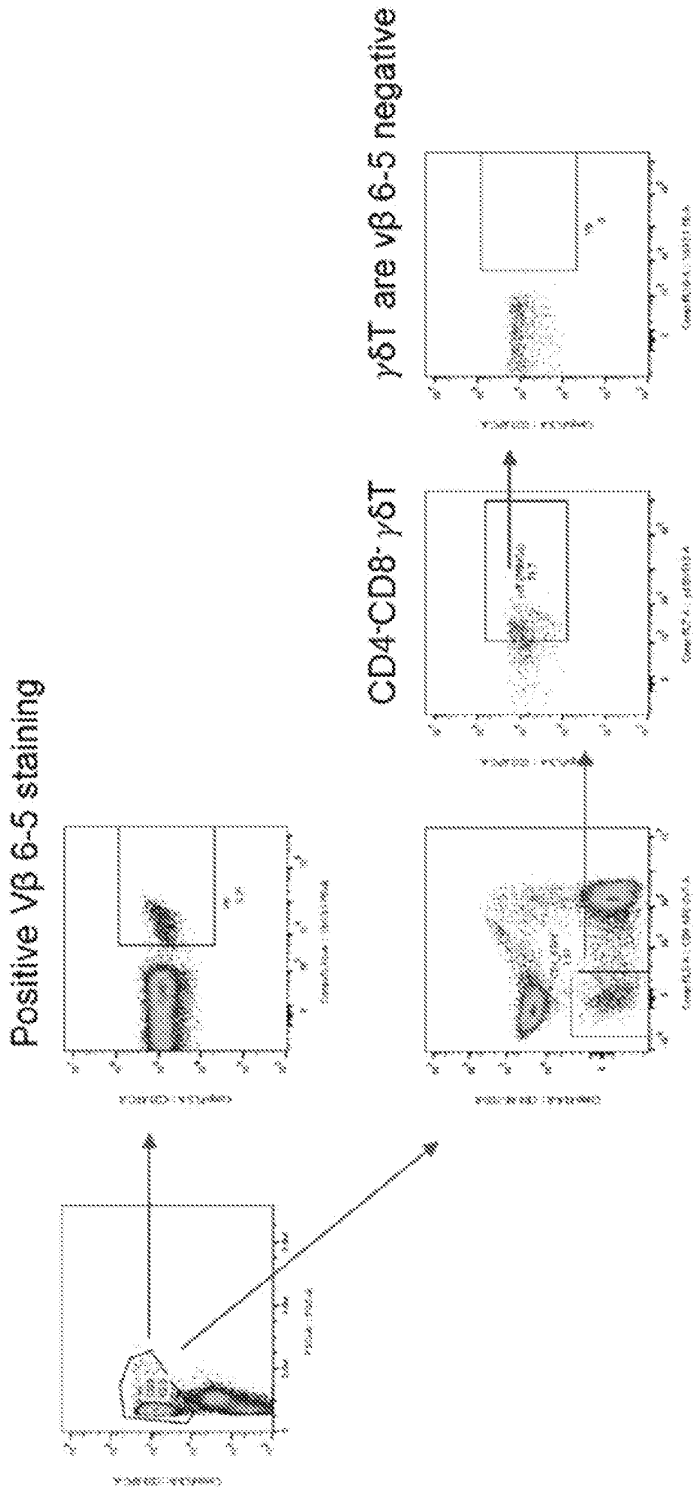


FIG. 49

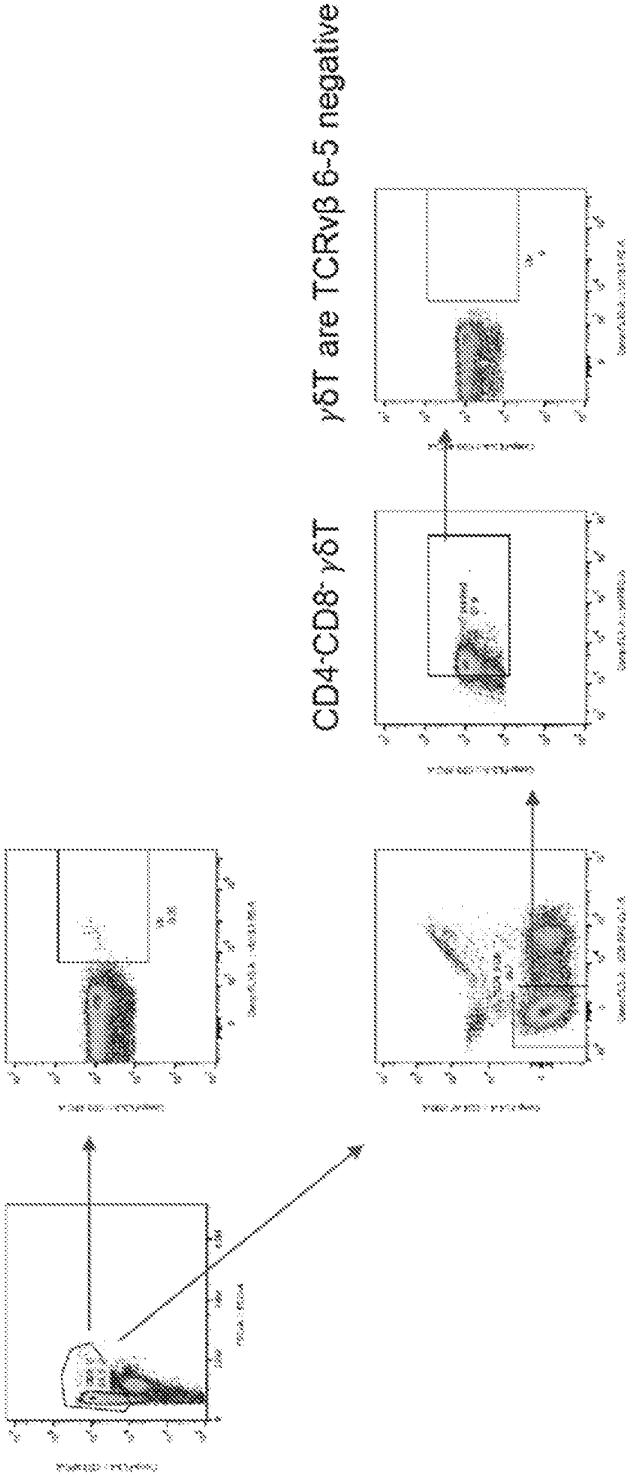


FIG. 50

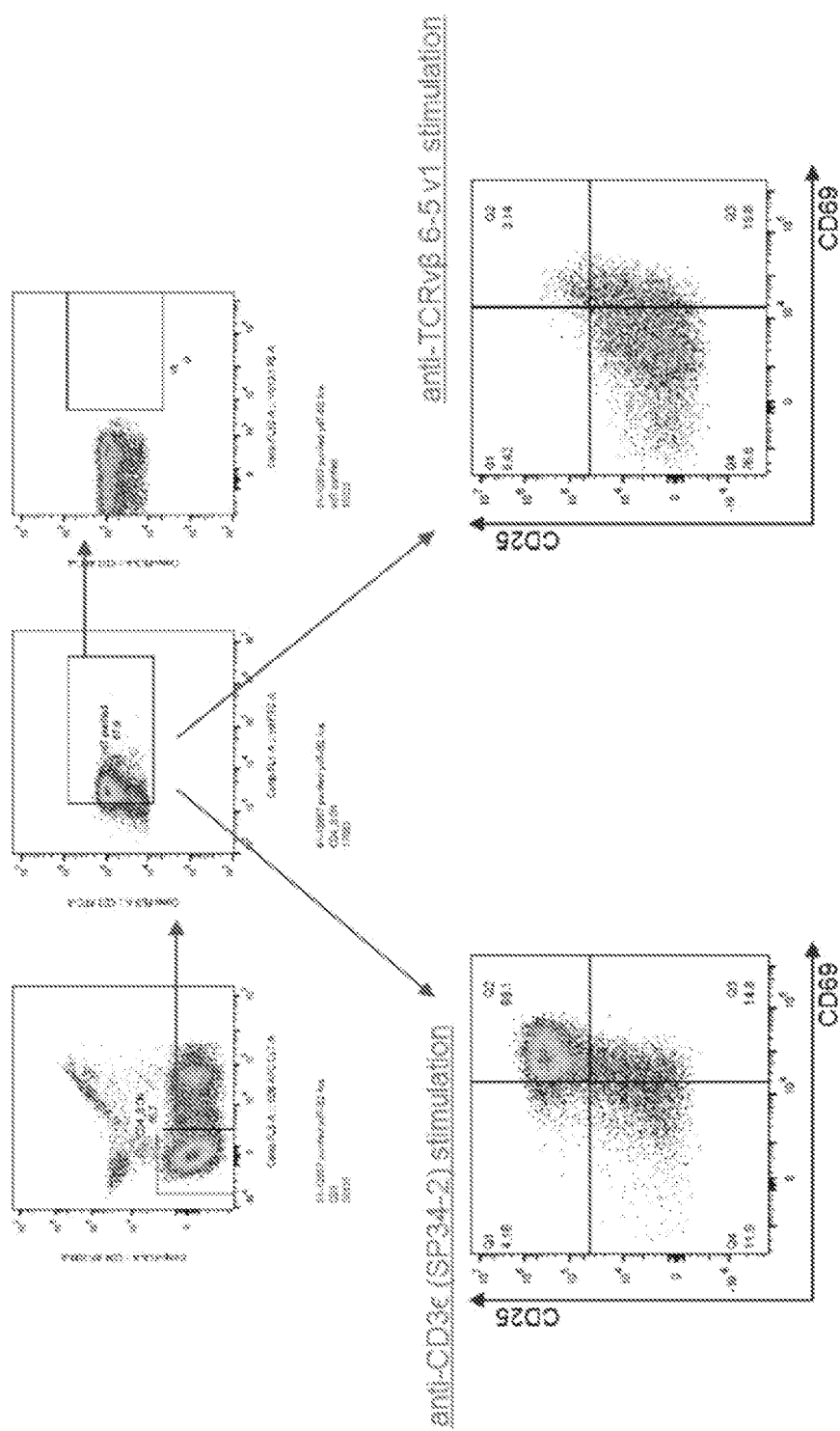


FIG. 51

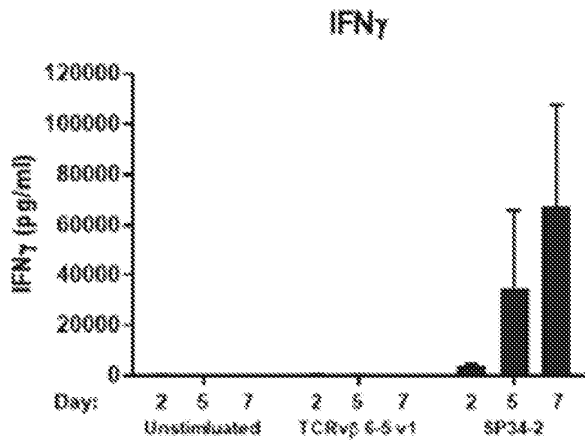


FIG. 52A

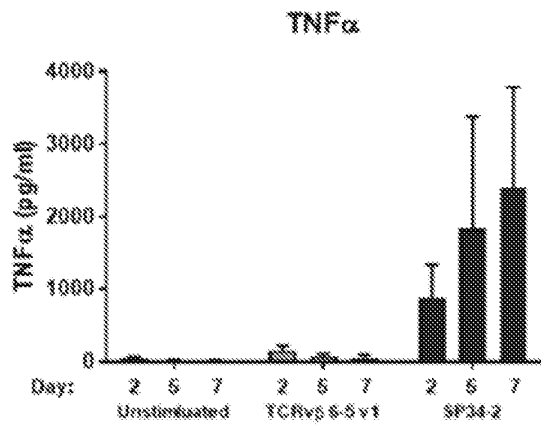


FIG. 52B

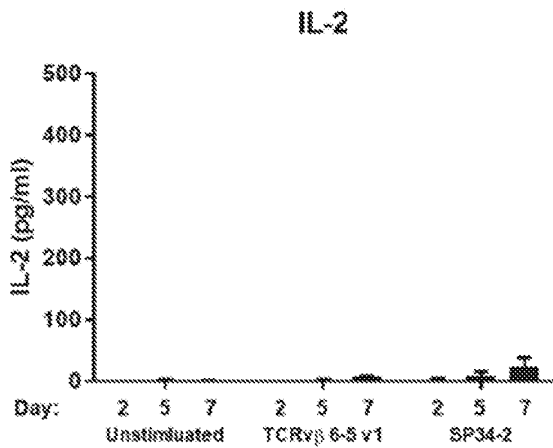


FIG. 52C

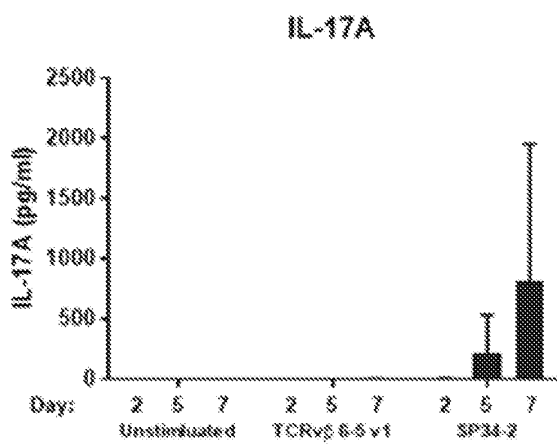


FIG. 52D

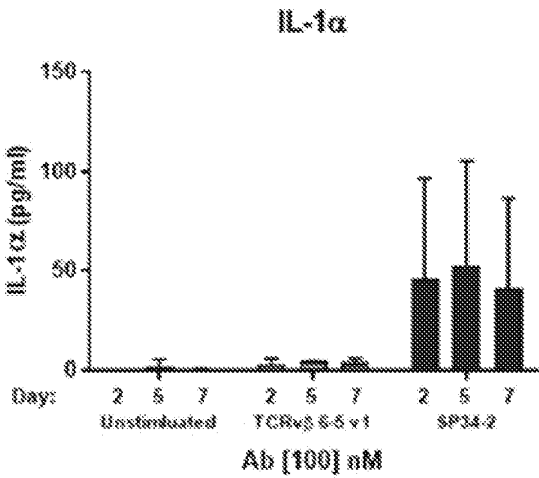


FIG. 52E

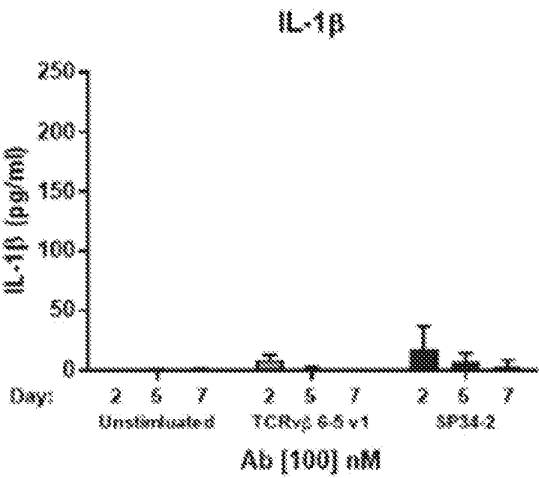


FIG. 52F

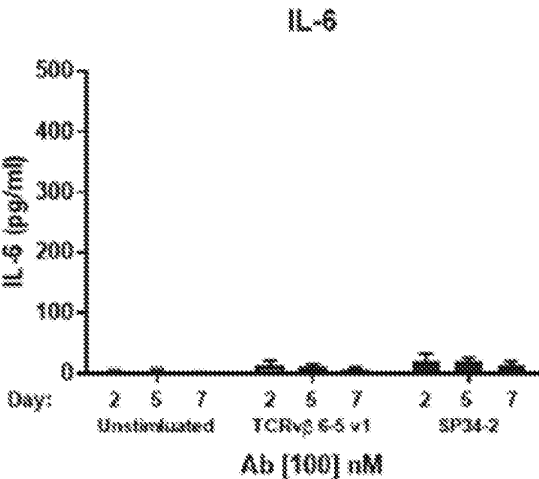


FIG. 52G

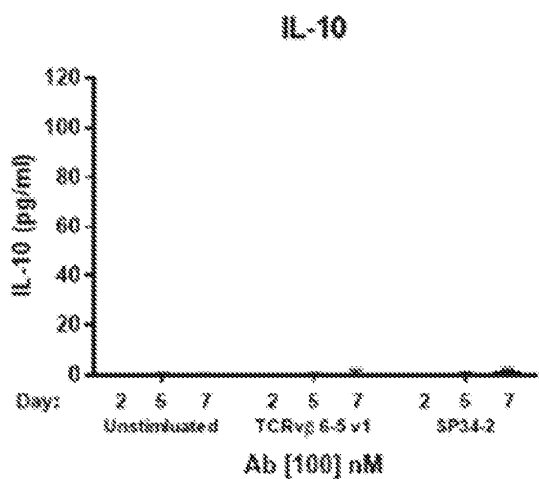
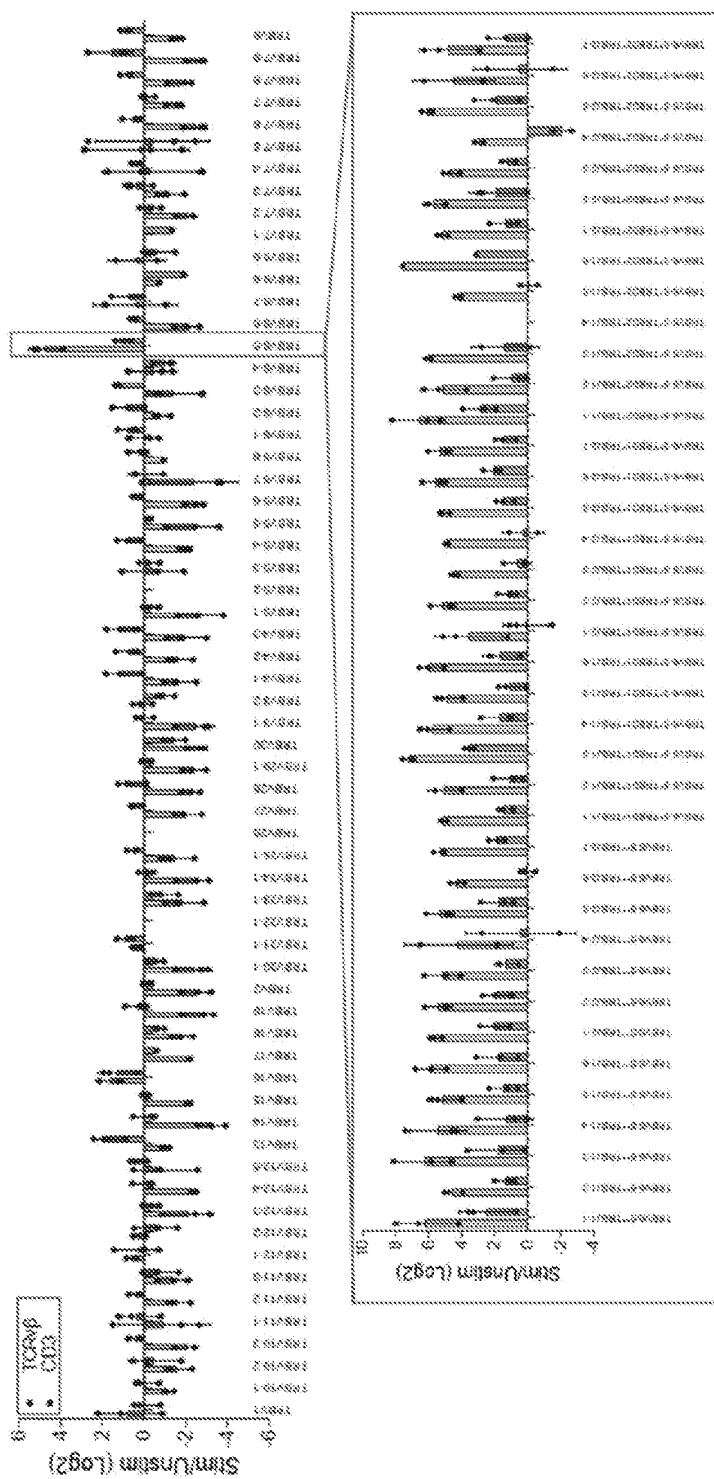


FIG. 52H



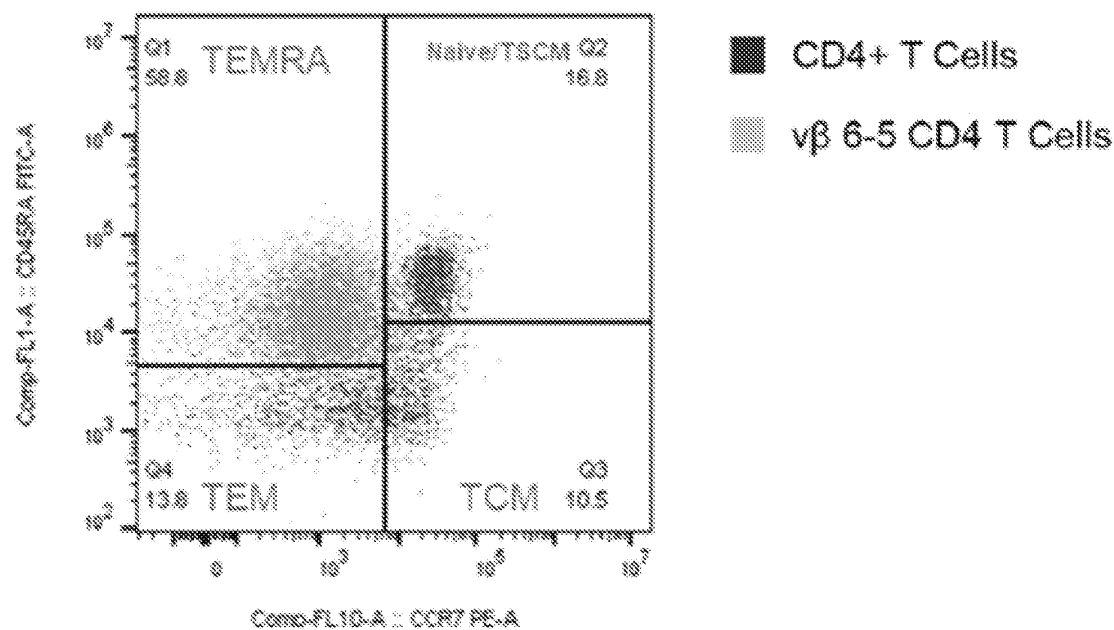


FIG. 54A

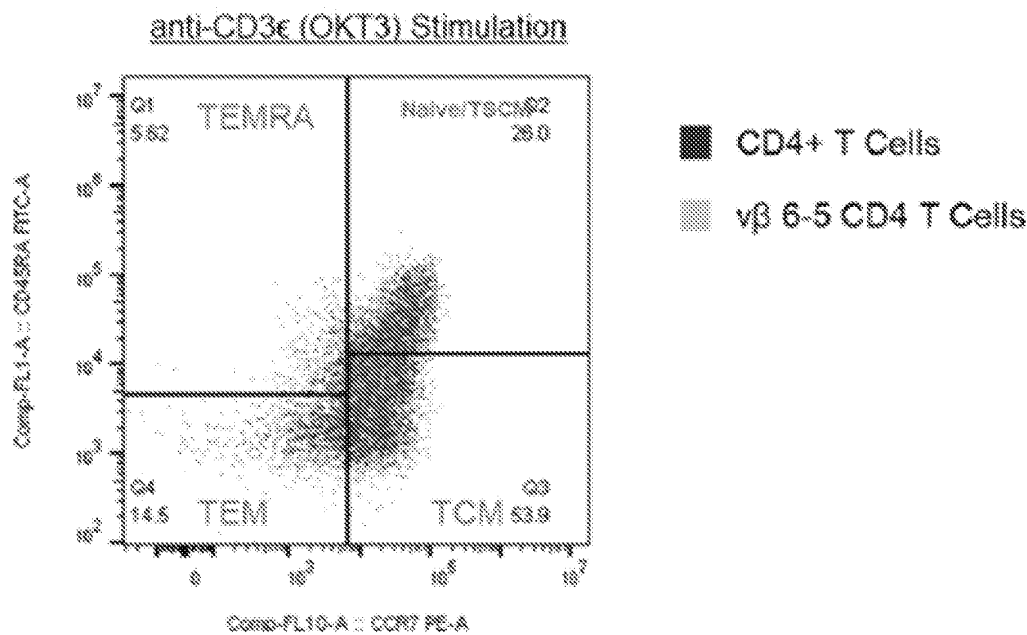


FIG. 54B

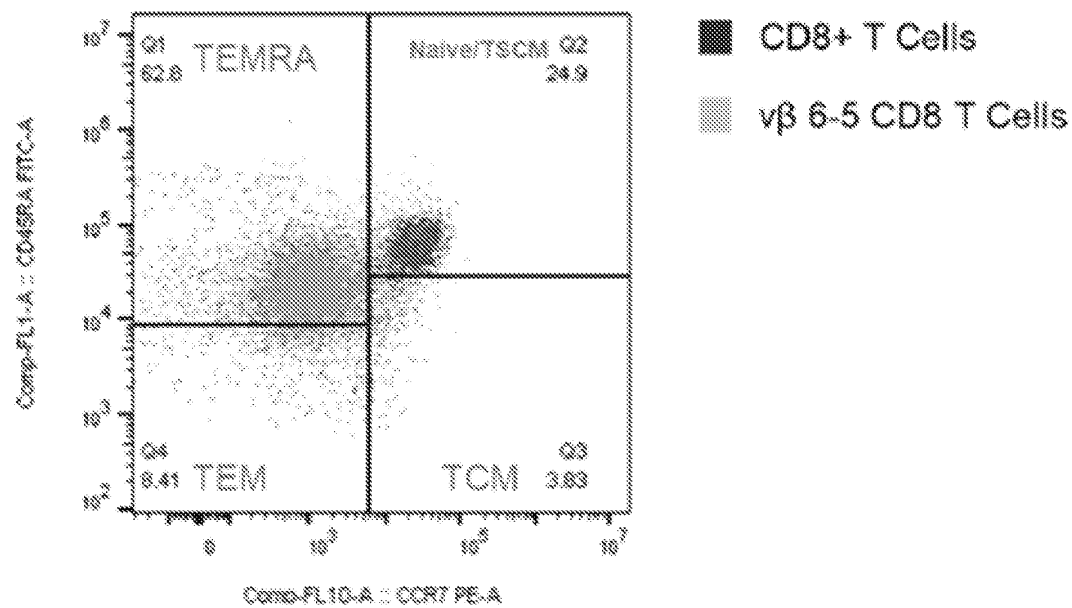


FIG. 55A

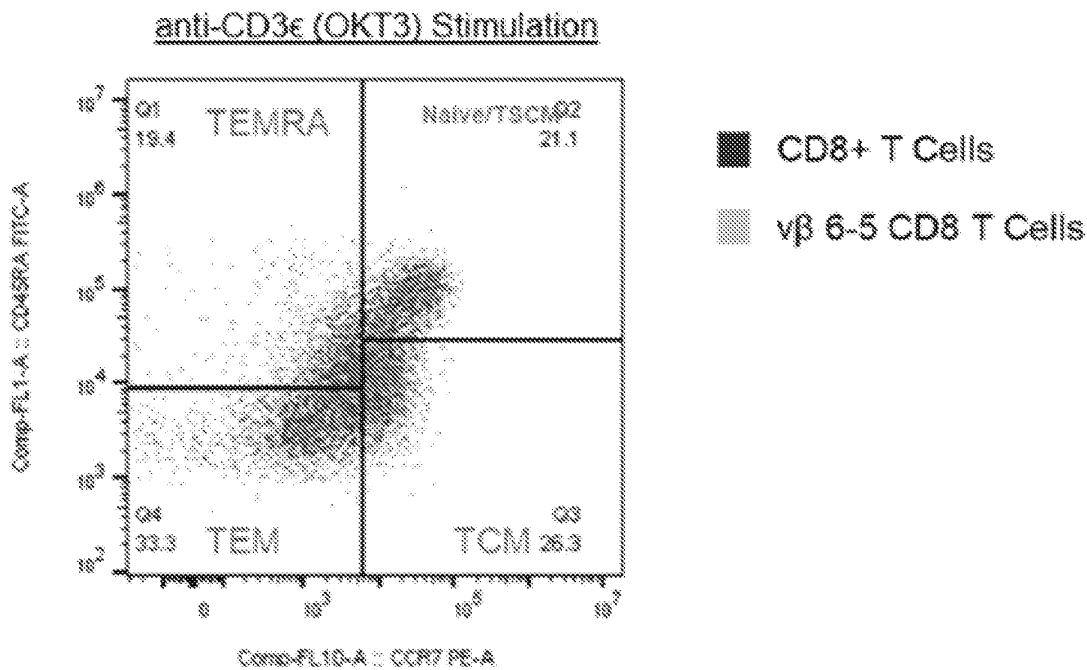


FIG. 55B

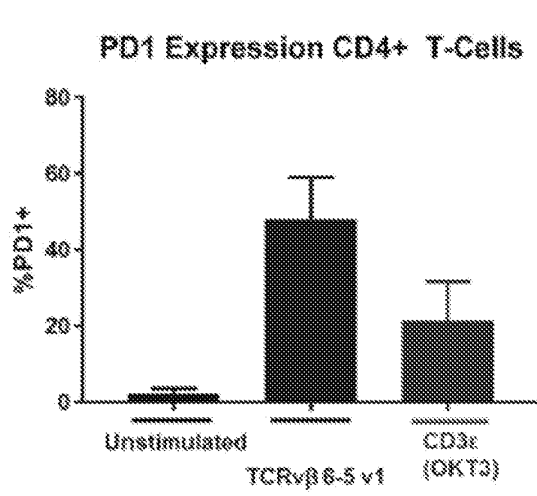


FIG. 56A

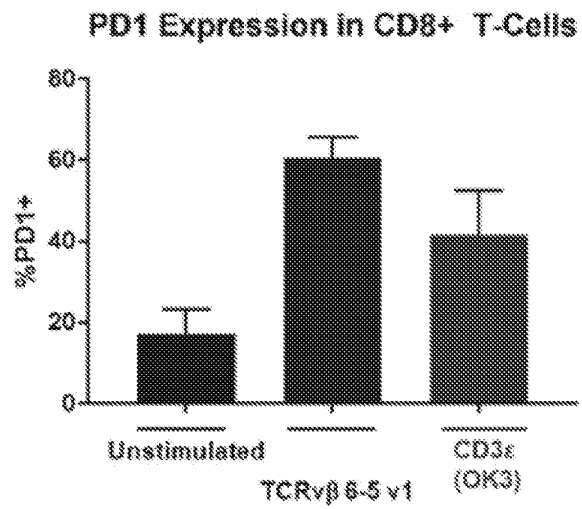


FIG. 56B

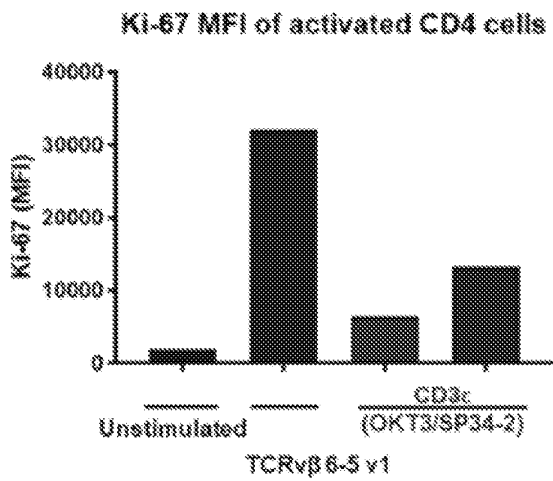


FIG. 57A

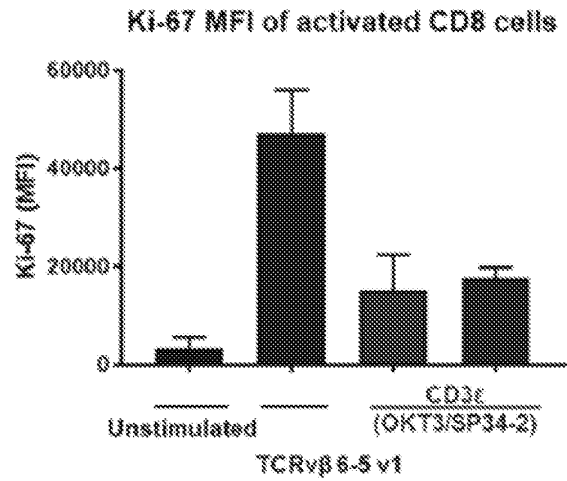


FIG. 57B

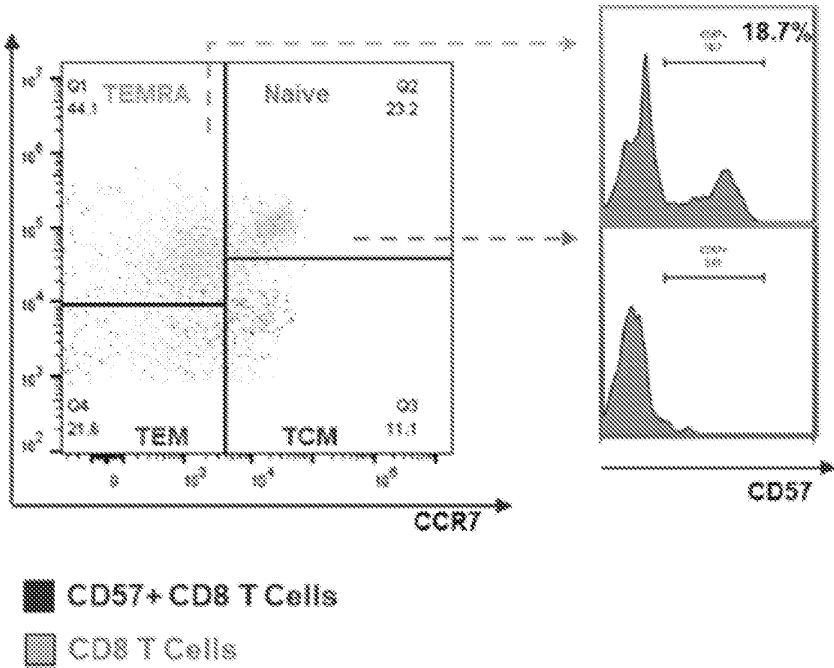


FIG. 58A

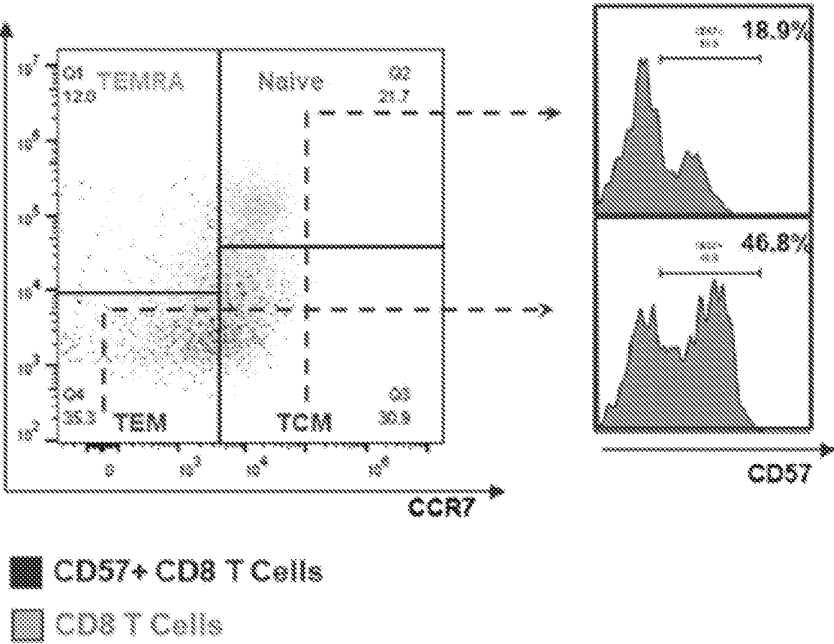


FIG. 58B

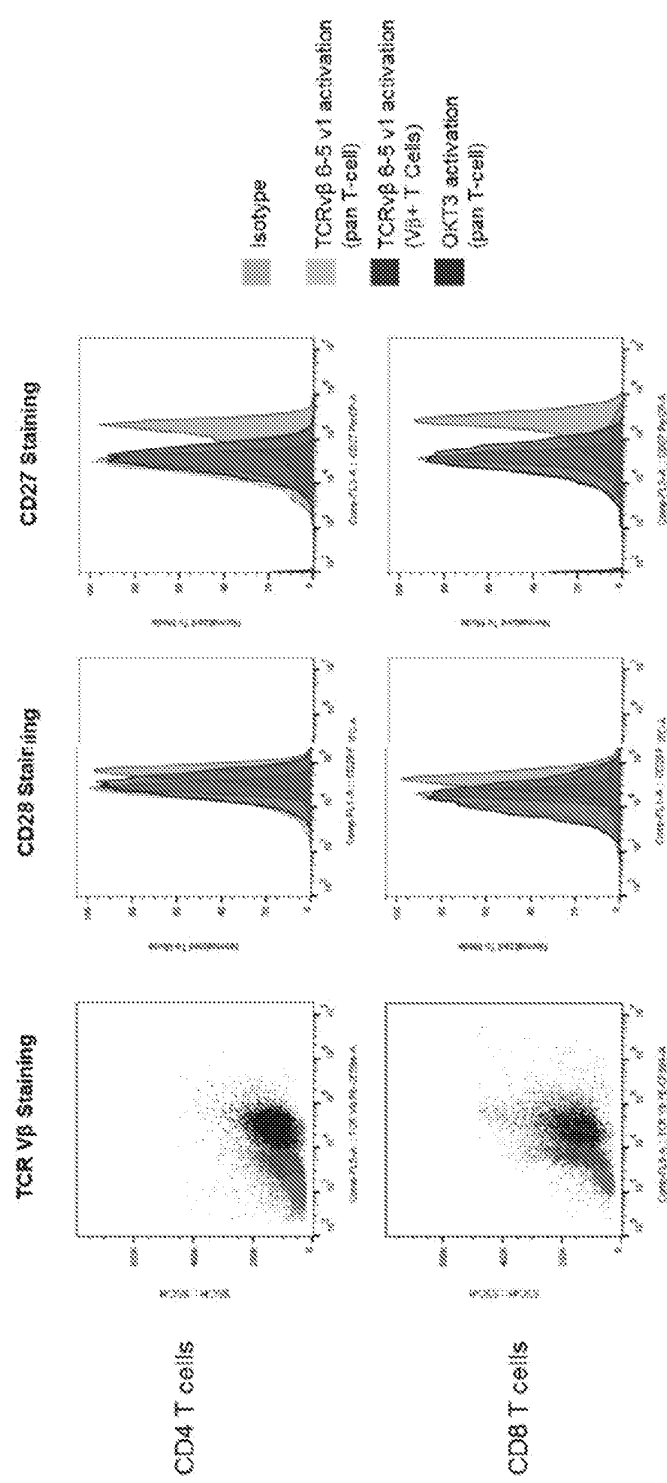


FIG. 59

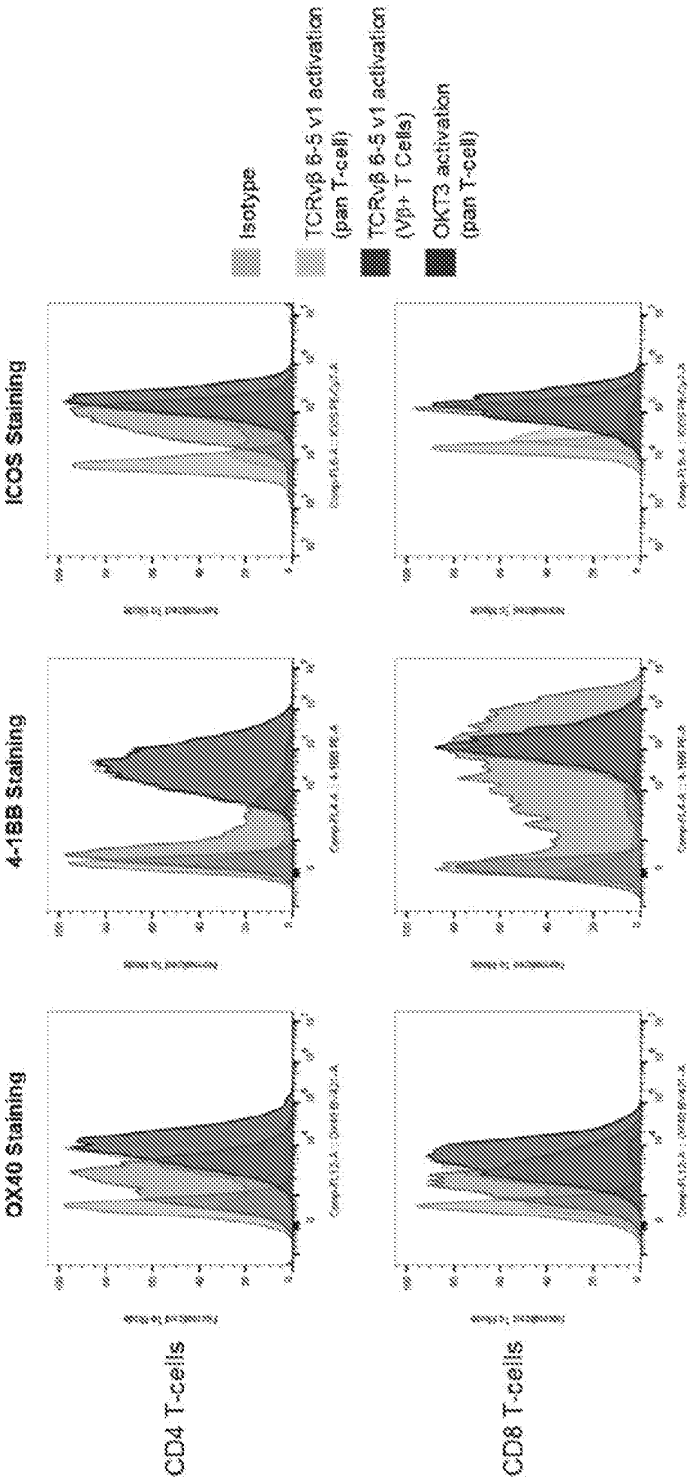


FIG. 60

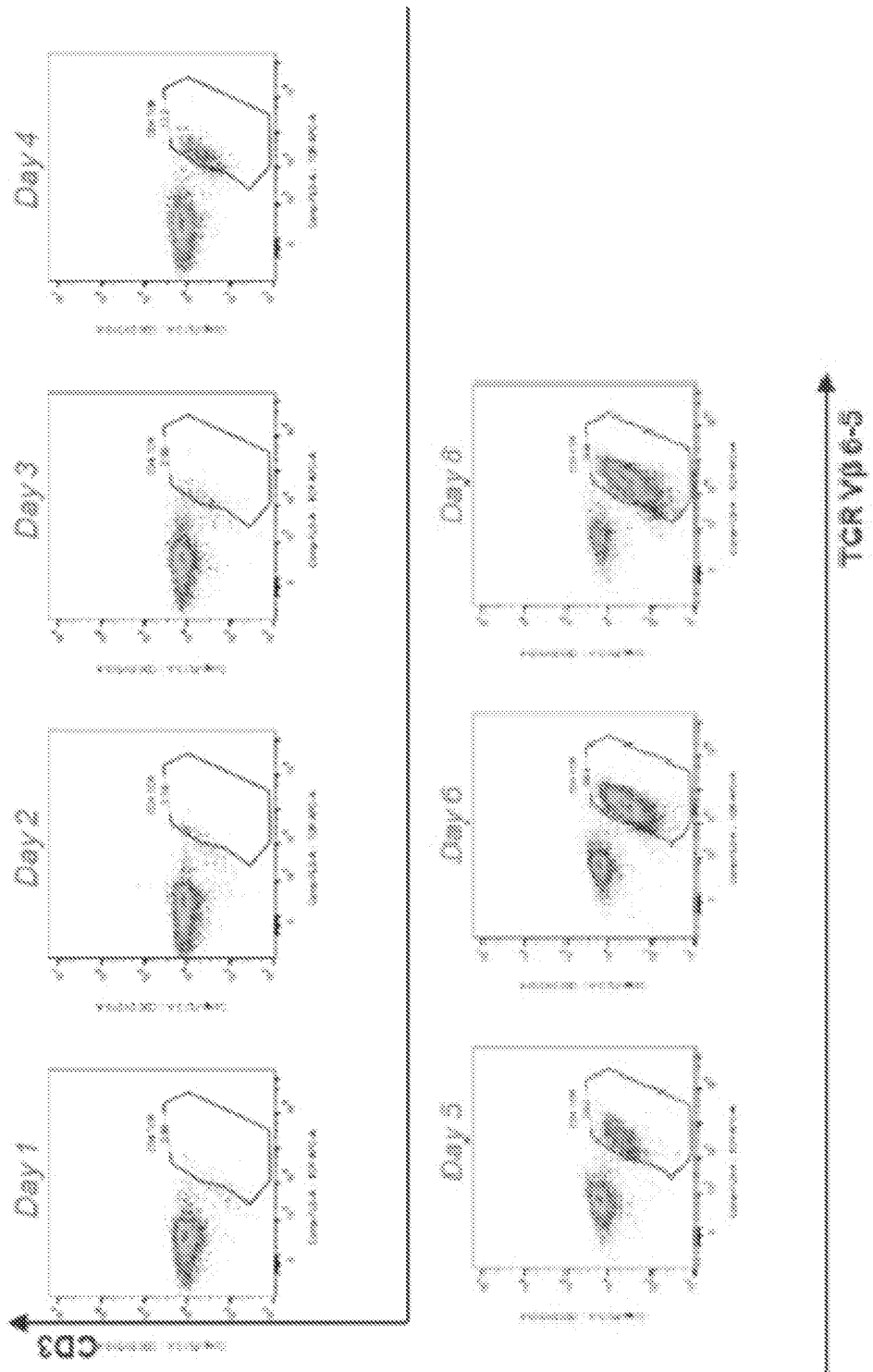
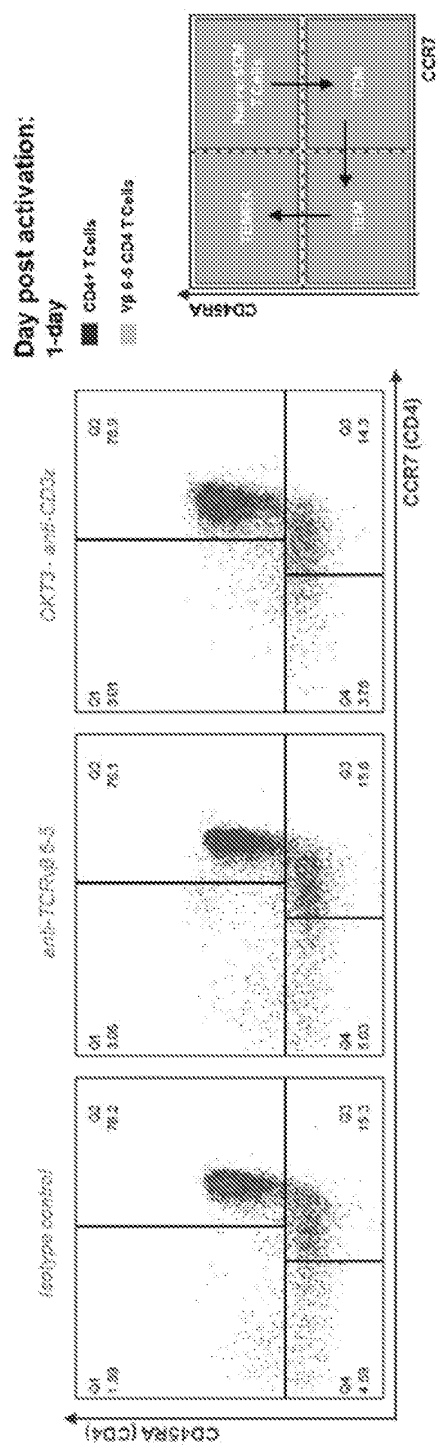
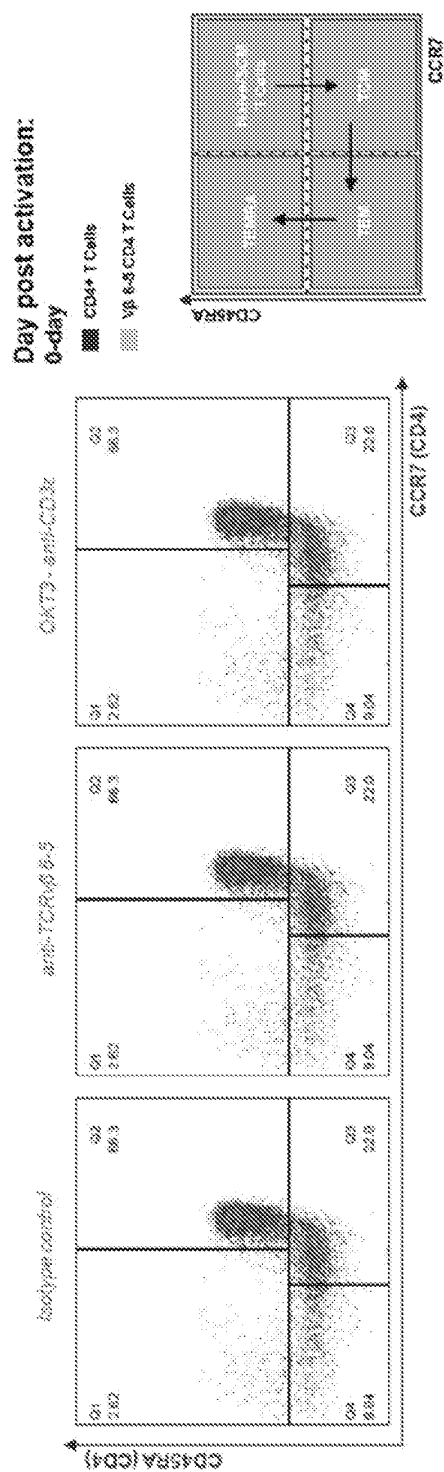


FIG. 61



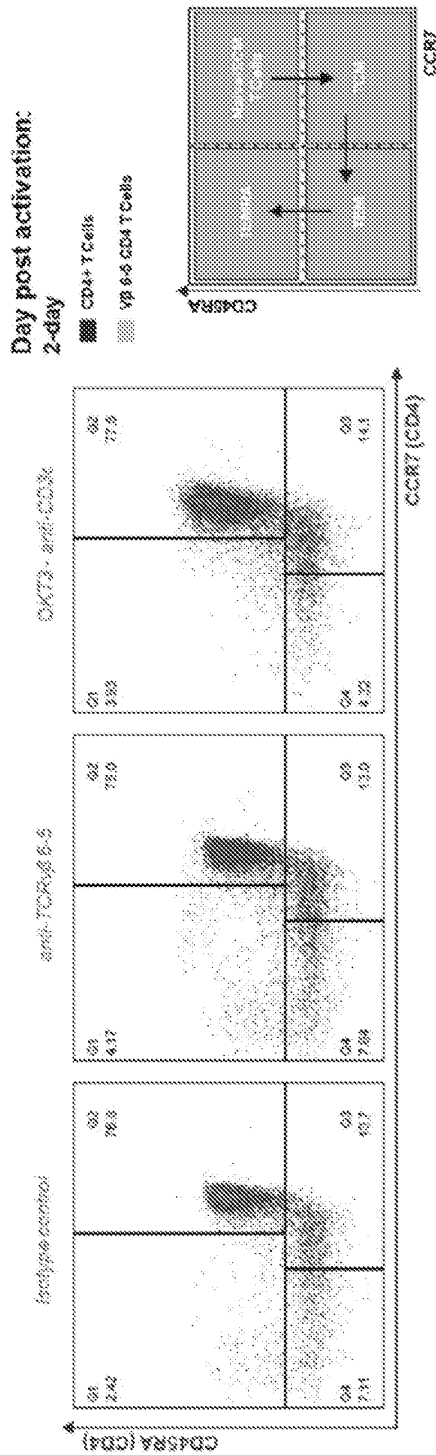


FIG. 62C

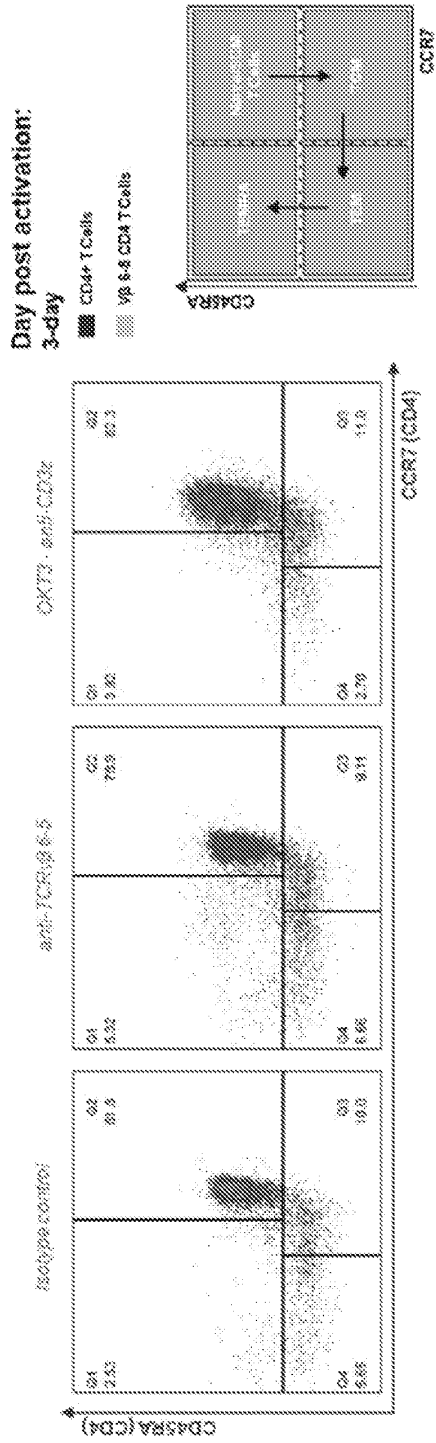


FIG. 62D

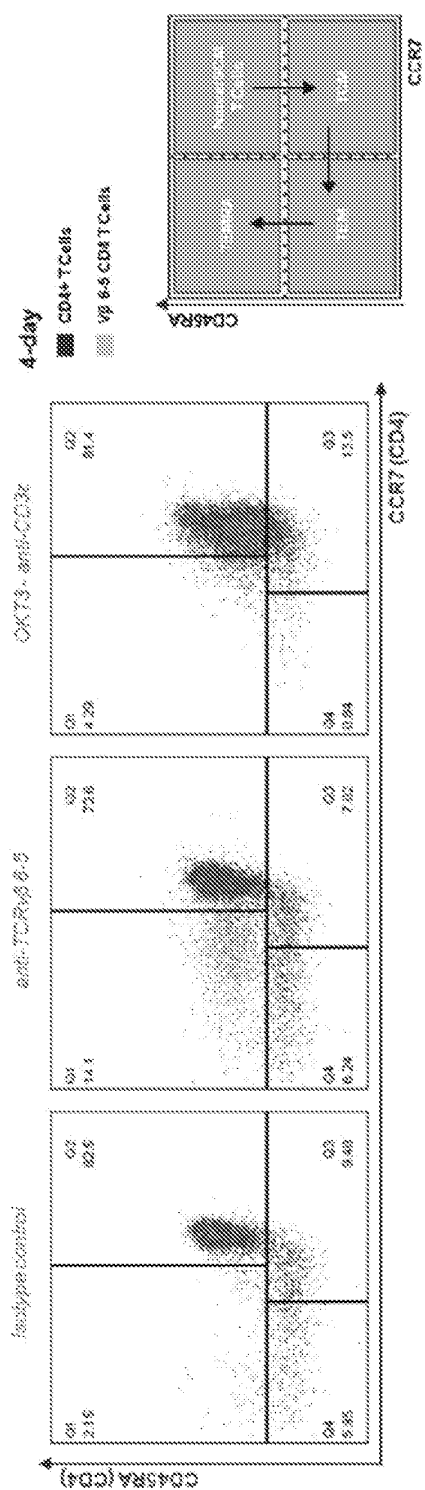


FIG. 62E

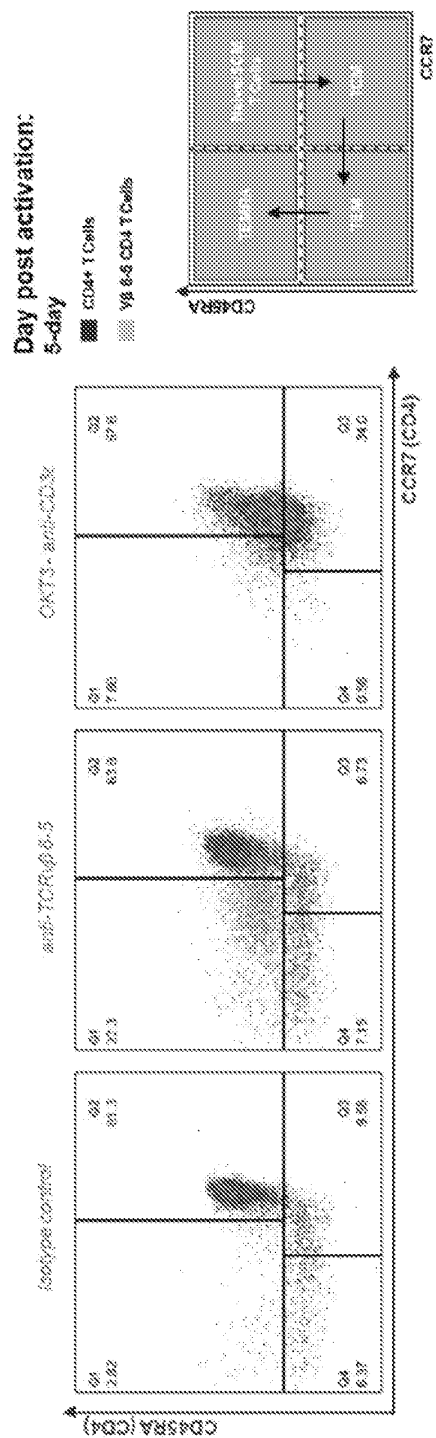


FIG. 62F

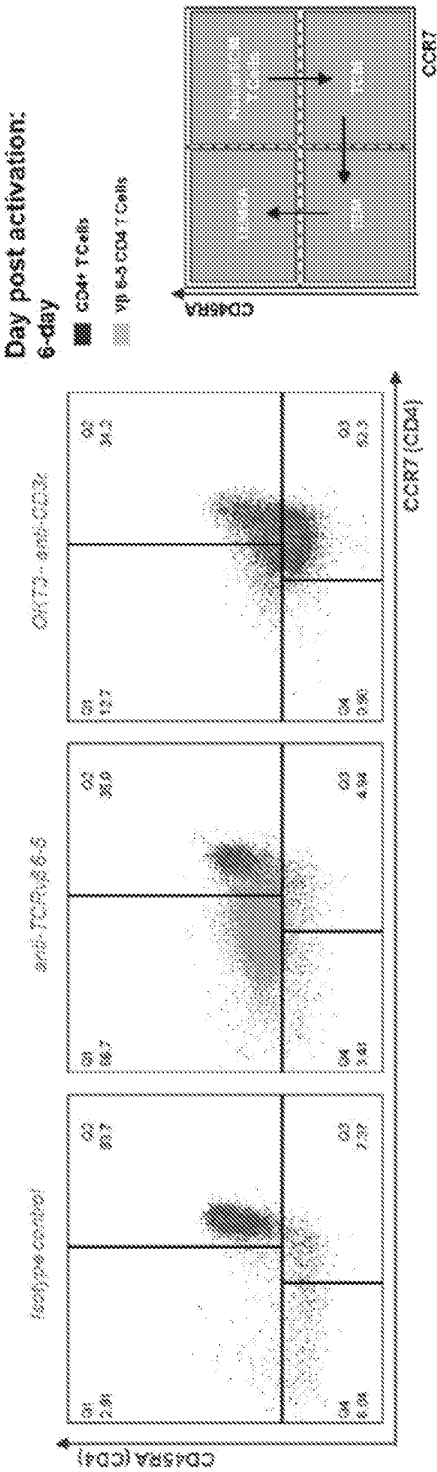


FIG. 62G

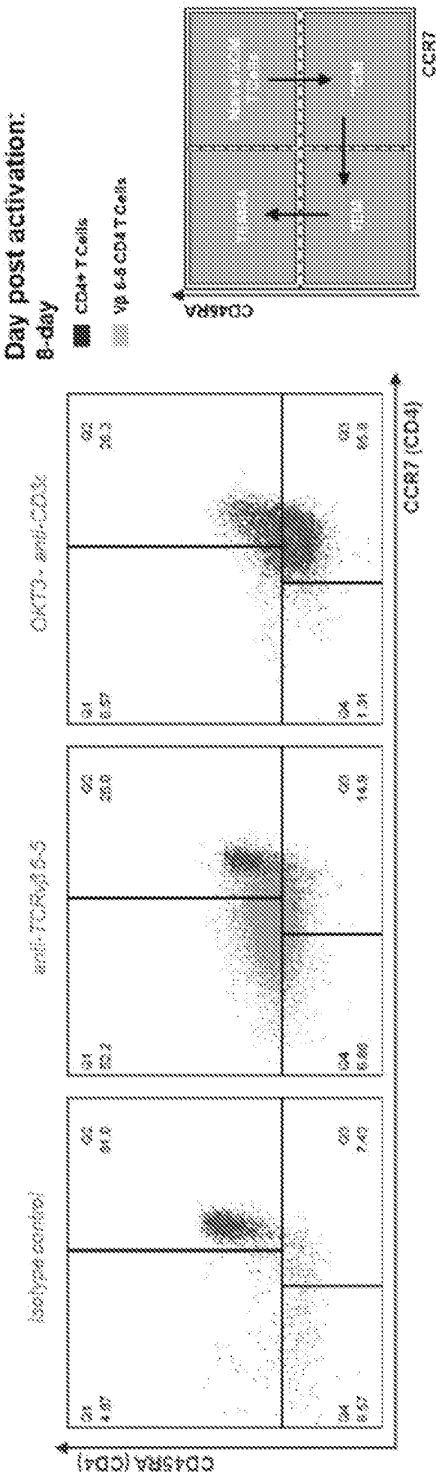


FIG. 62H

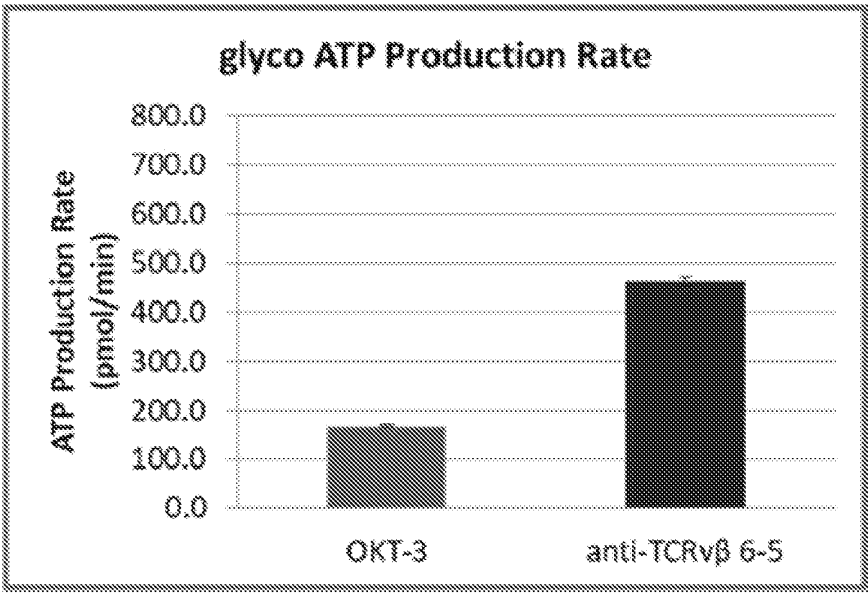


FIG. 63A

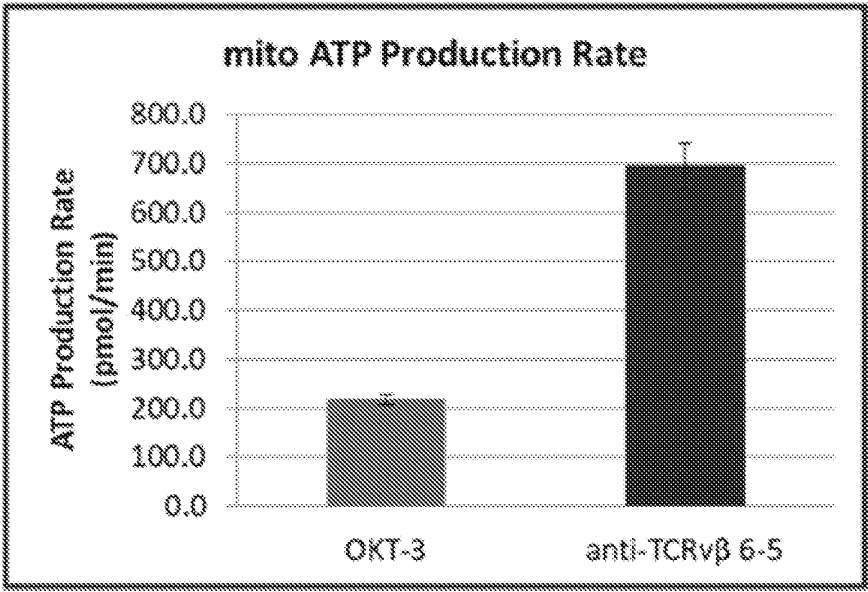


FIG. 63B

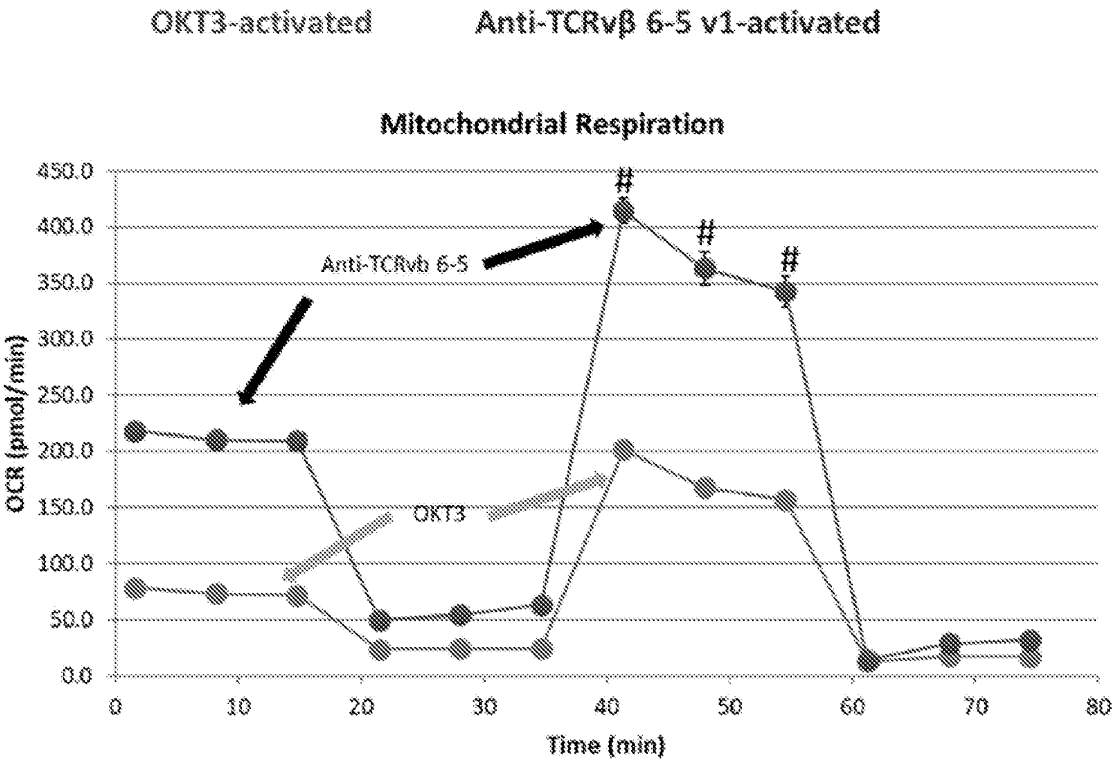


FIG. 64

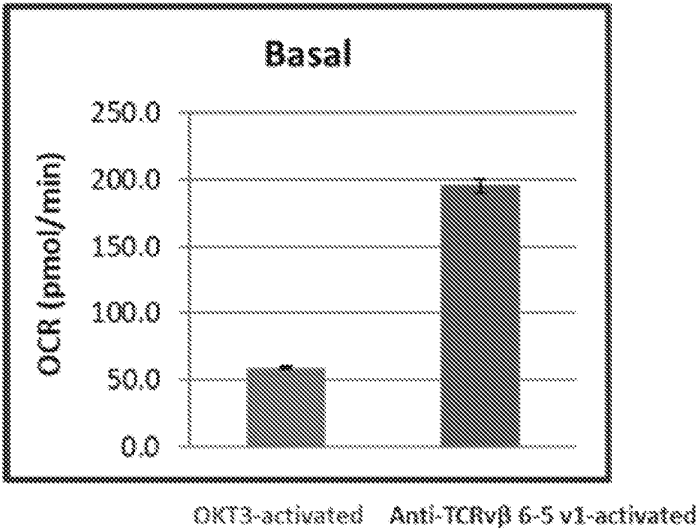
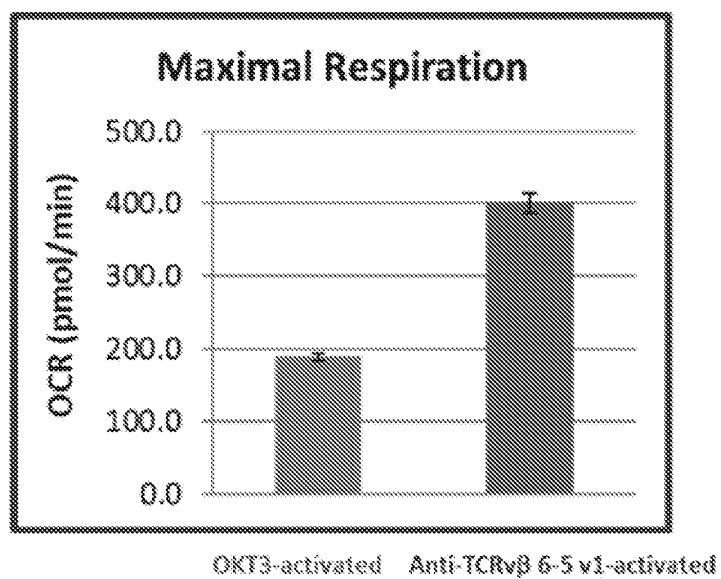
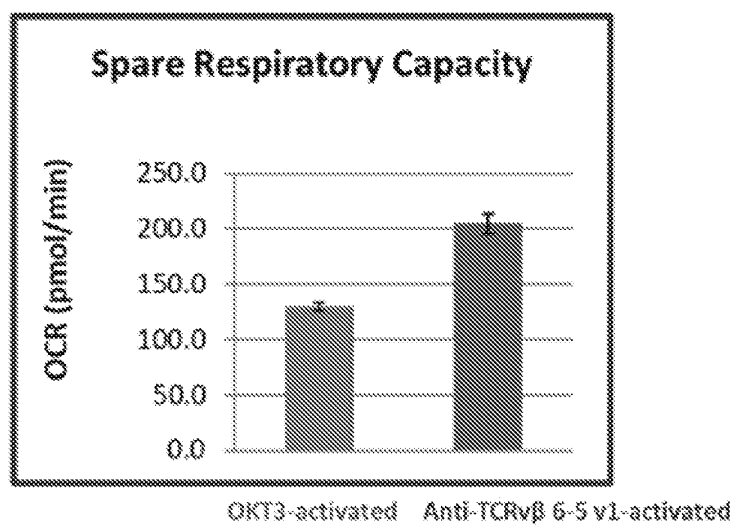


FIG. 65A

**FIG. 65B****FIG. 65C**

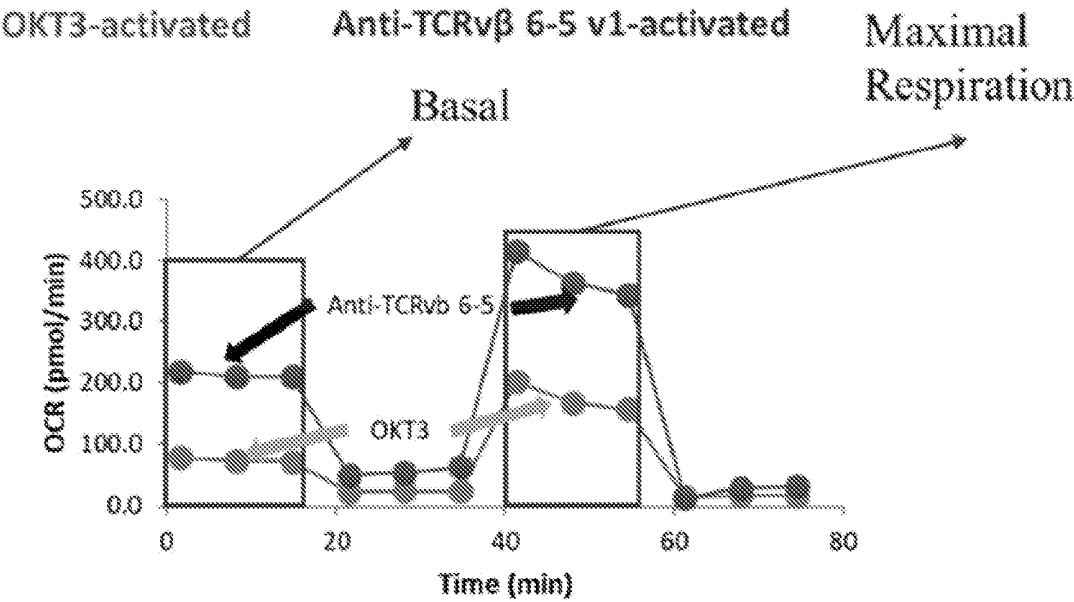


FIG. 65D

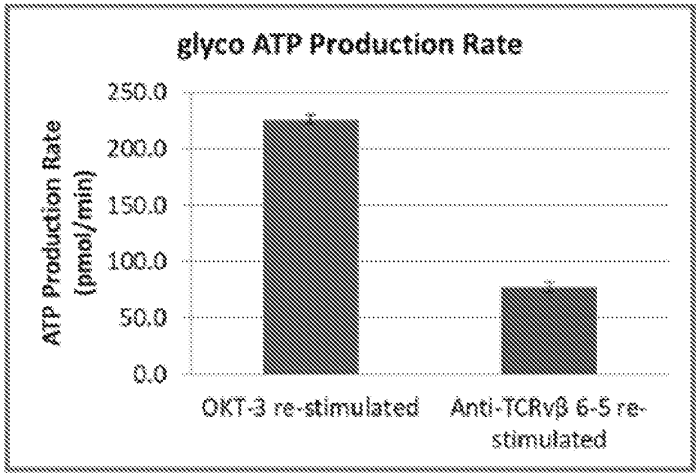
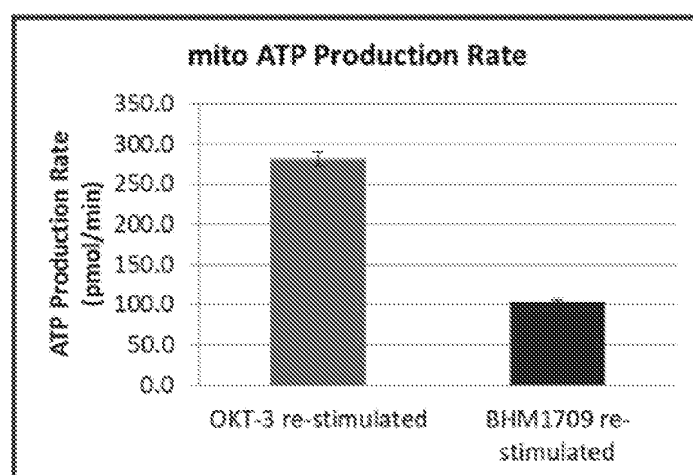


FIG. 66A

**FIG. 66B**

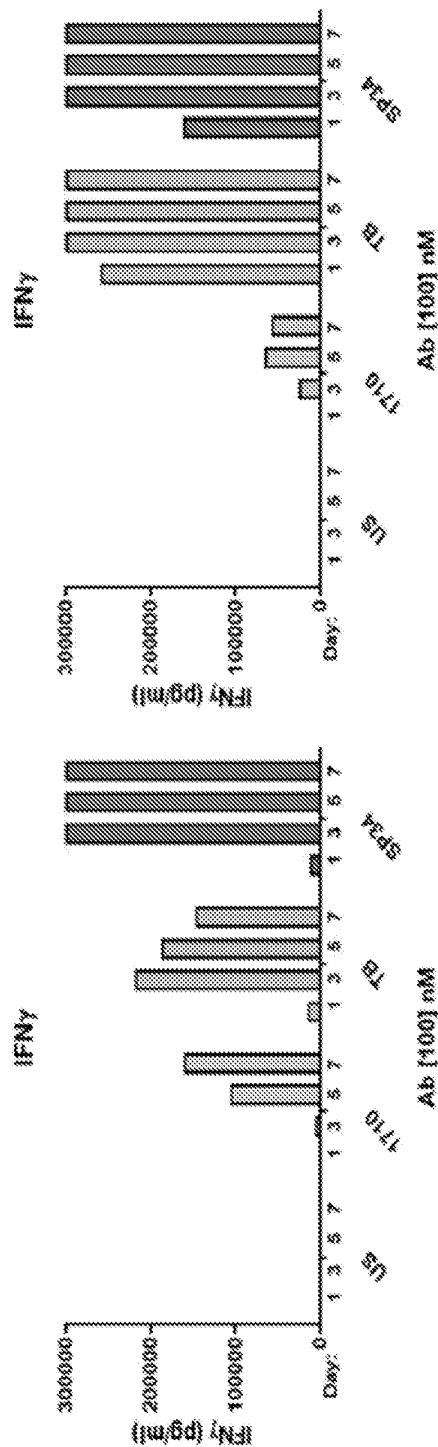


FIG. 67A

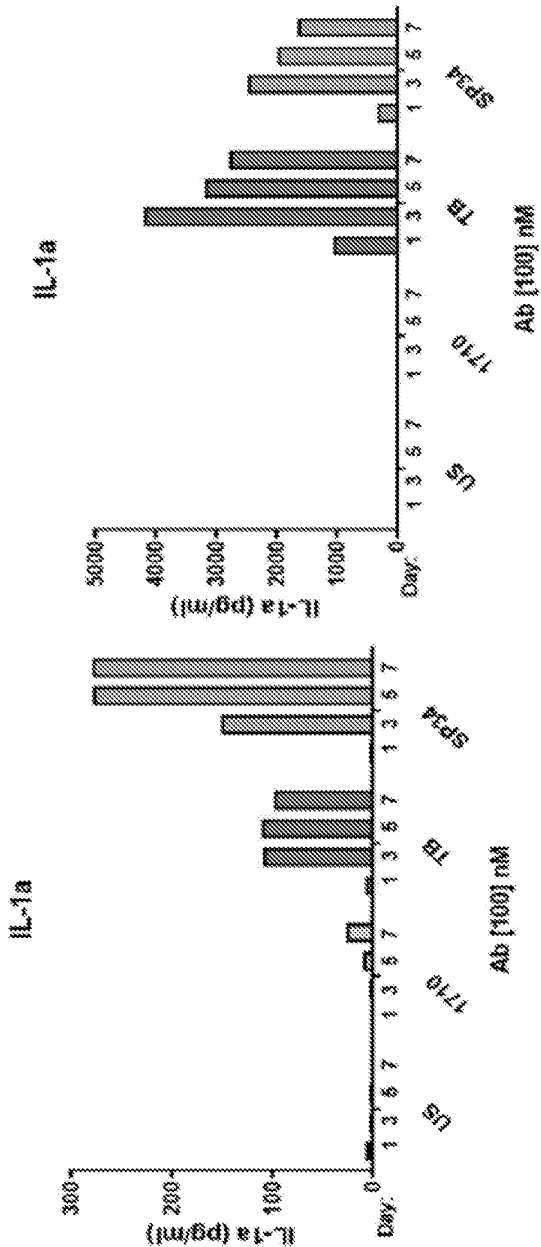


FIG. 67B

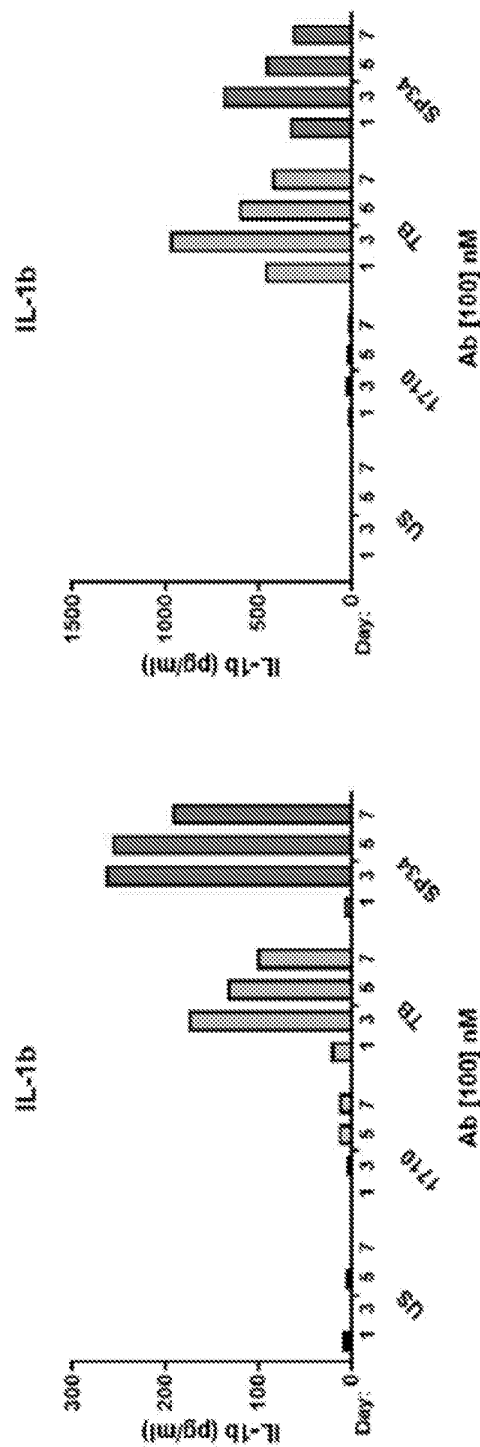


FIG. 67C

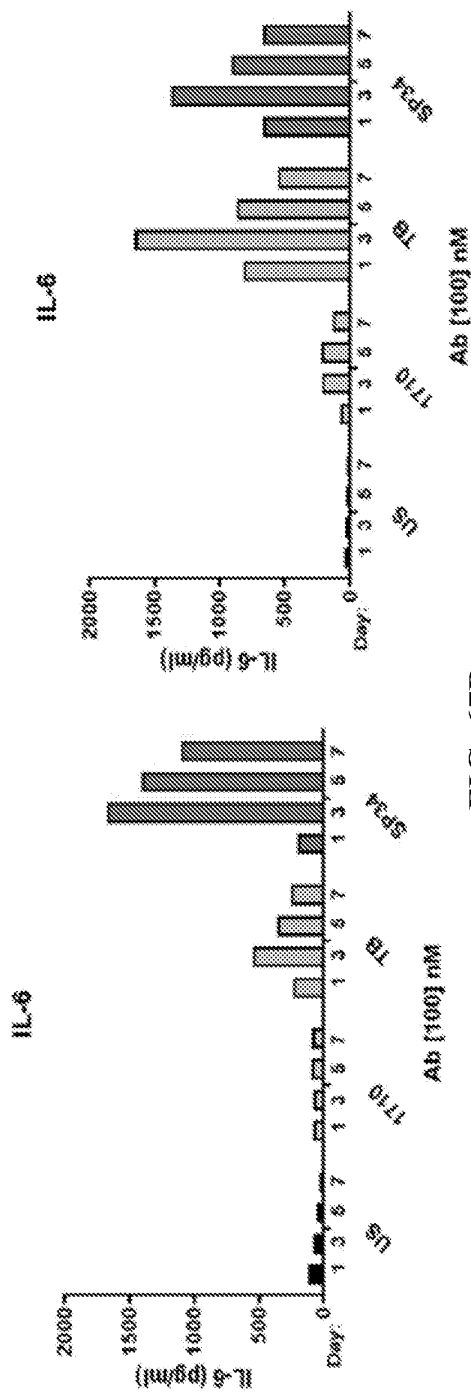


FIG. 67D

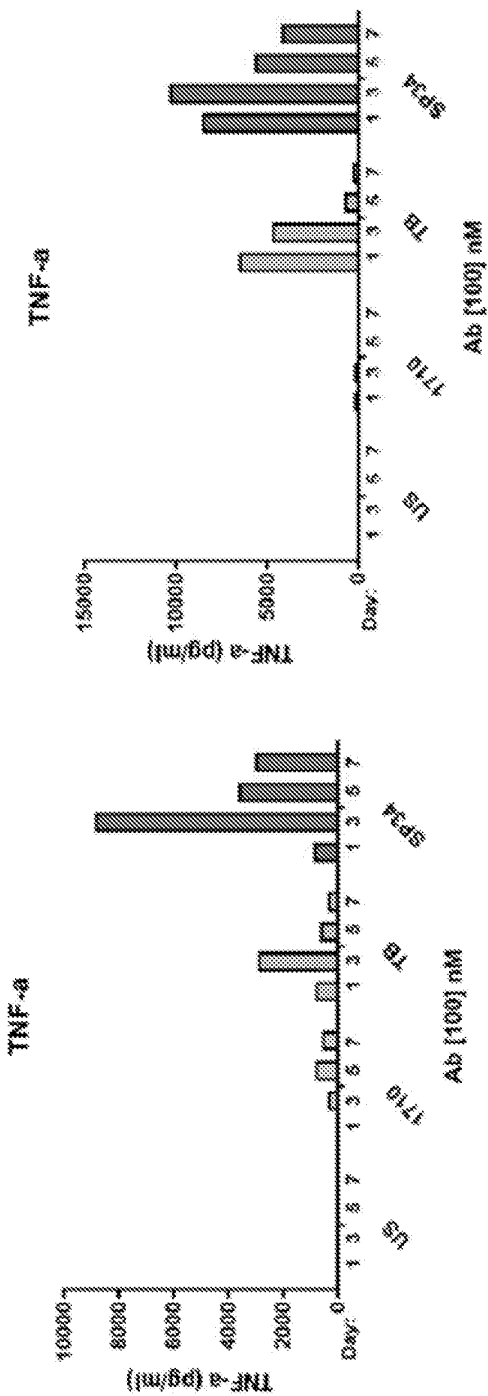


FIG. 67E

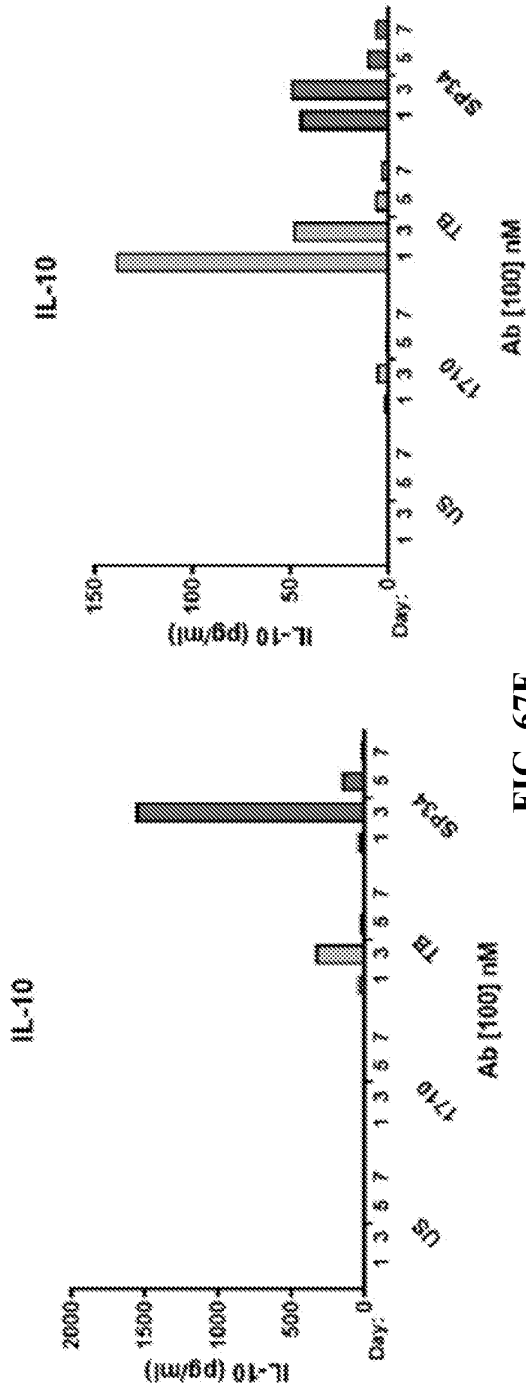


FIG. 67F

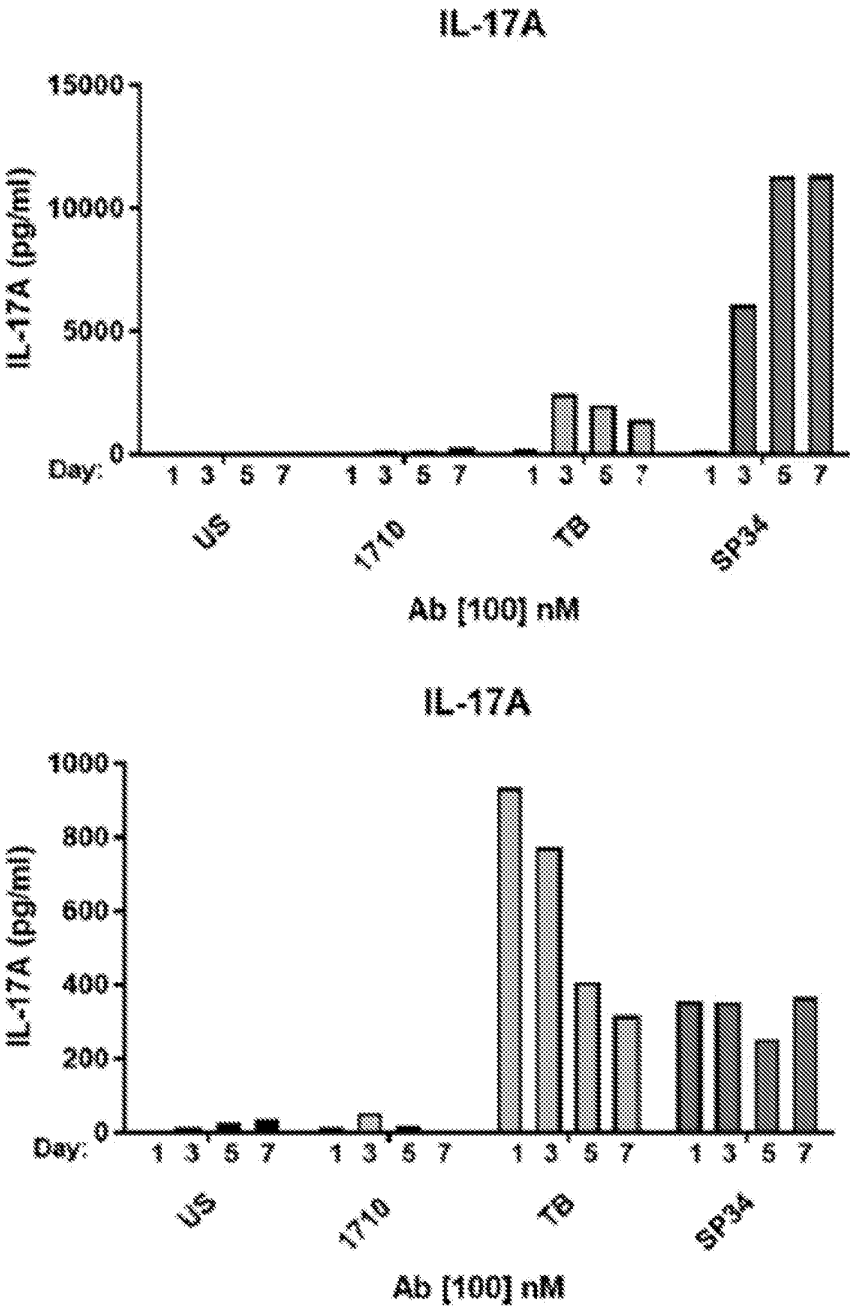
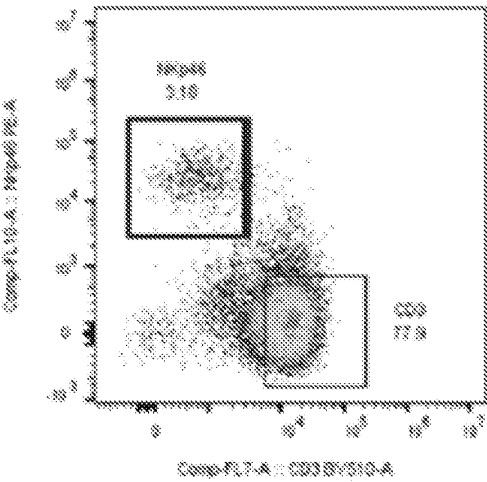


FIG. 67G

Activation Ab

anti-CD3 ϵ
(OKT3)



anti-TCR $\nu\beta$ 6-5 v1

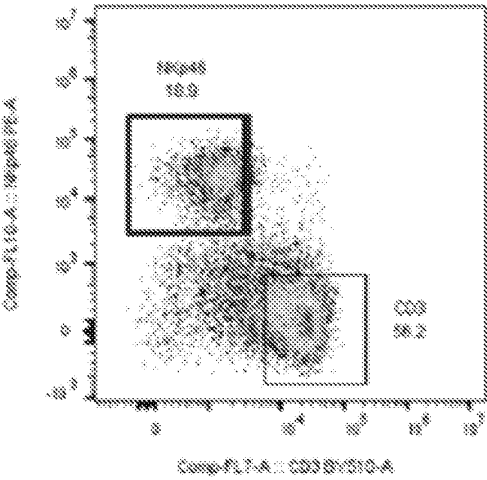


FIG. 68

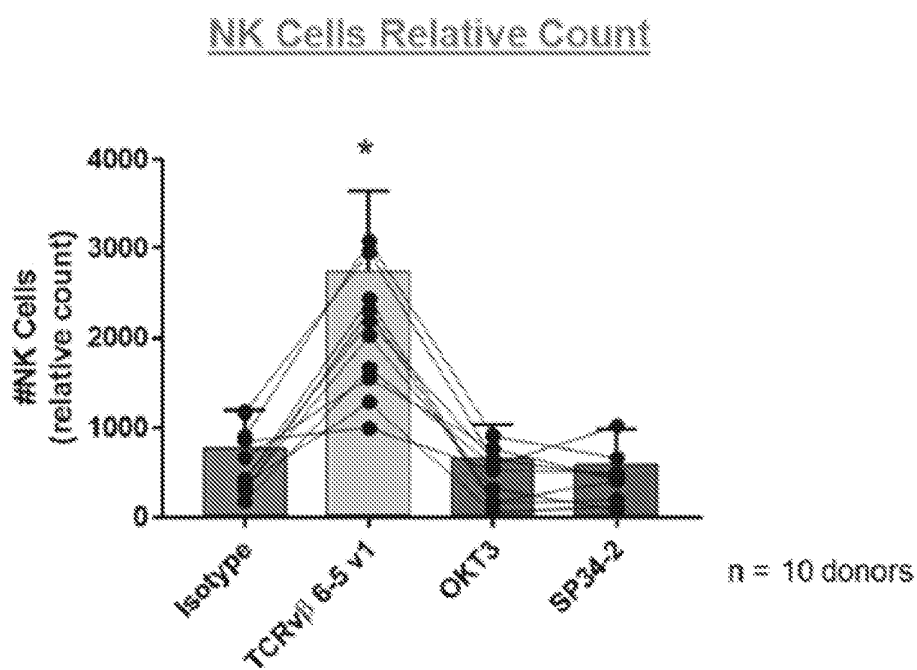


FIG. 69

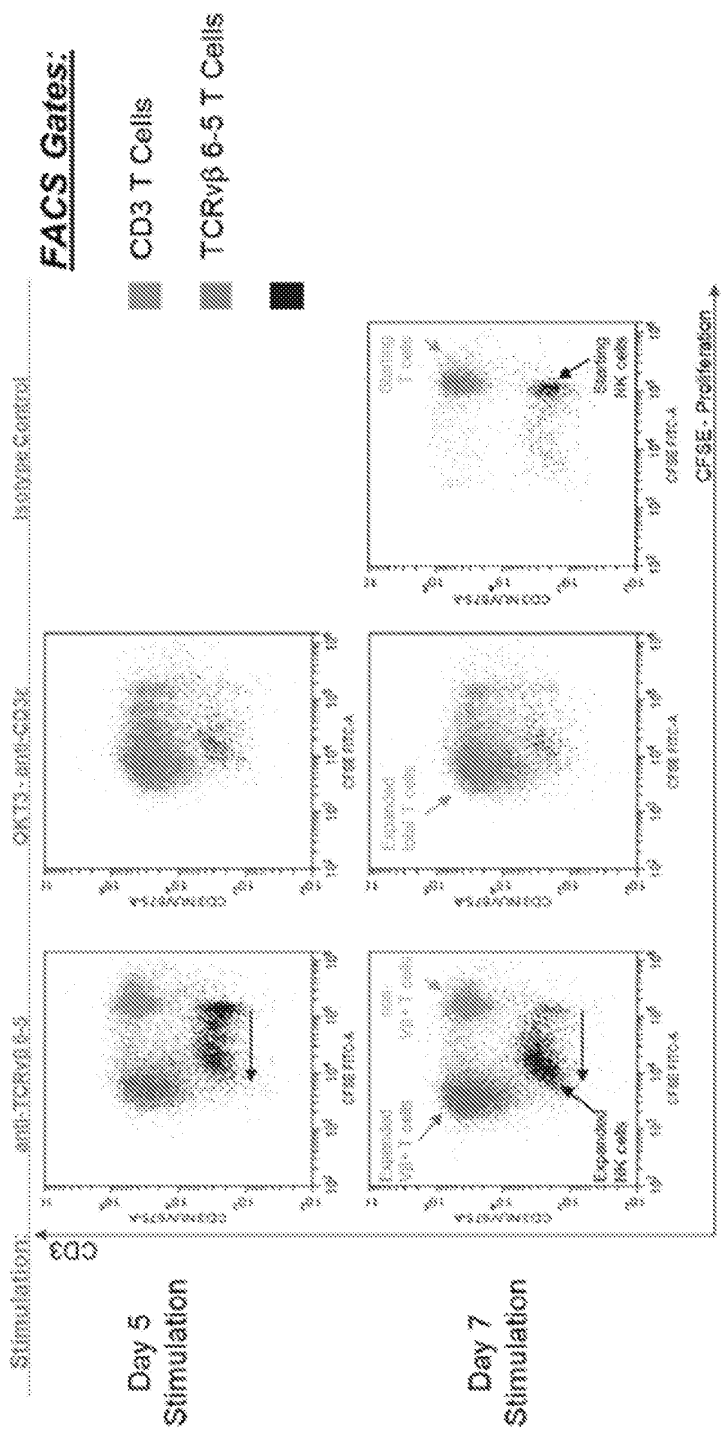


FIG. 70

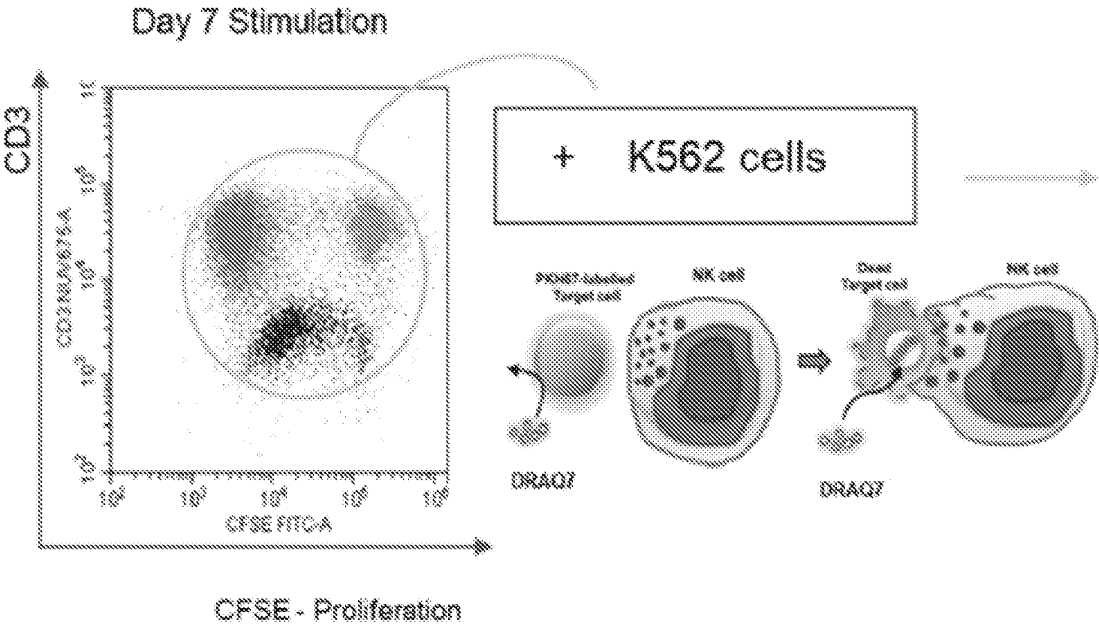


FIG. 71

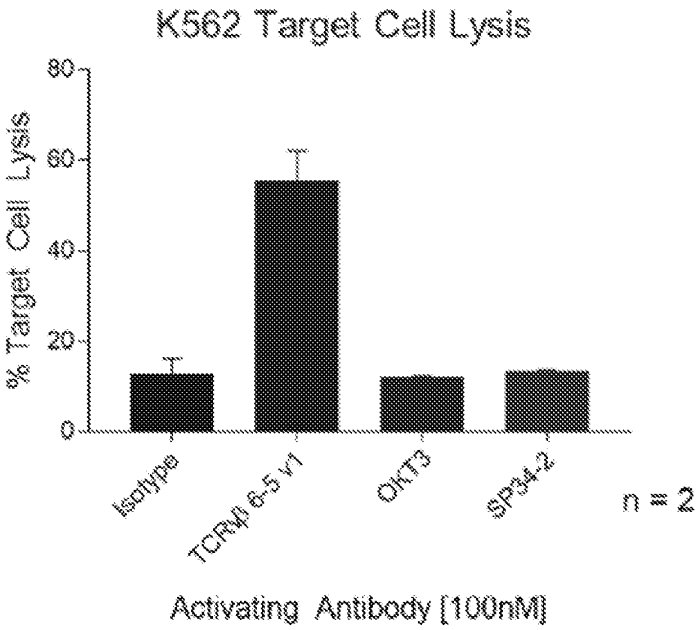


FIG. 72

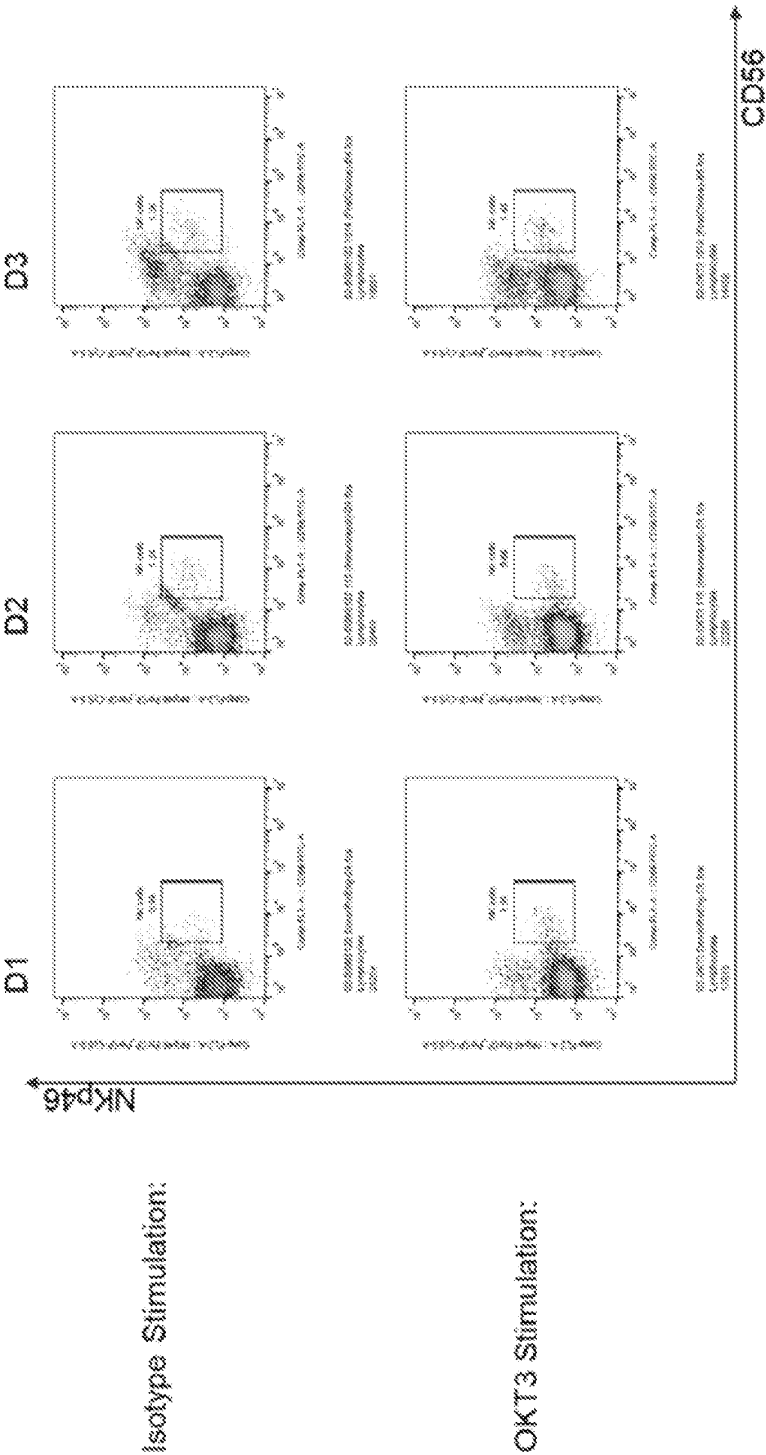


FIG. 73

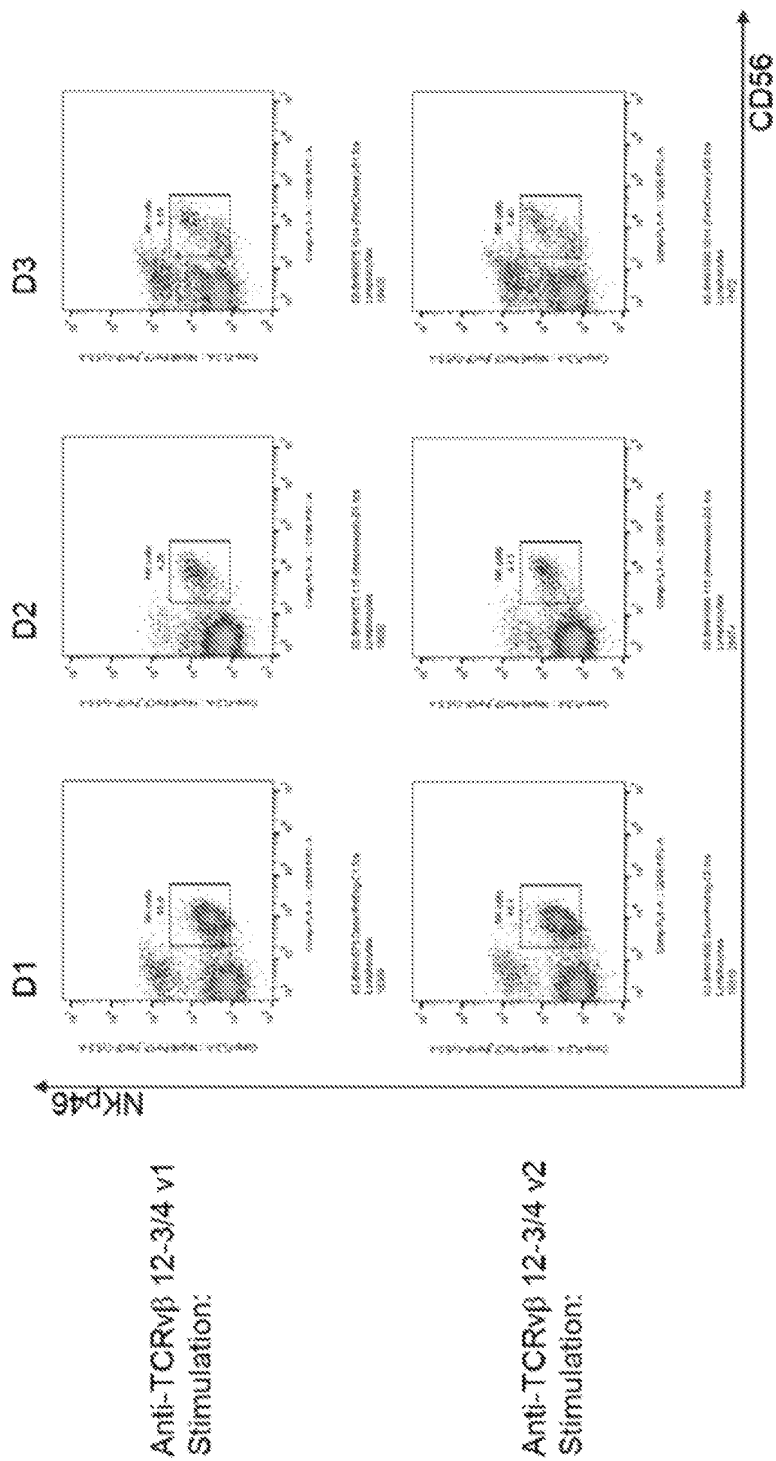


FIG. 74

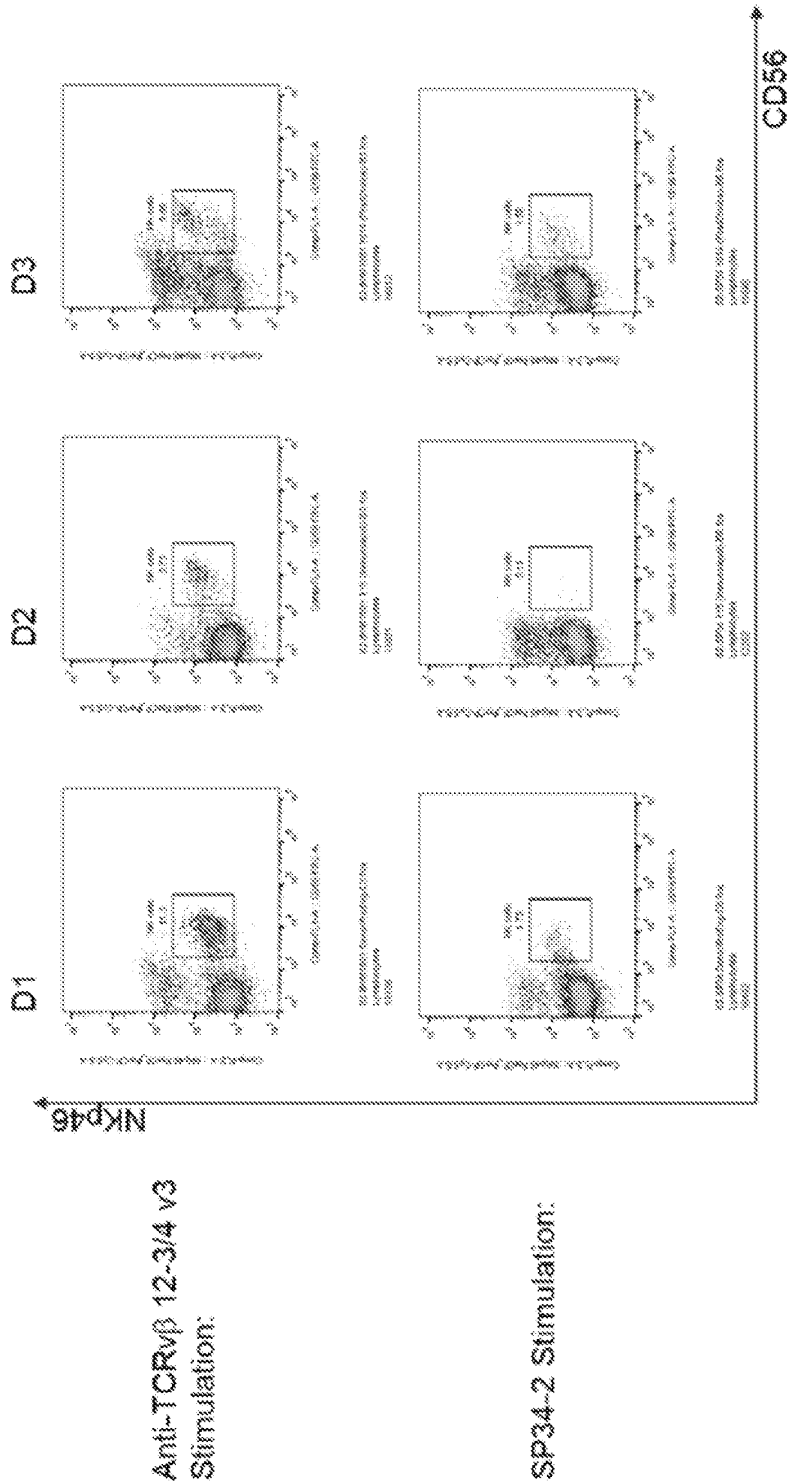


FIG. 75

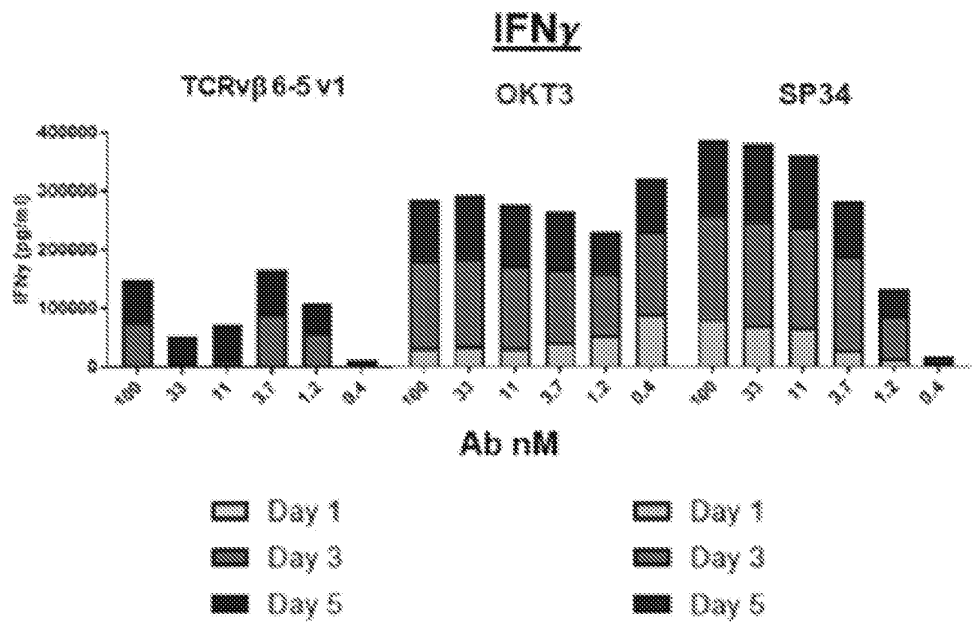


FIG. 76

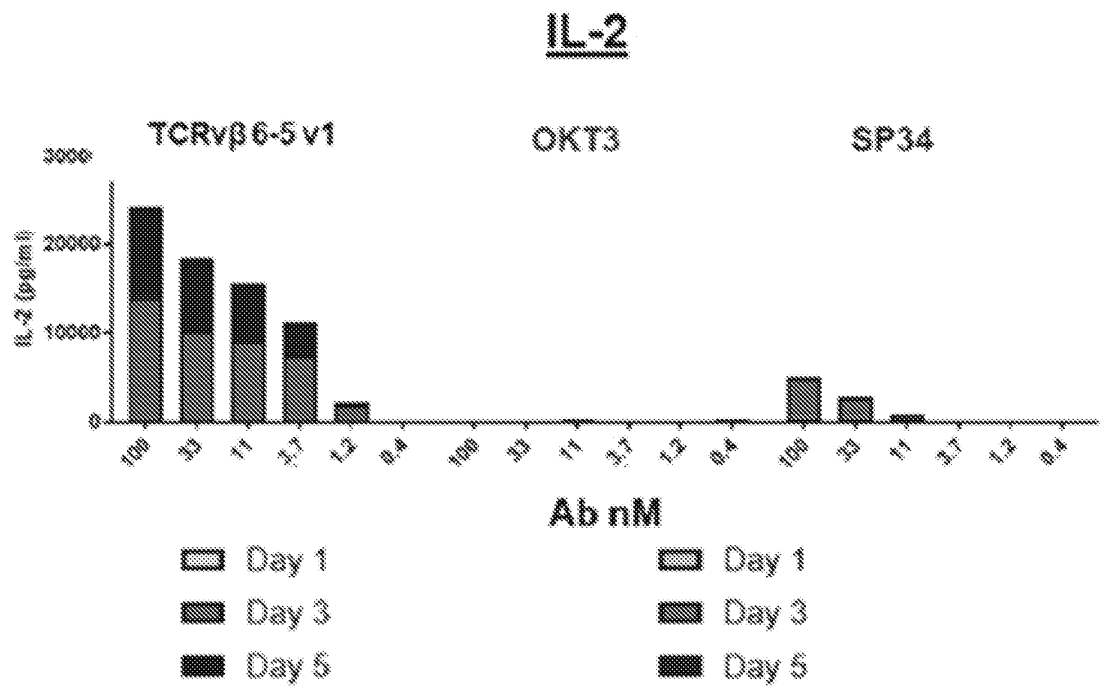


FIG. 77

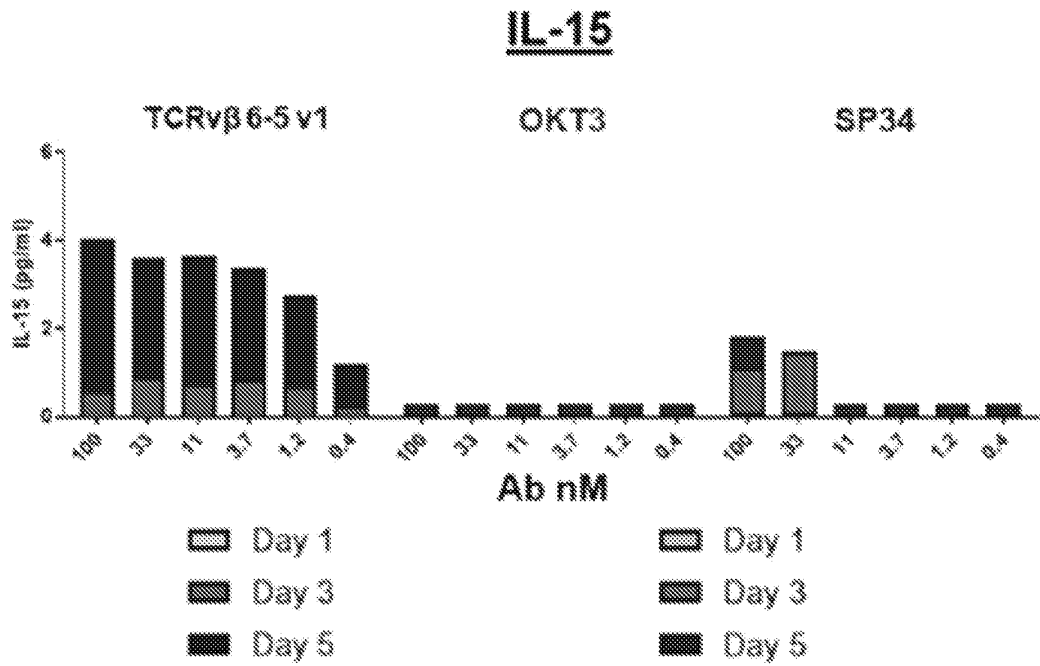


FIG. 78

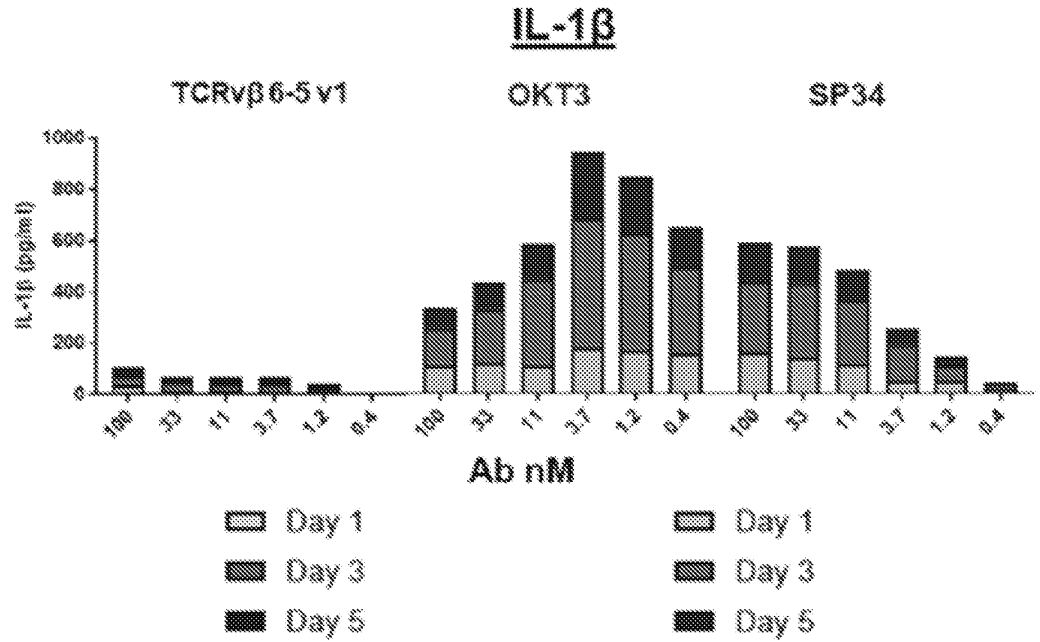


FIG. 79

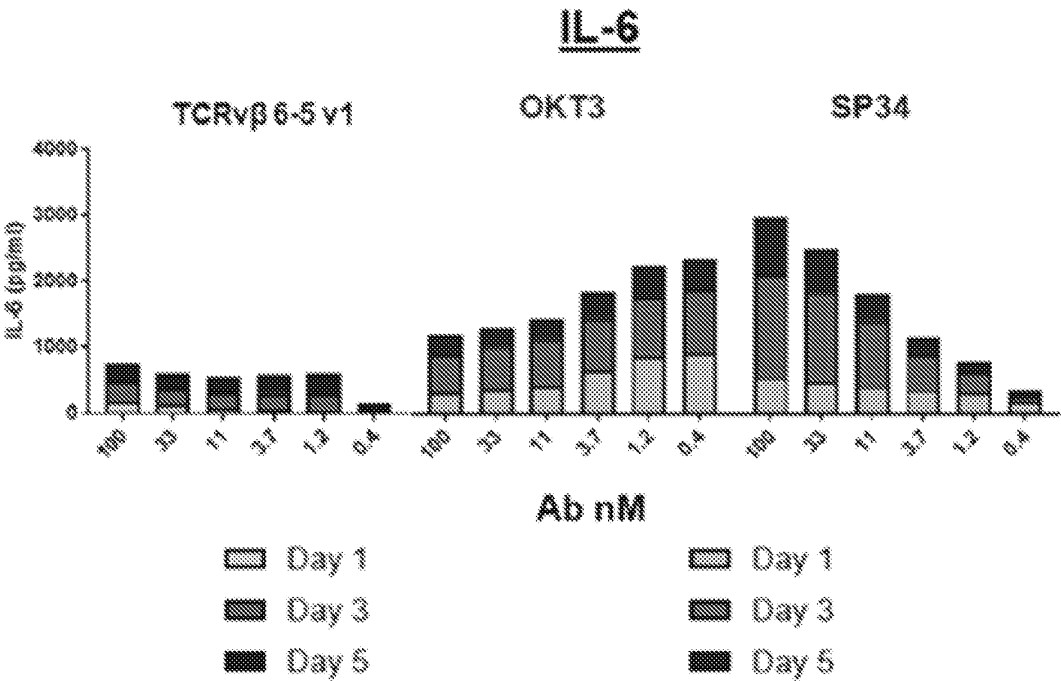


FIG. 80

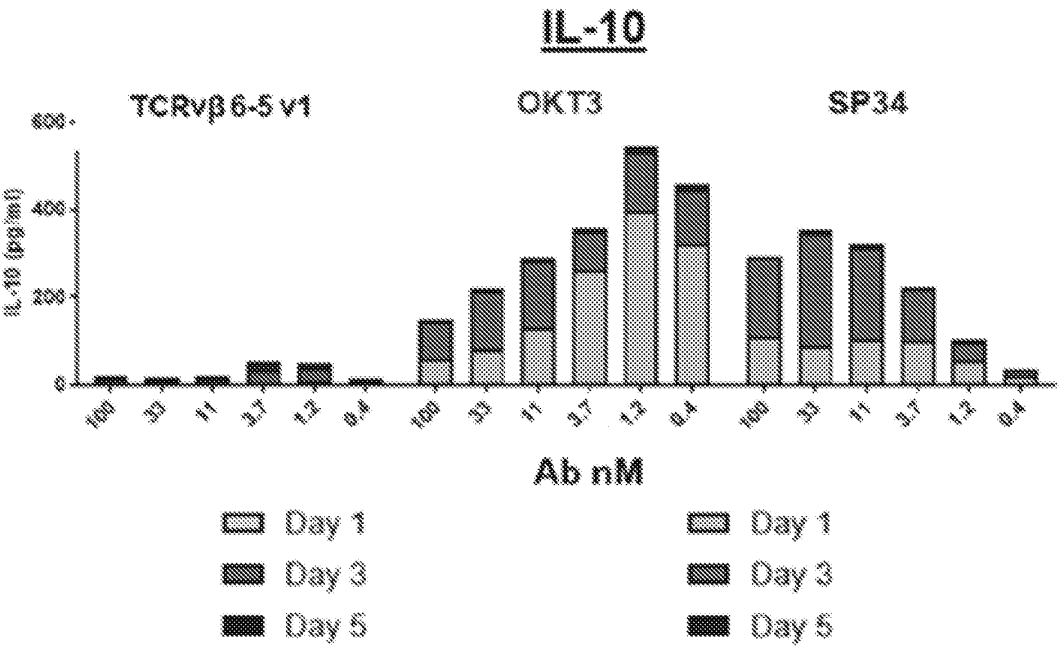


FIG. 81

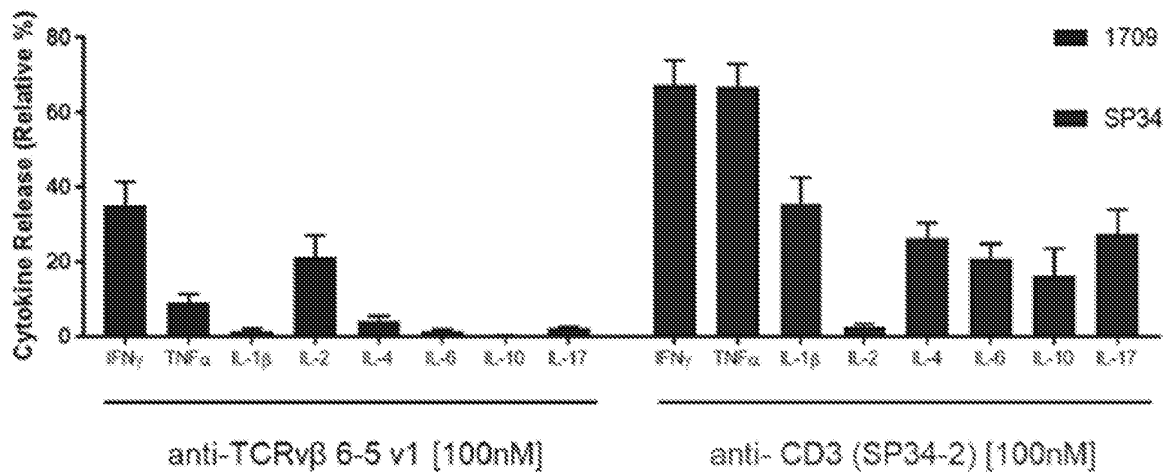


FIG. 82

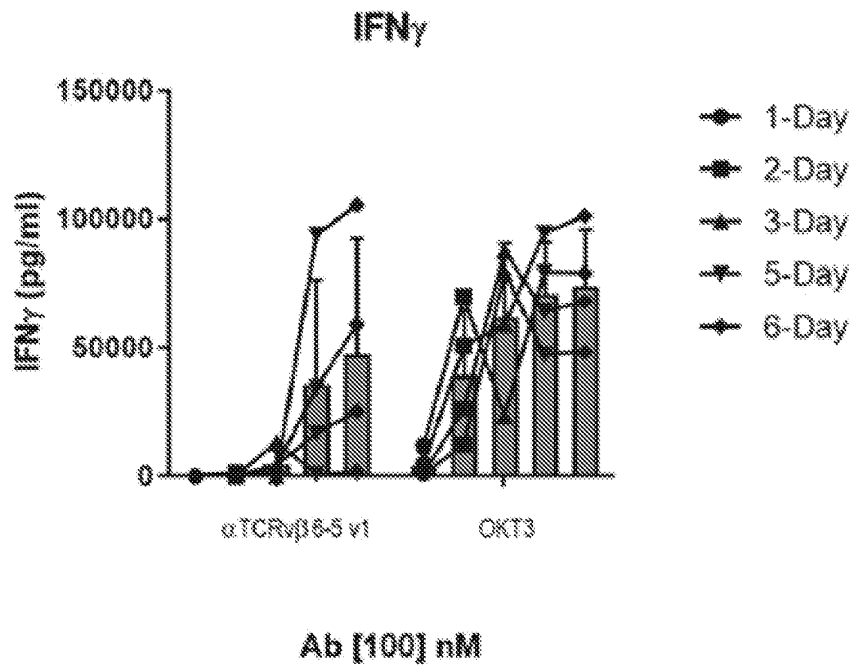


FIG. 83A

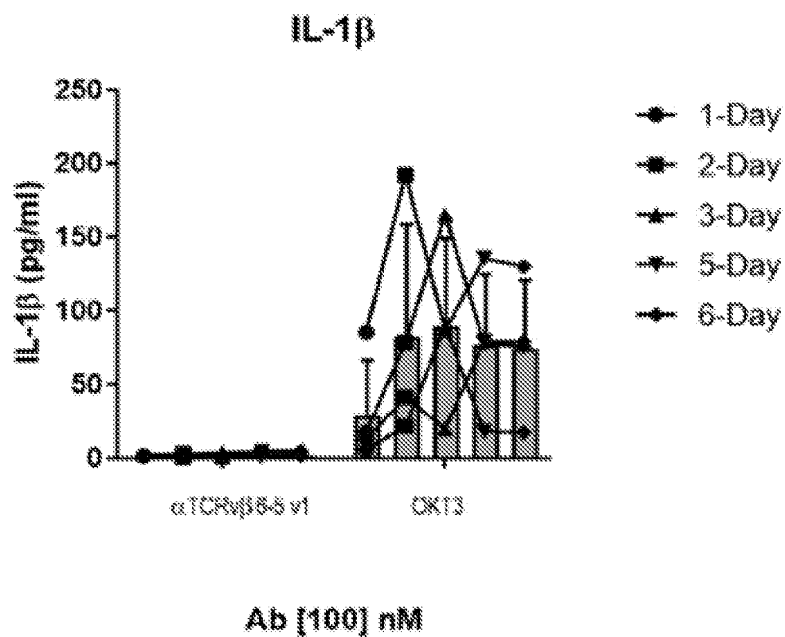


FIG. 83B

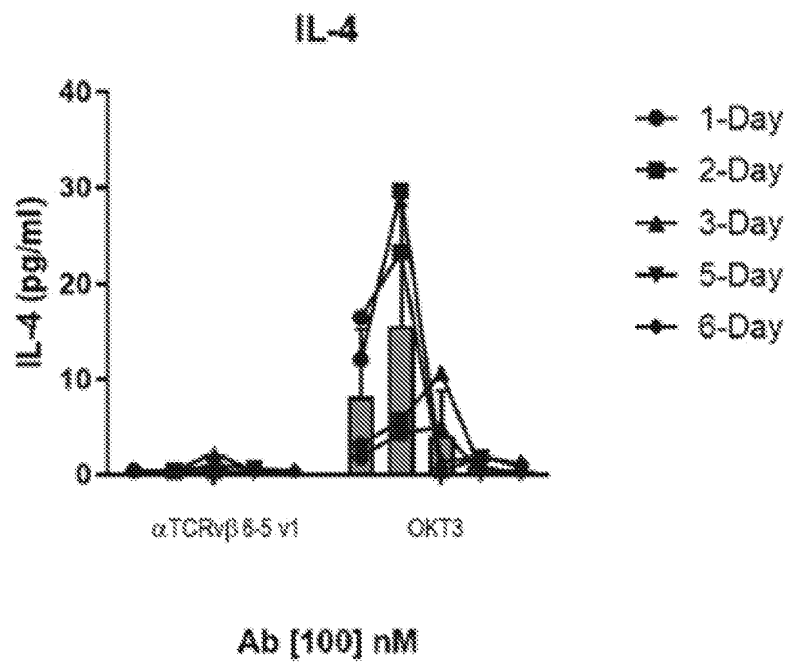


FIG. 83C

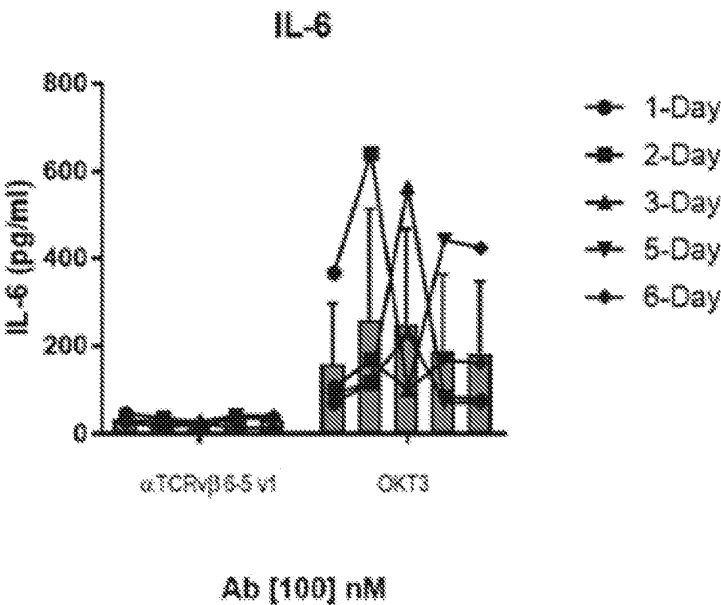


FIG. 83D

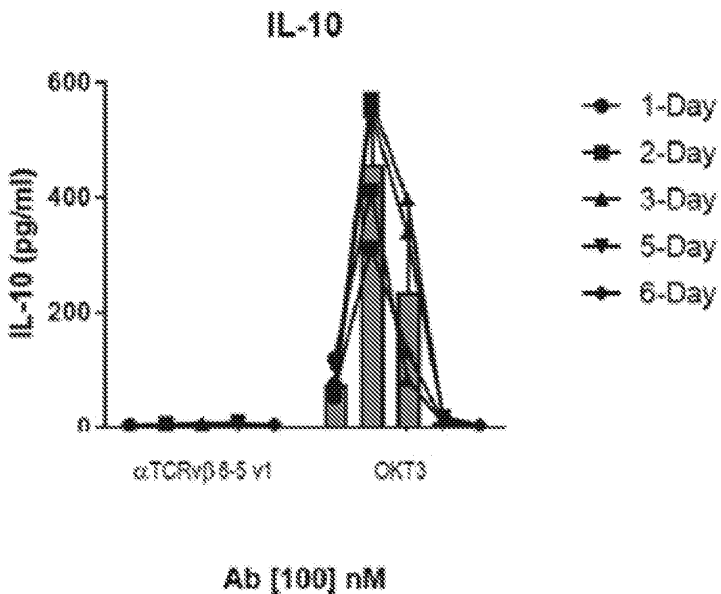
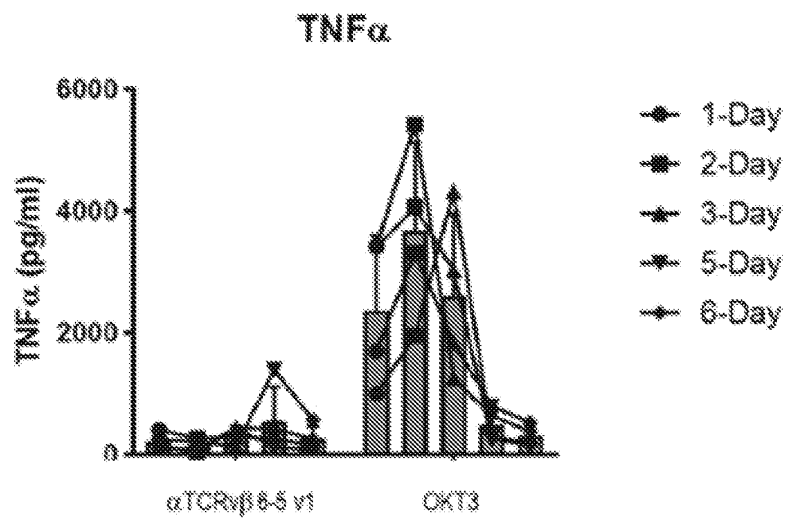
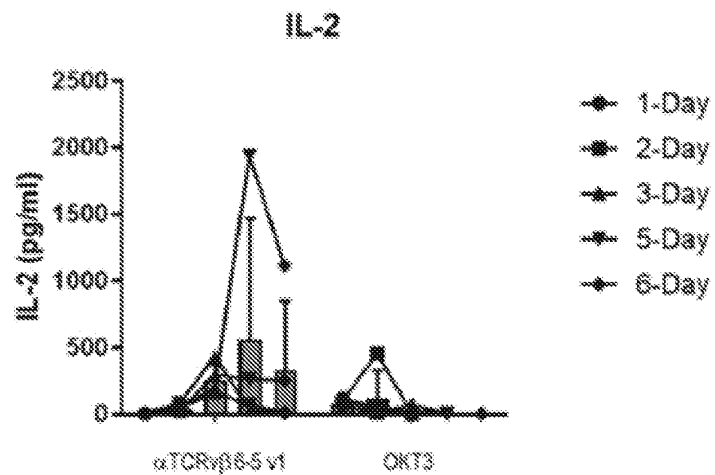


FIG. 83E



Ab [100] nM
FIG. 83F



Ab [100] nM
FIG. 83G

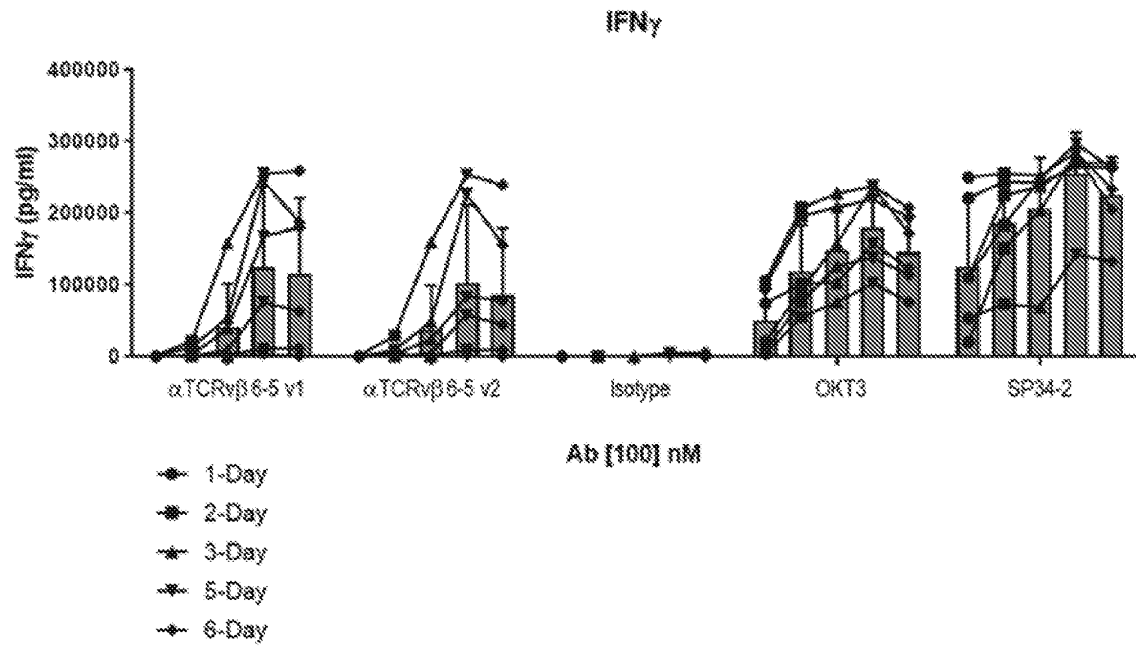


FIG. 84A

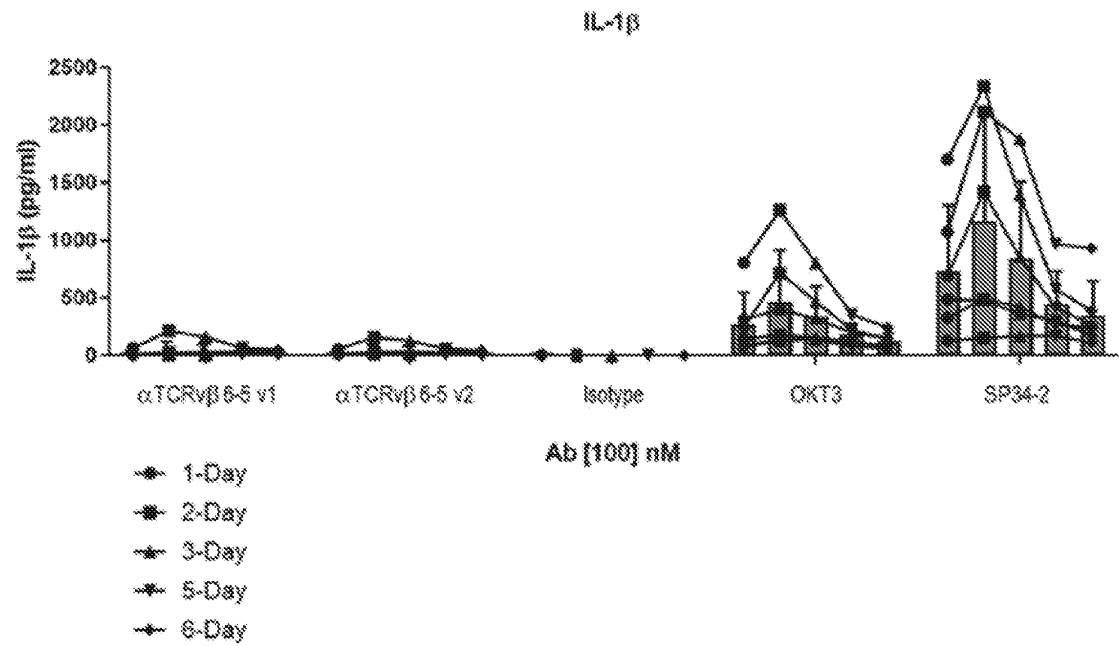


FIG. 84B

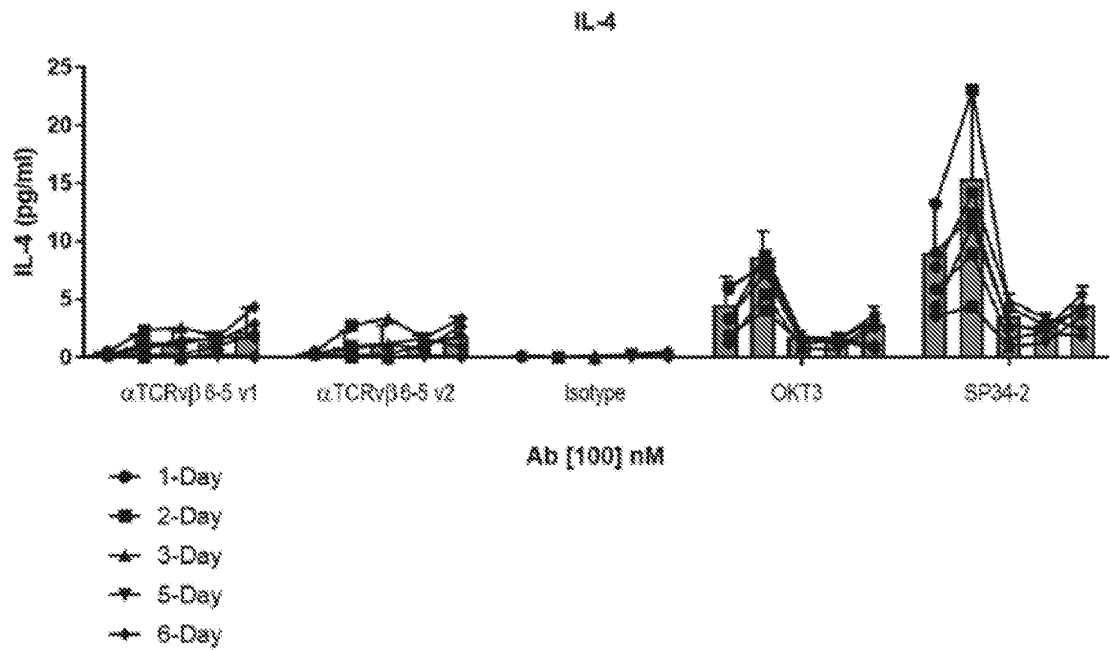


FIG. 84C

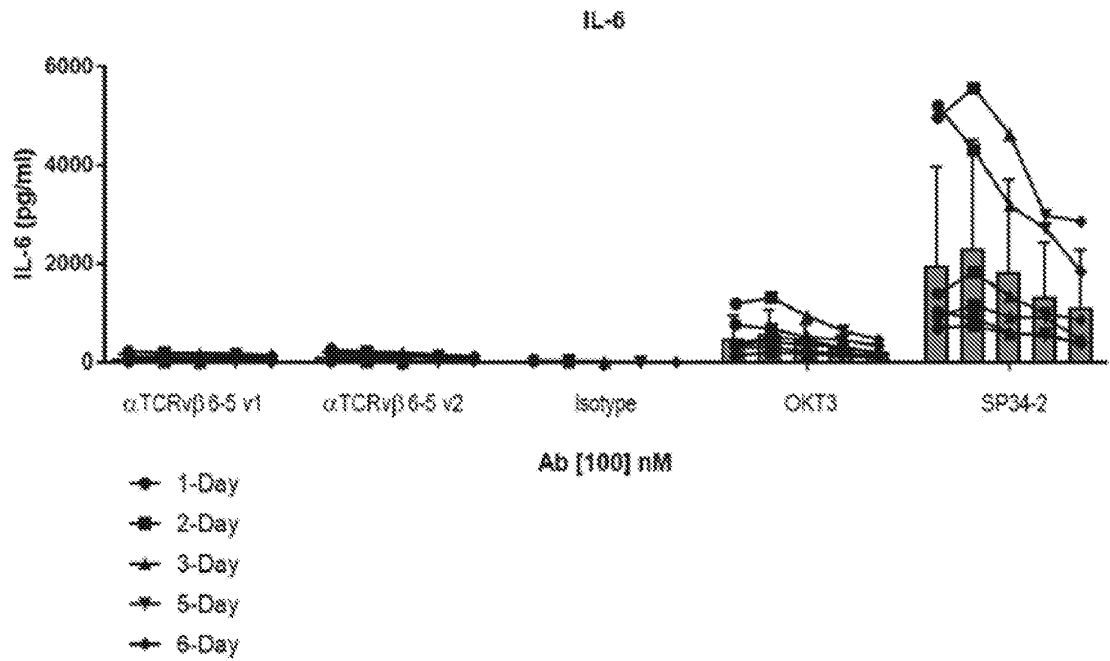


FIG. 84D

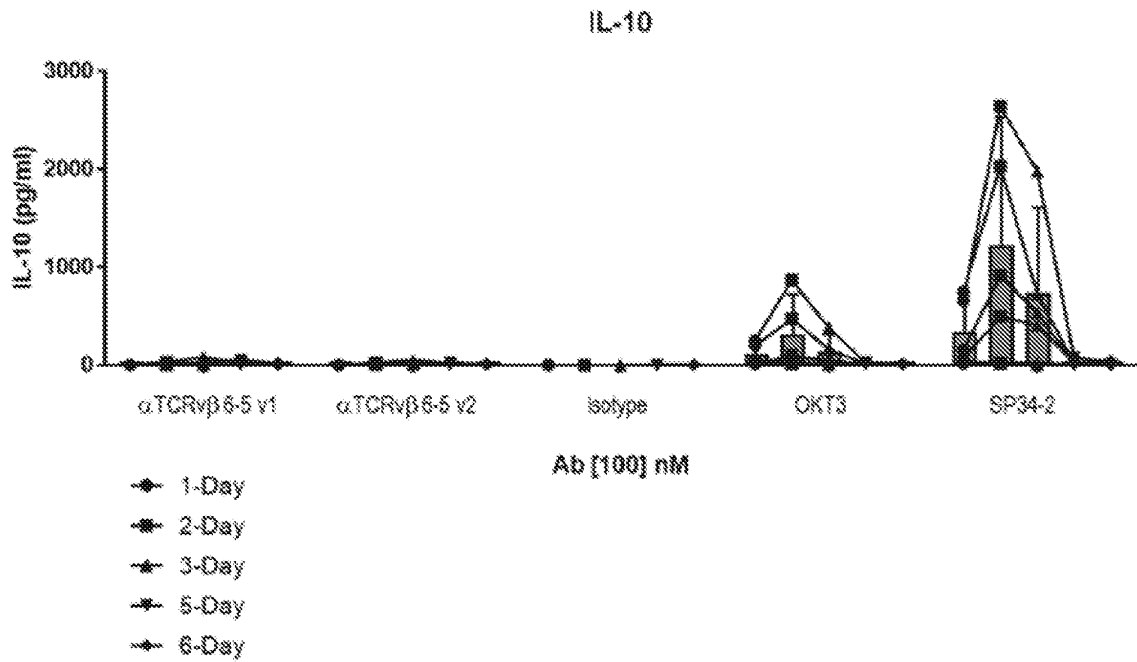


FIG. 84E

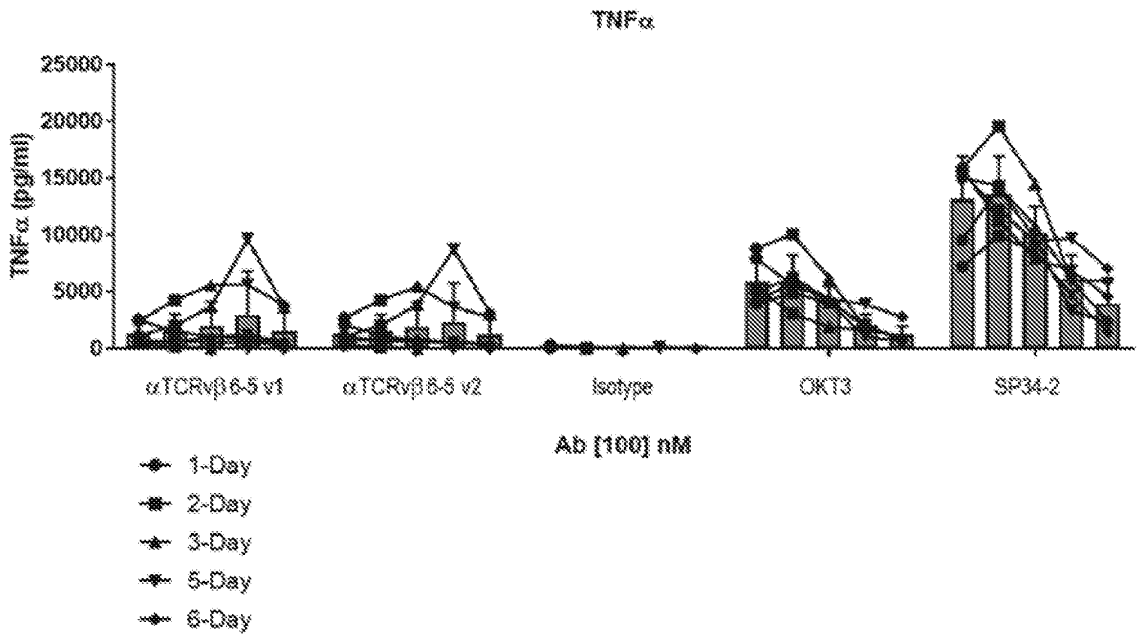
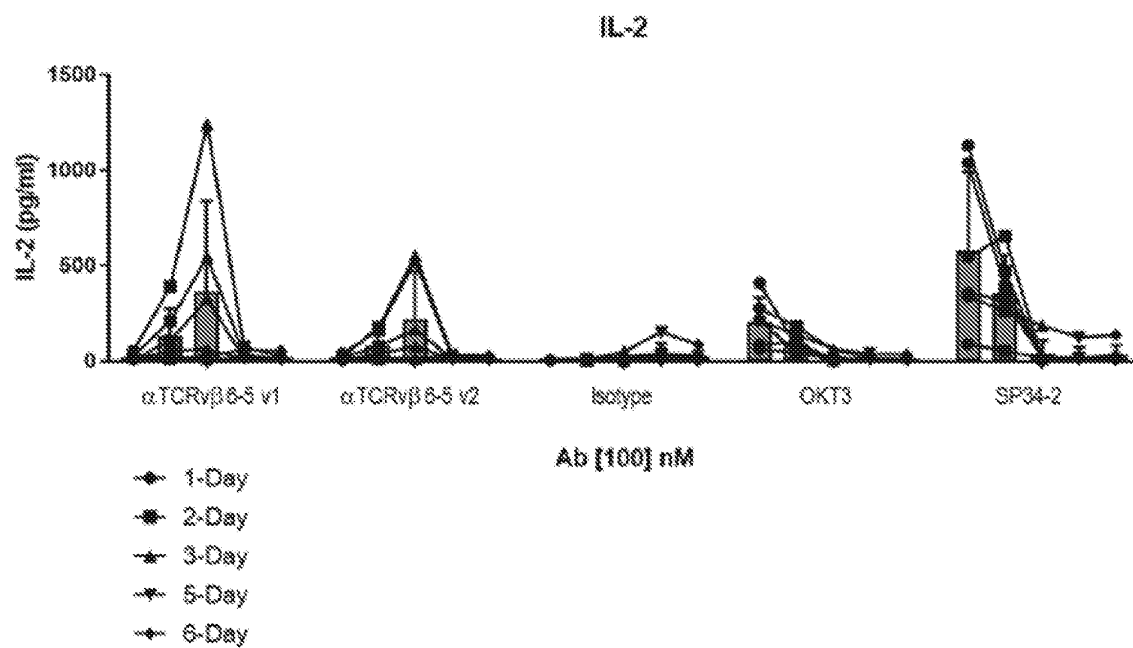


FIG. 84F

**FIG. 84G**

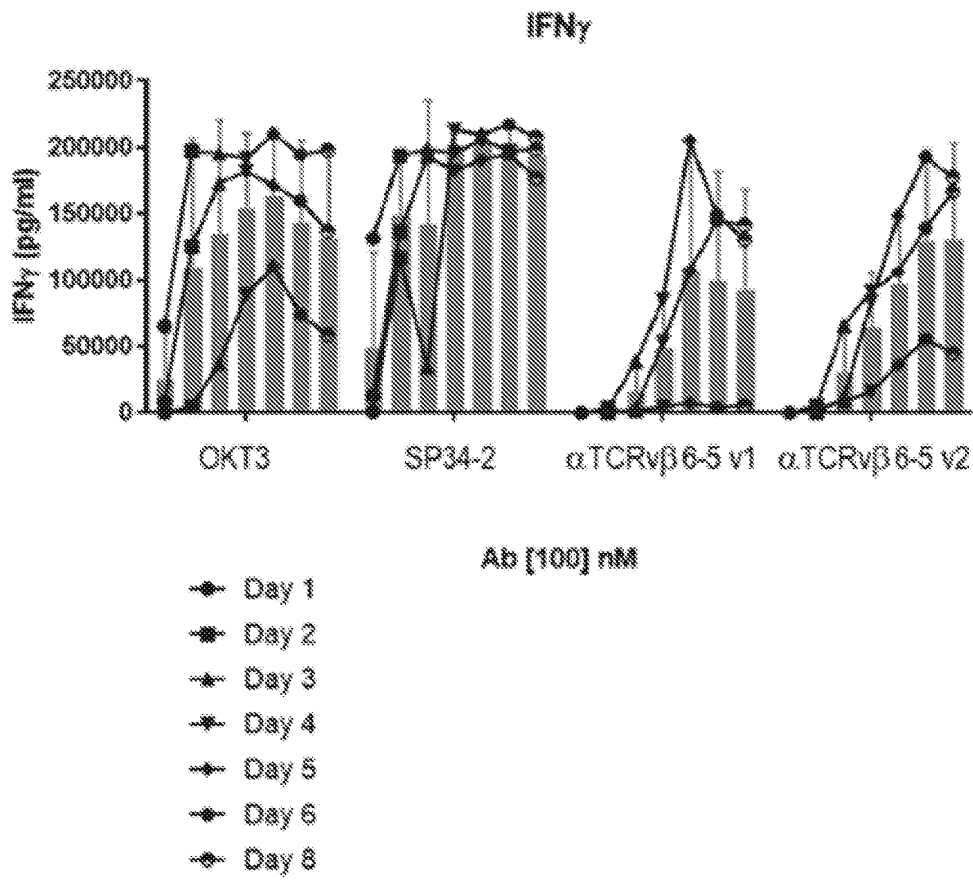


FIG. 85A

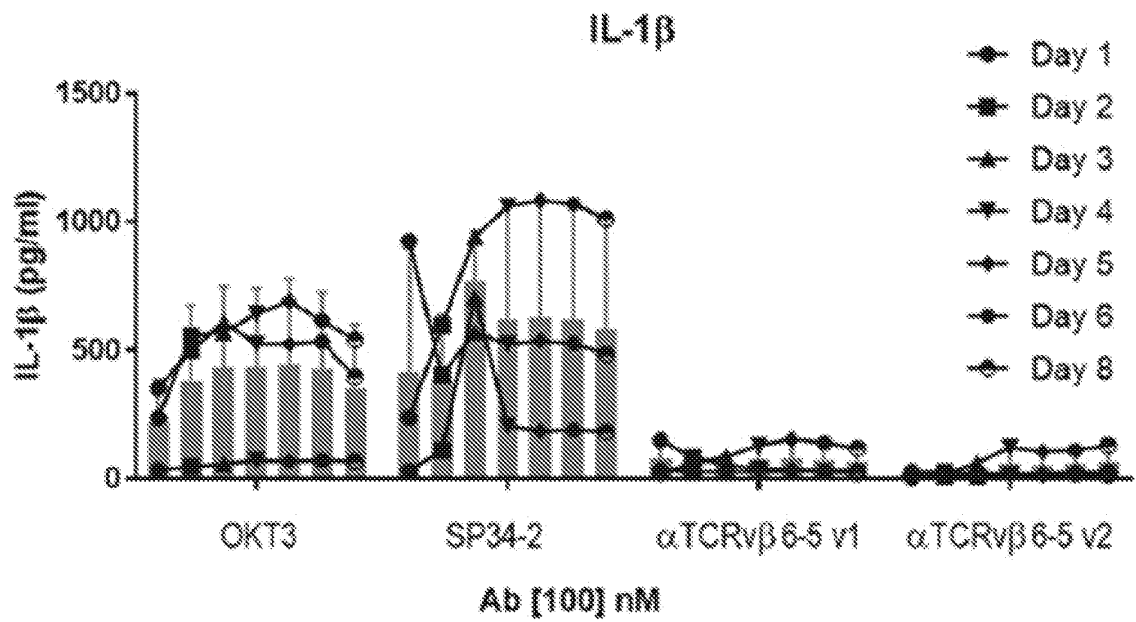


FIG. 85B

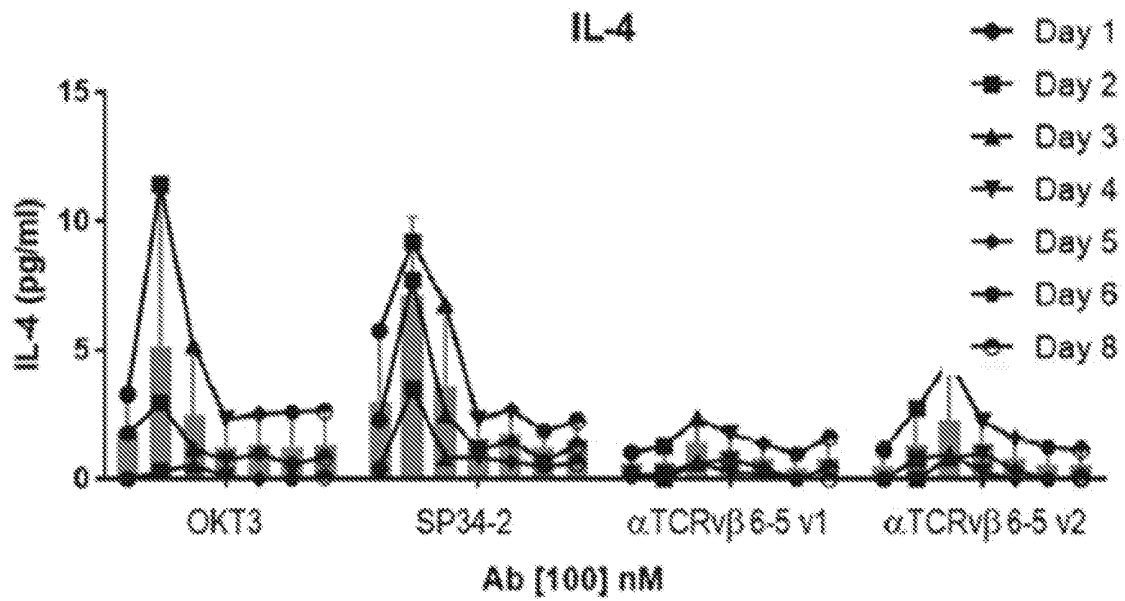


FIG. 85C

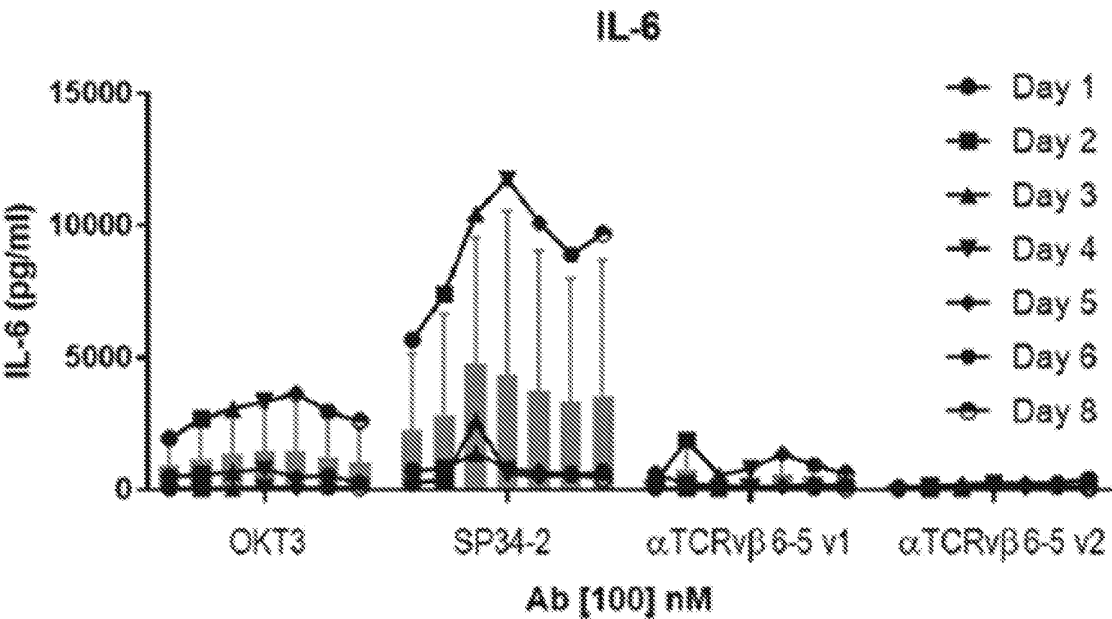


FIG. 85D

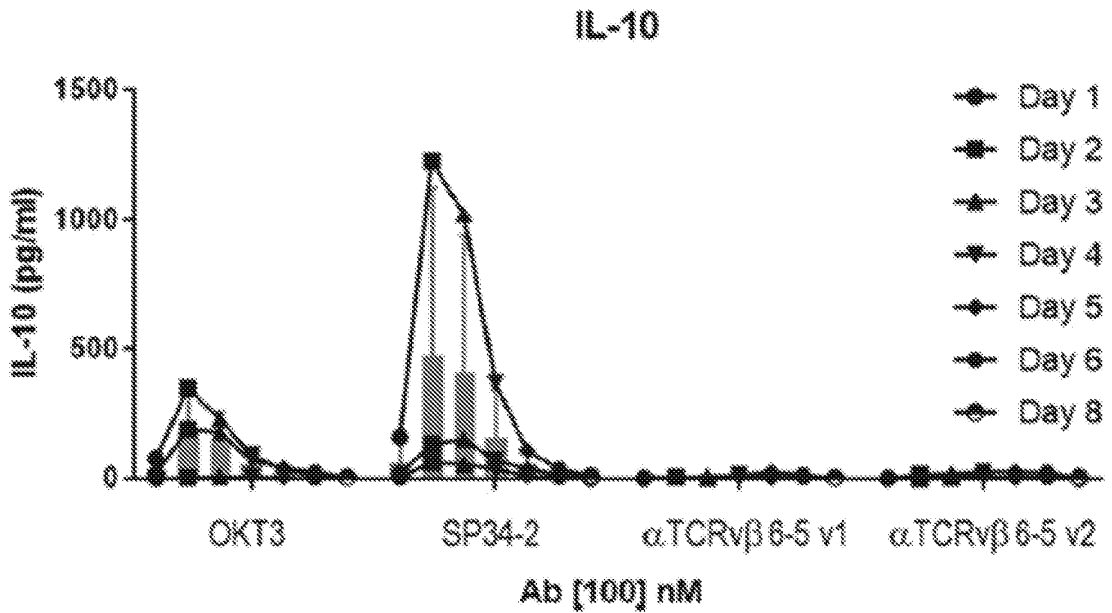


FIG. 85E

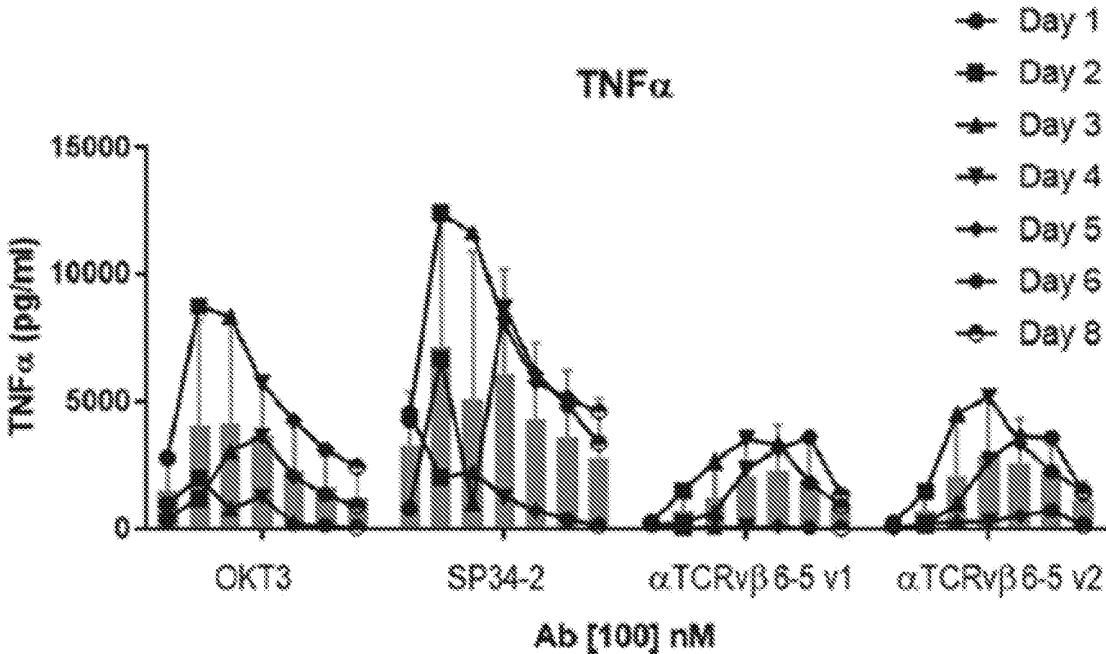


FIG. 85F

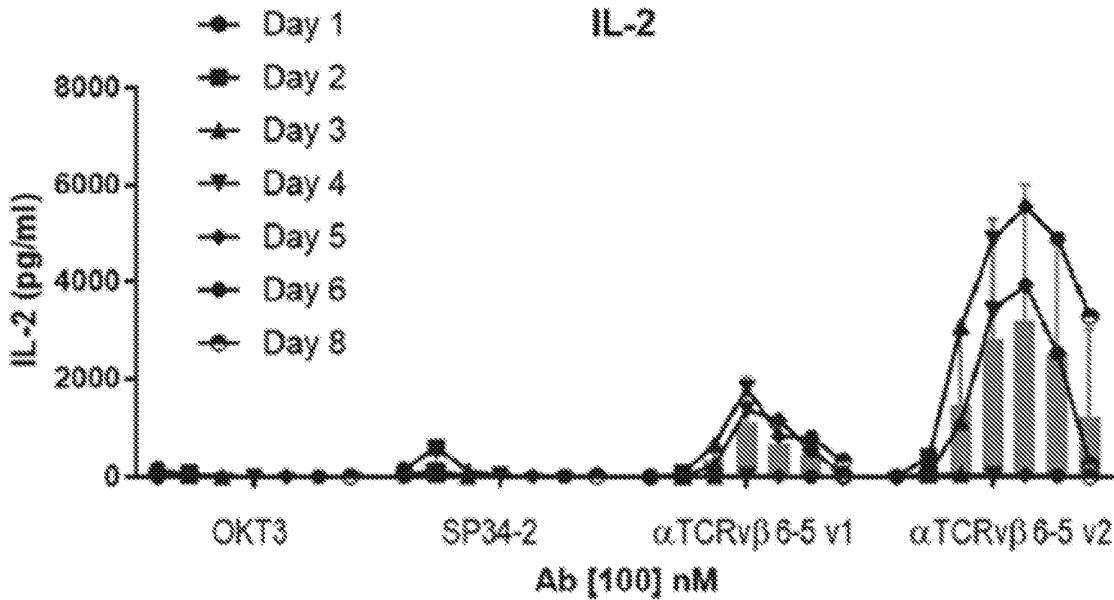


FIG. 85G

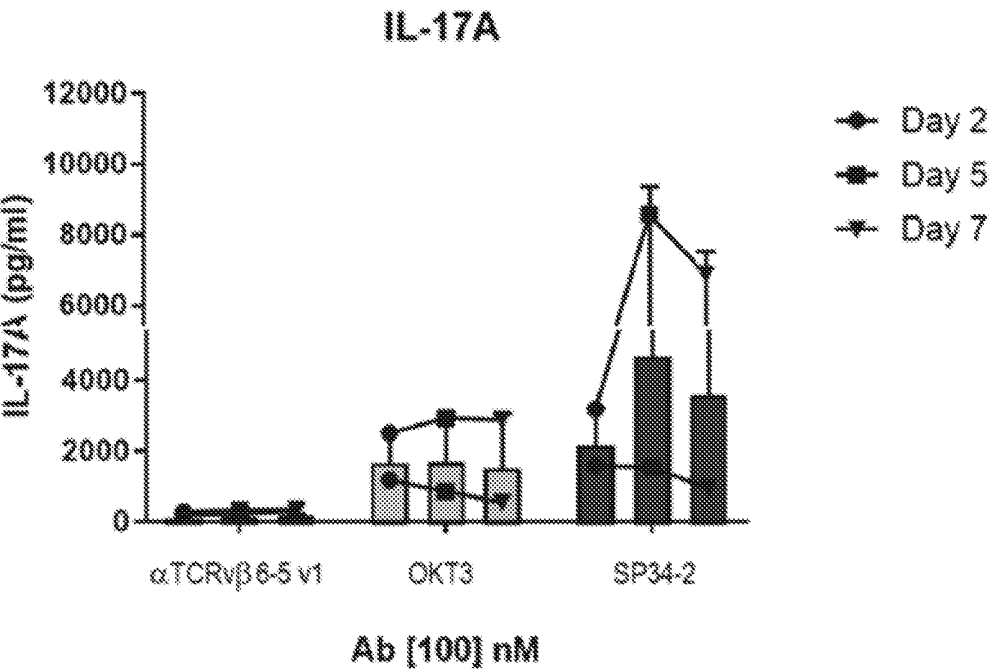


FIG. 86A

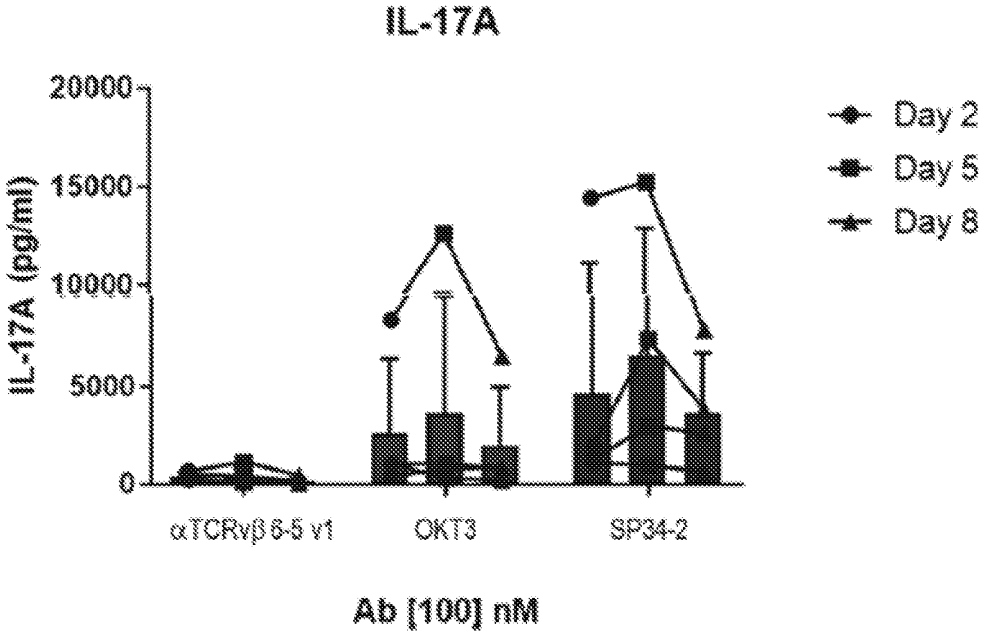


FIG. 86B

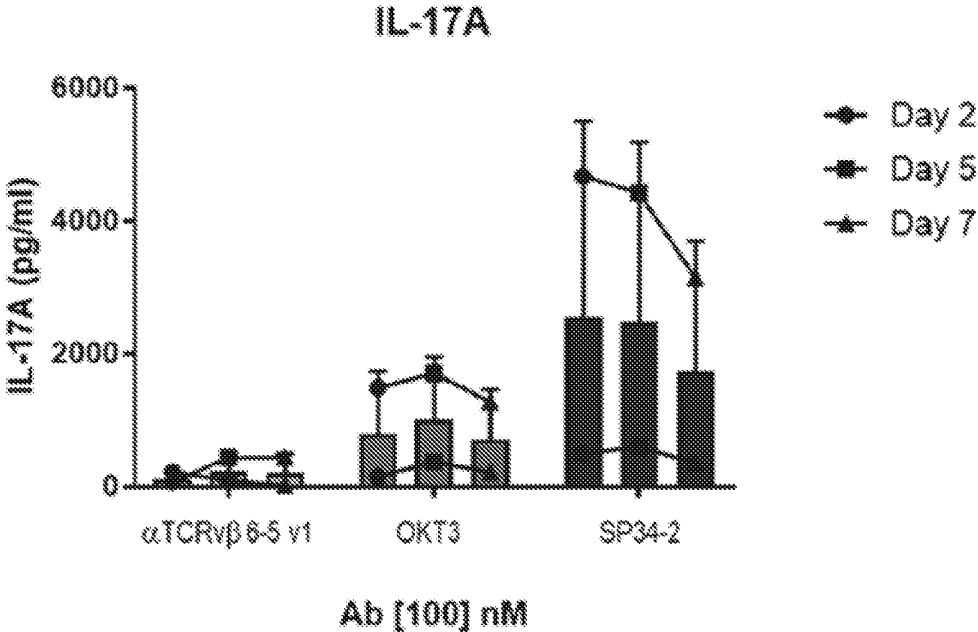


FIG. 86C

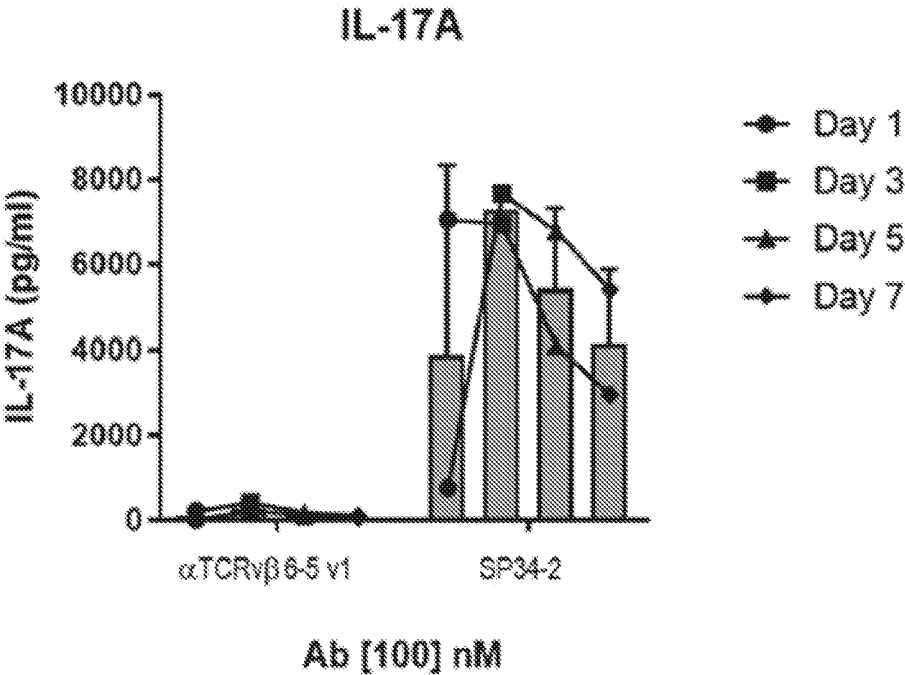


FIG. 86D

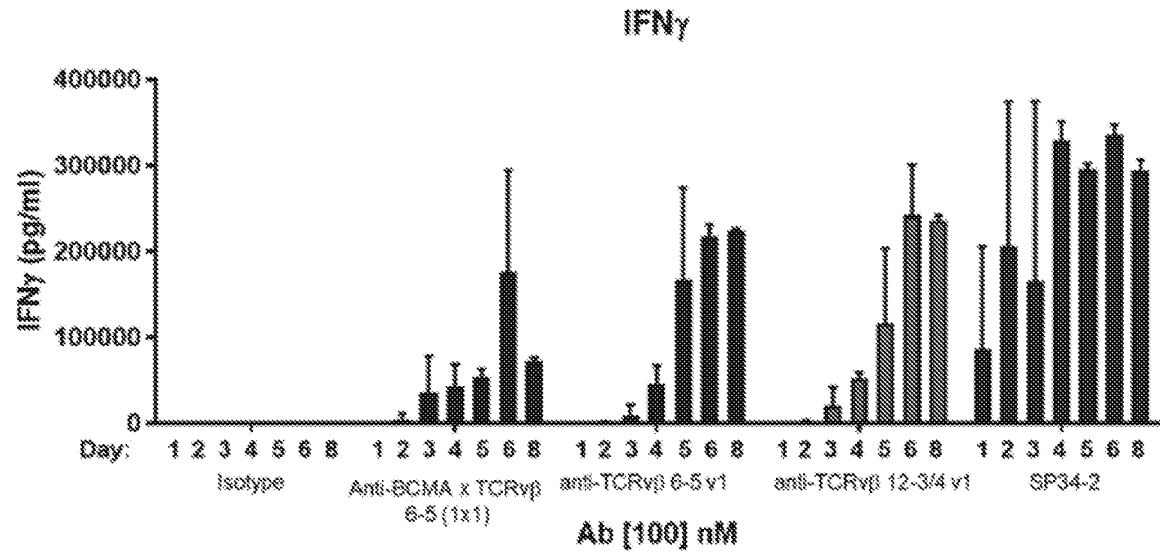


FIG. 87A

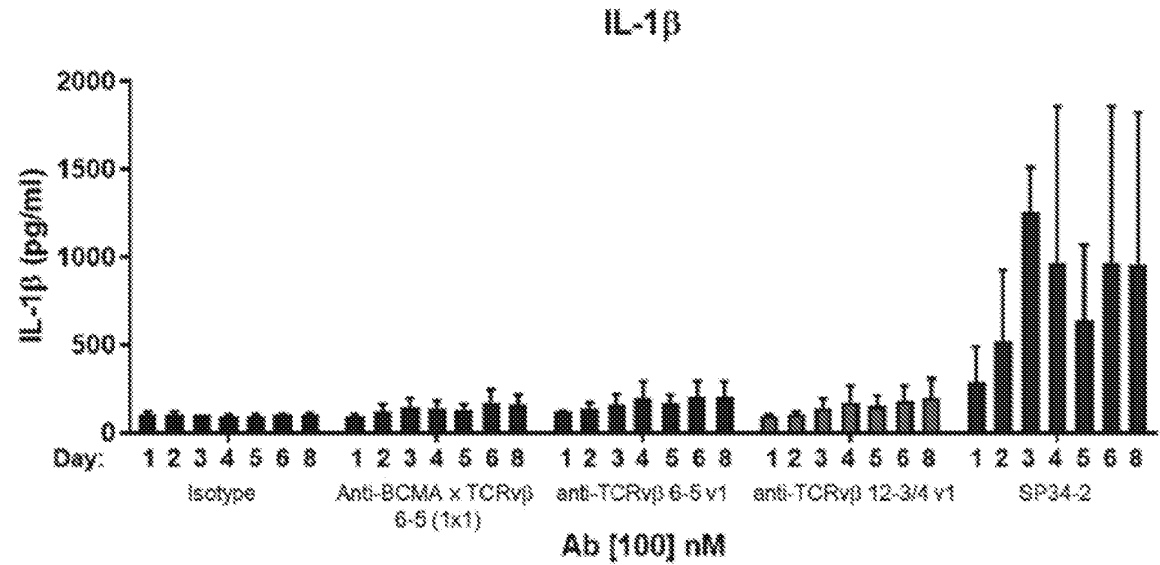


FIG. 87B

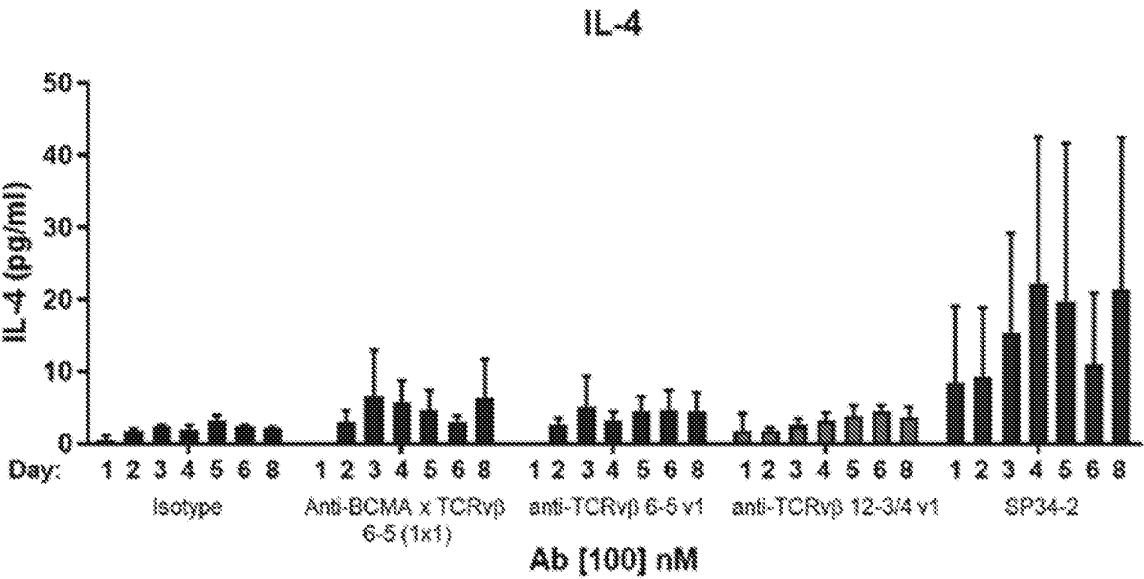


FIG. 87C

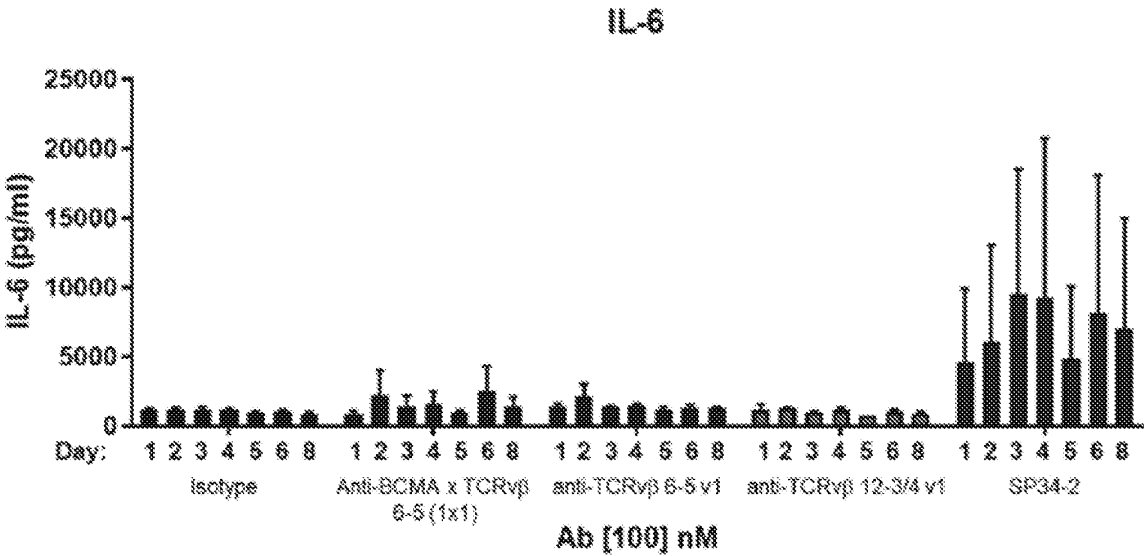


FIG. 87D

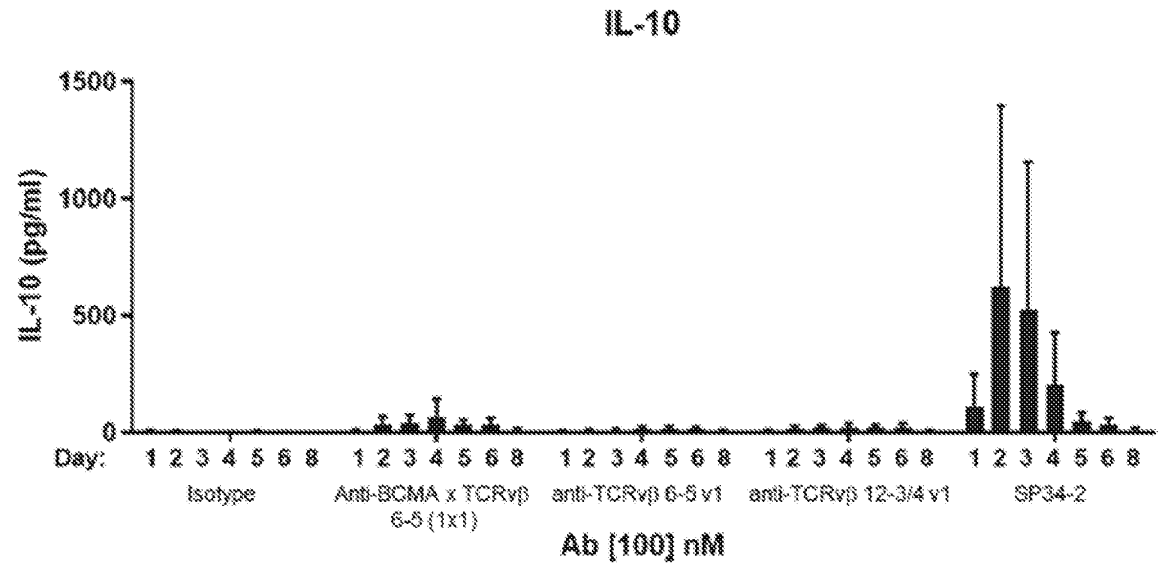


FIG. 87E

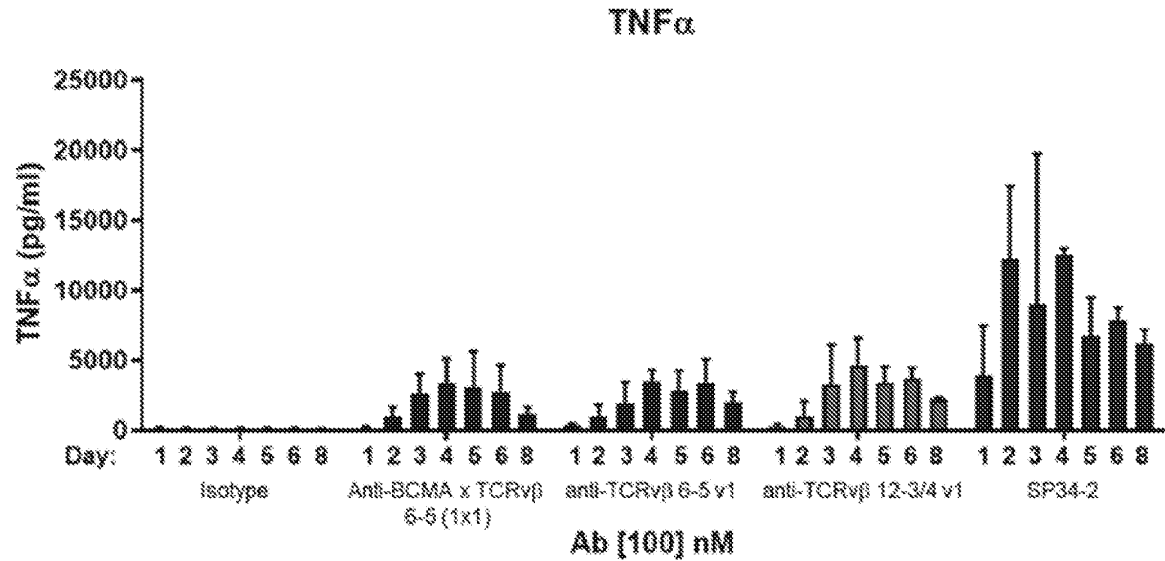


FIG. 87F

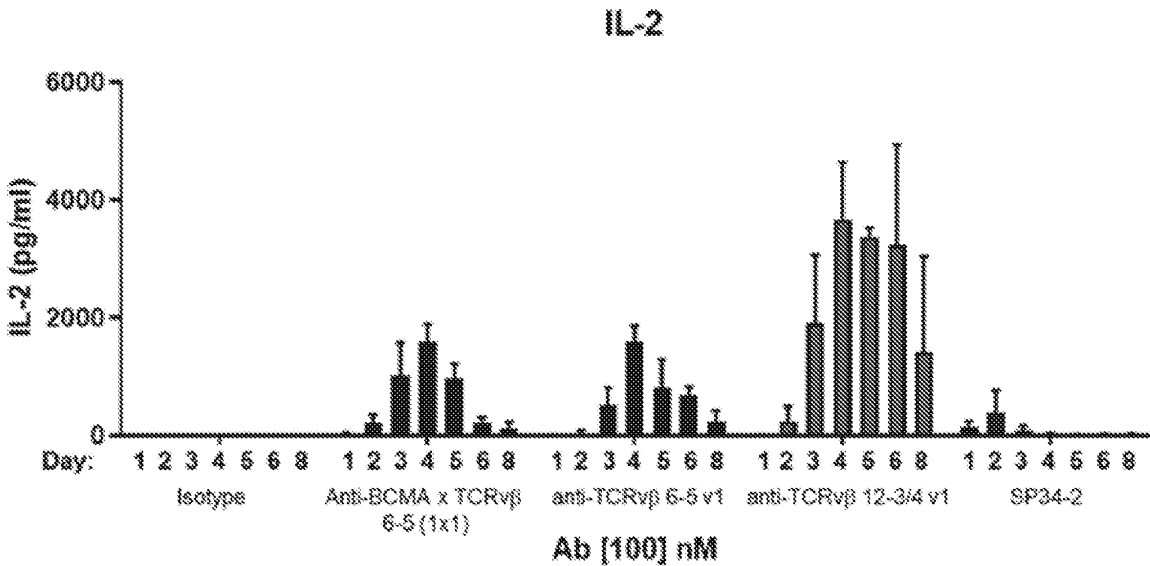


FIG. 87G

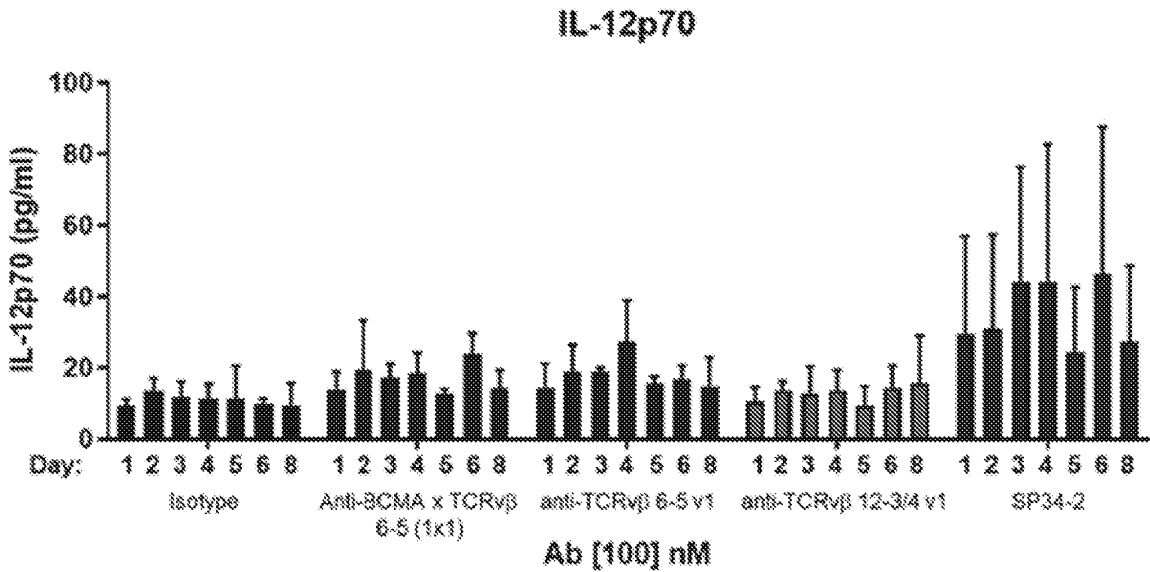


FIG. 87H

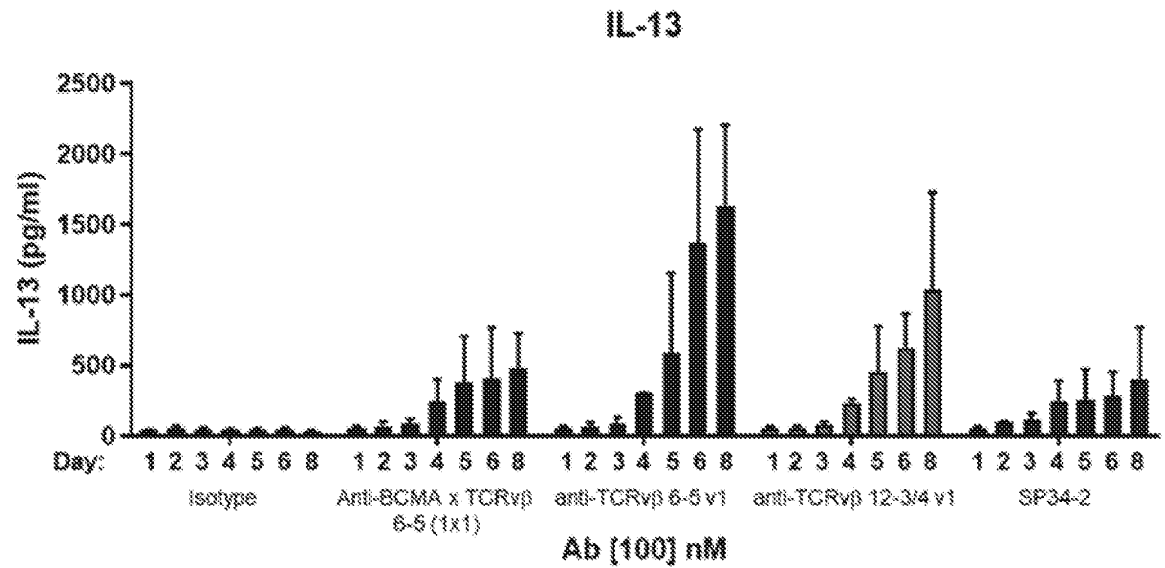


FIG. 87I

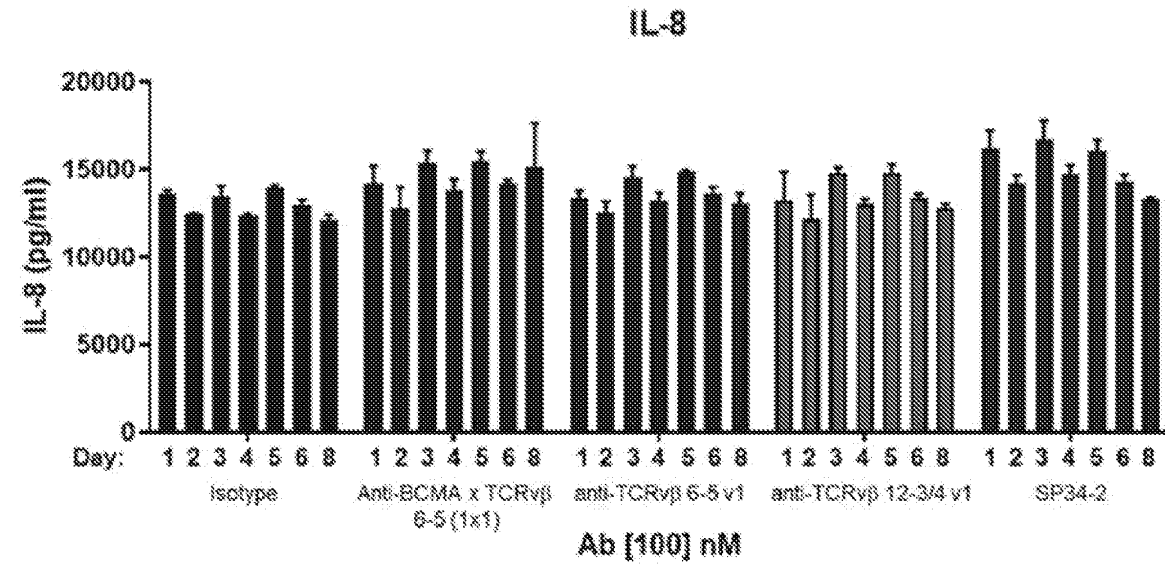


FIG. 87J

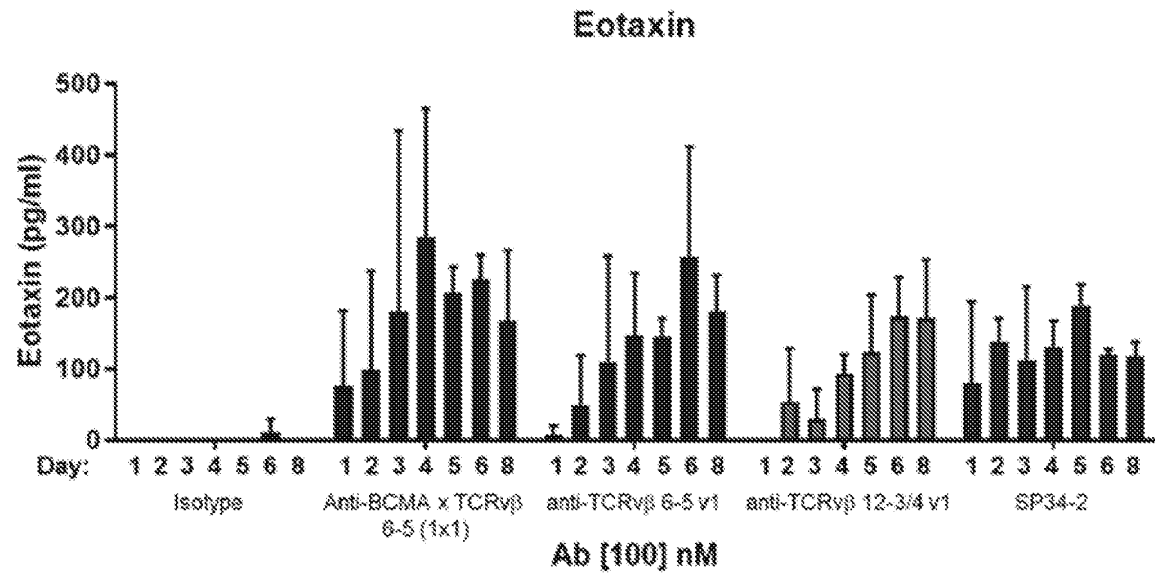


FIG. 87K

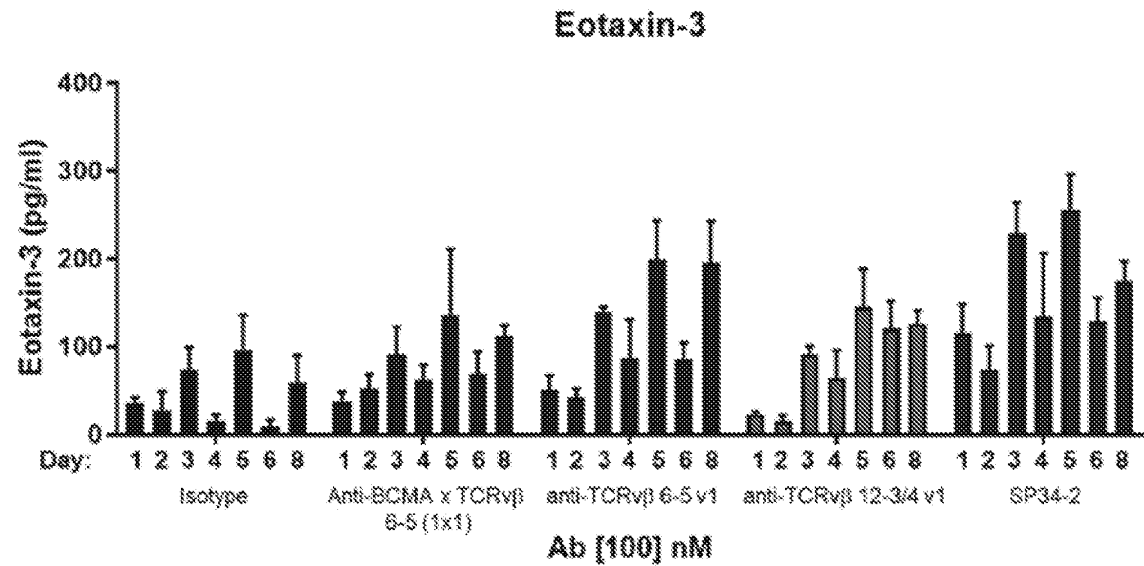


FIG. 87L

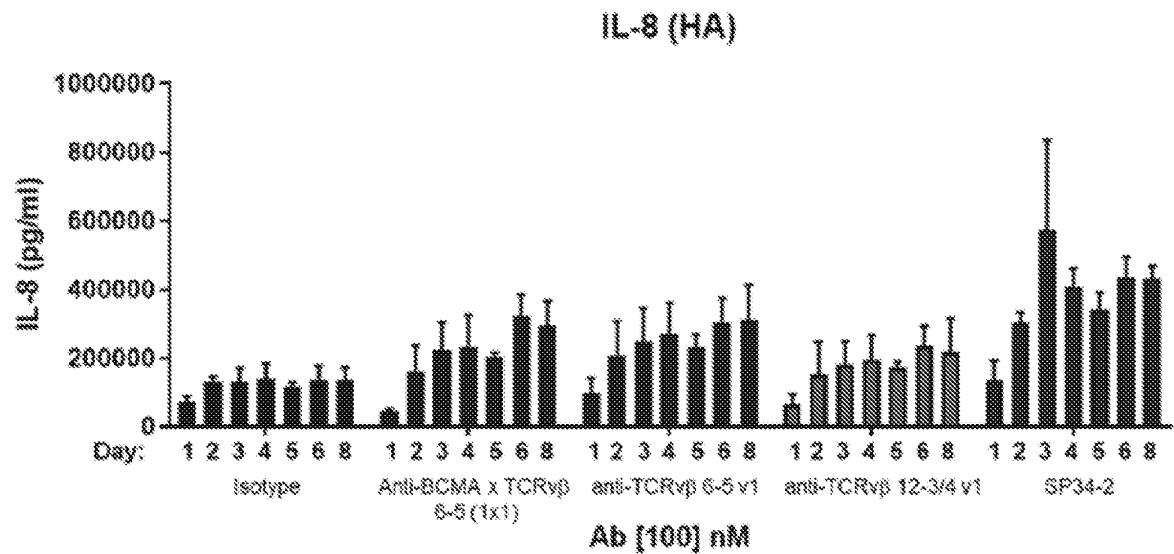


FIG. 87M

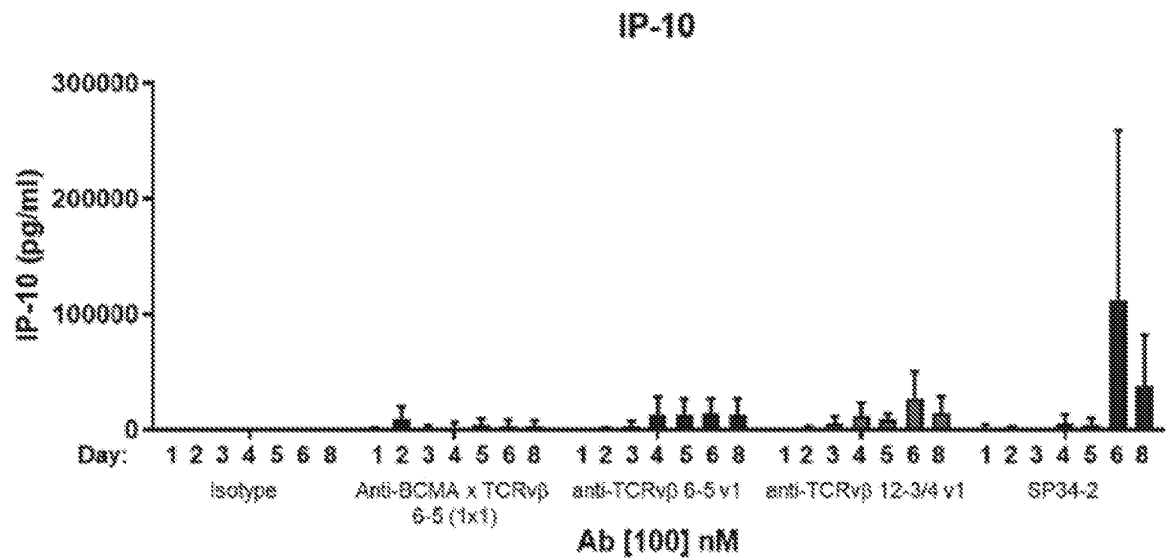


FIG. 87N

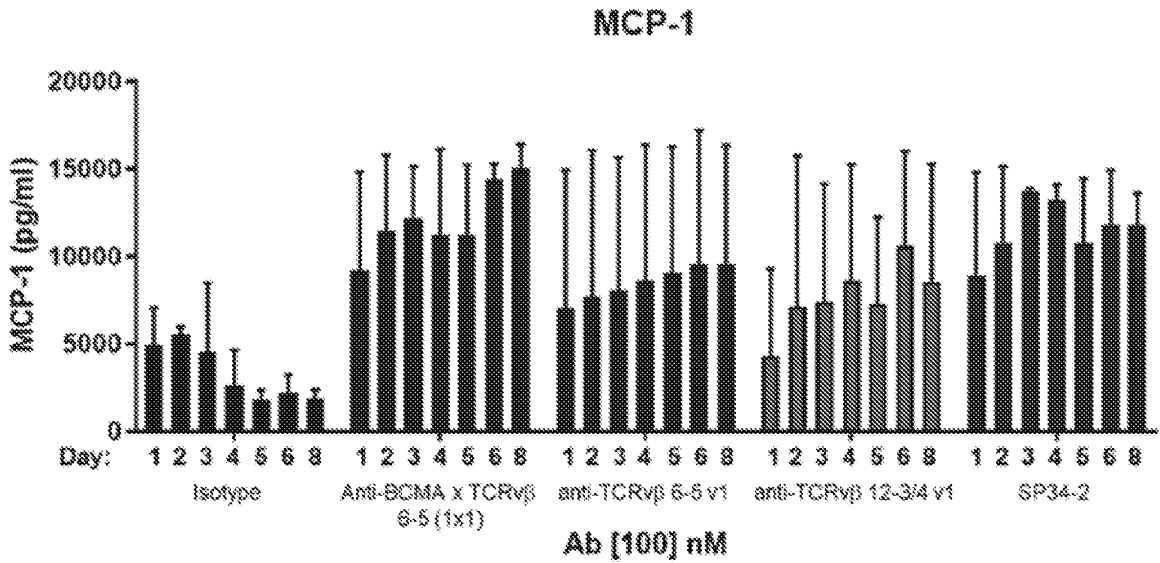


FIG. 87O

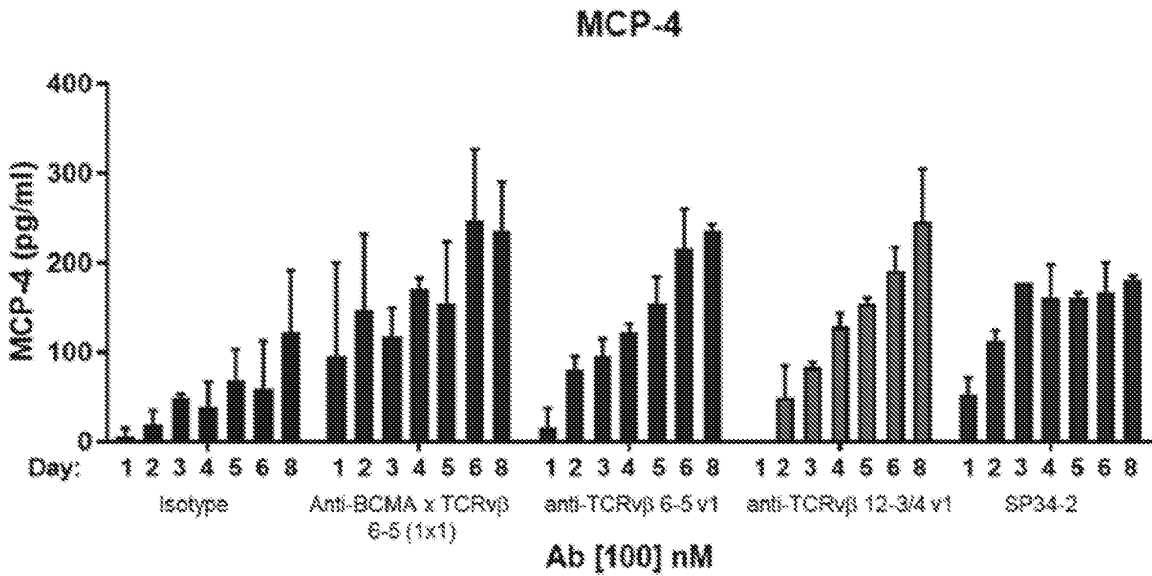


FIG. 87P

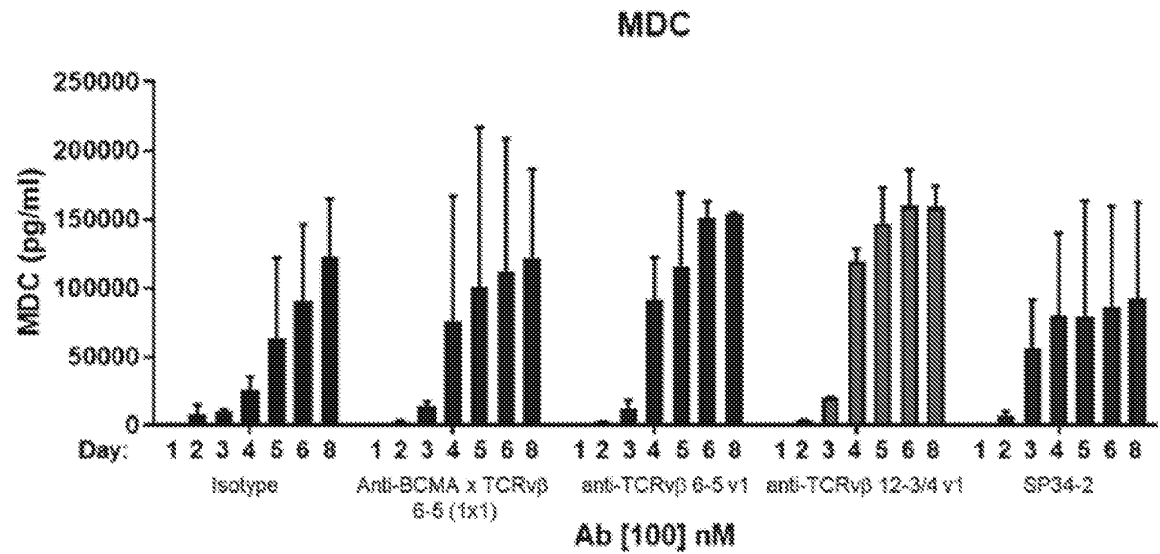


FIG. 87Q

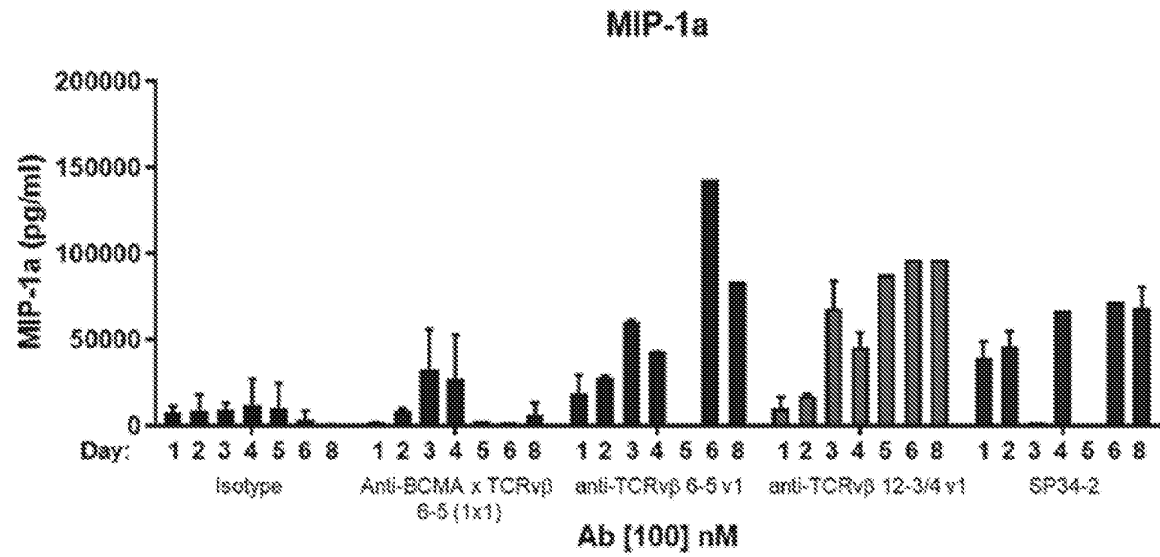


FIG. 87R

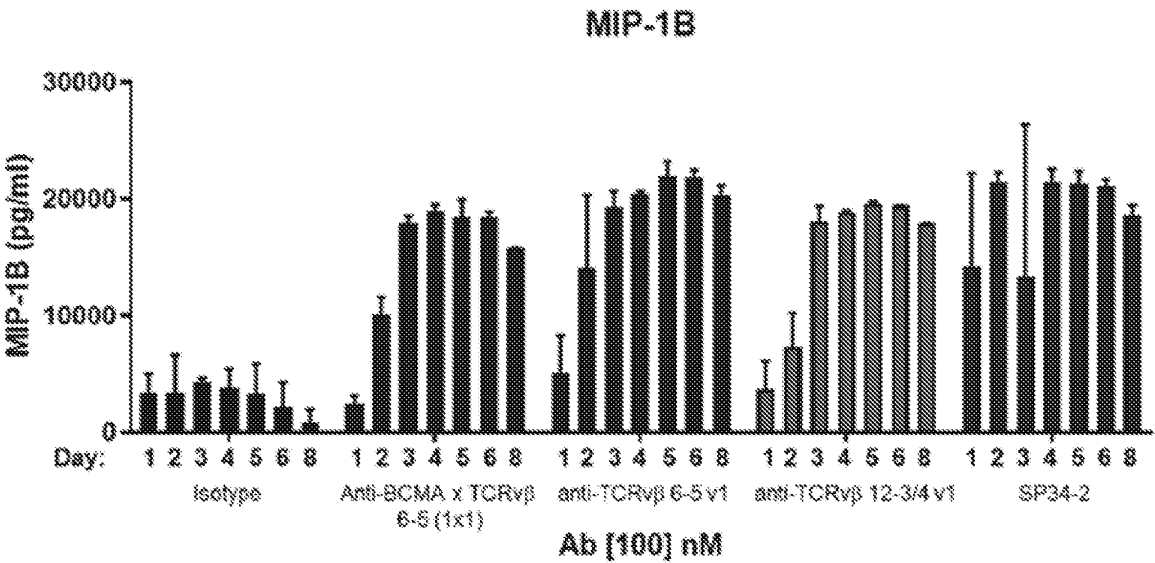


FIG. 87S

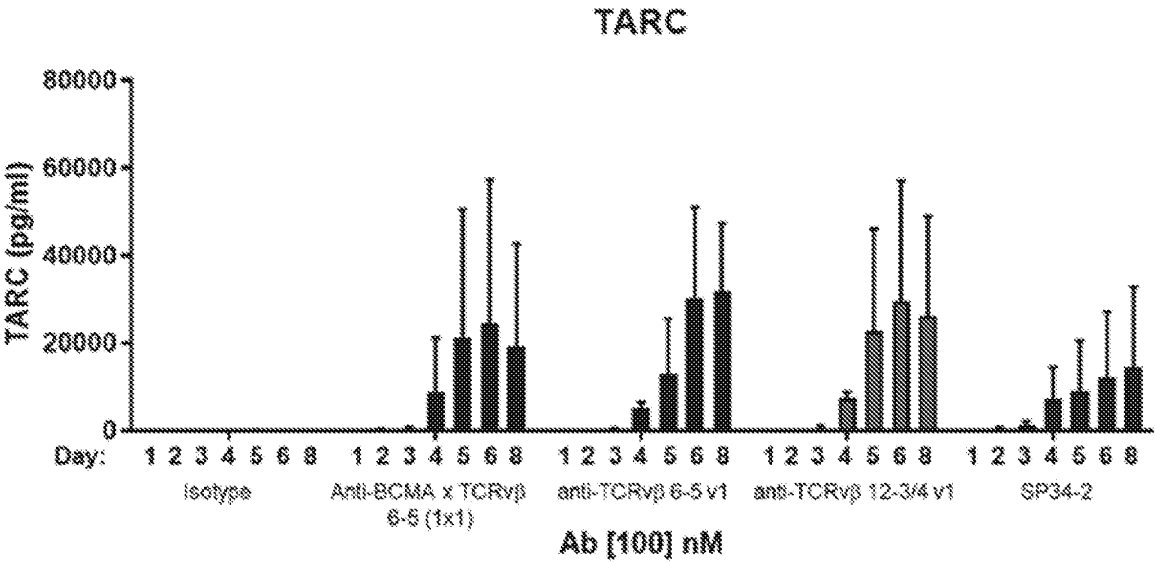


FIG. 87T

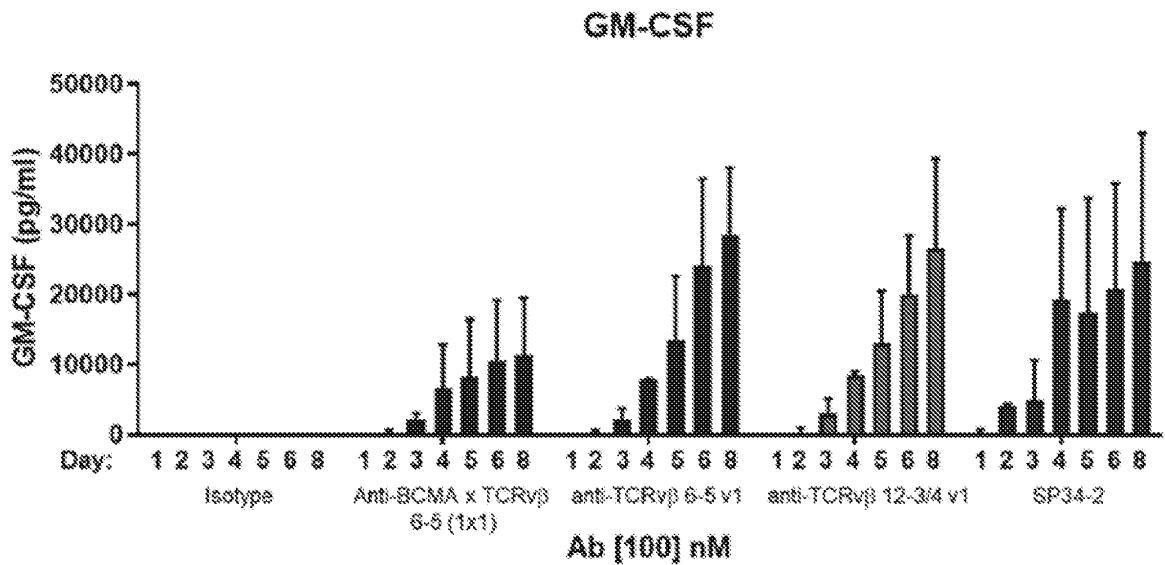


FIG. 87U

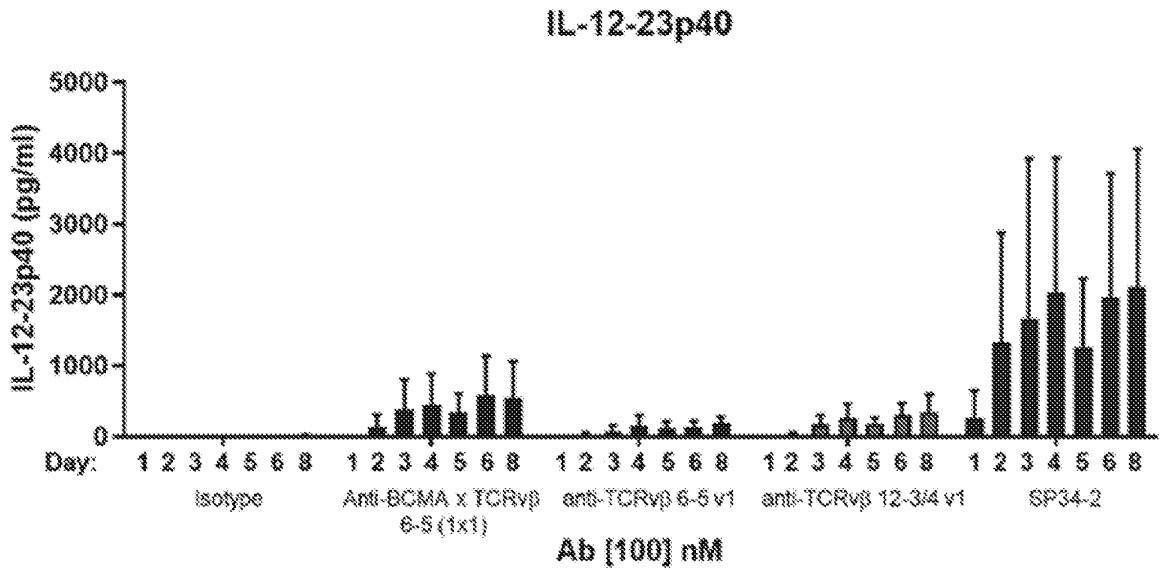


FIG. 87V

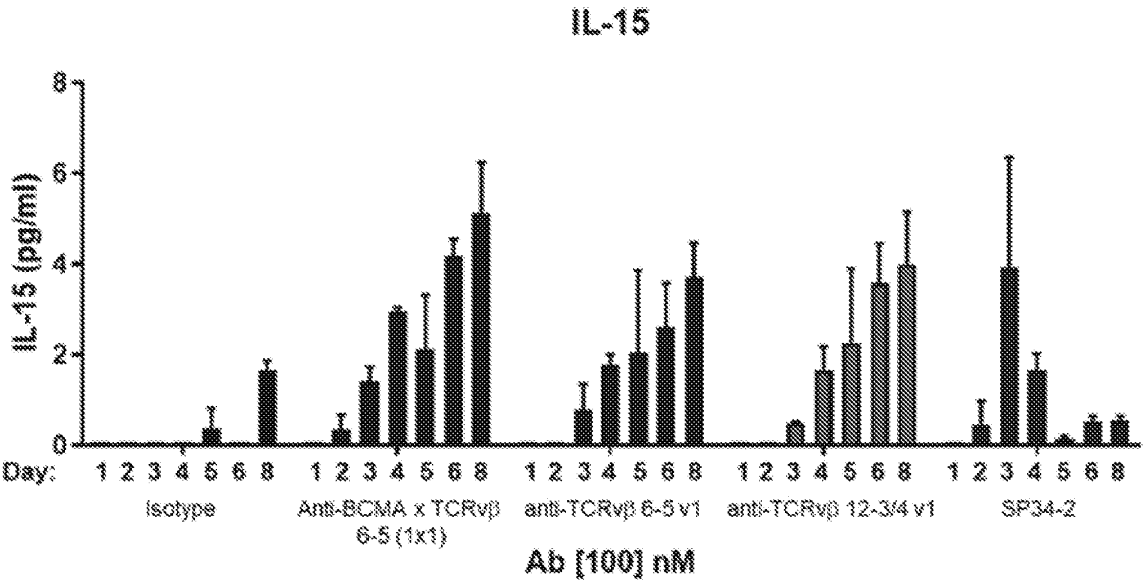


FIG. 87W

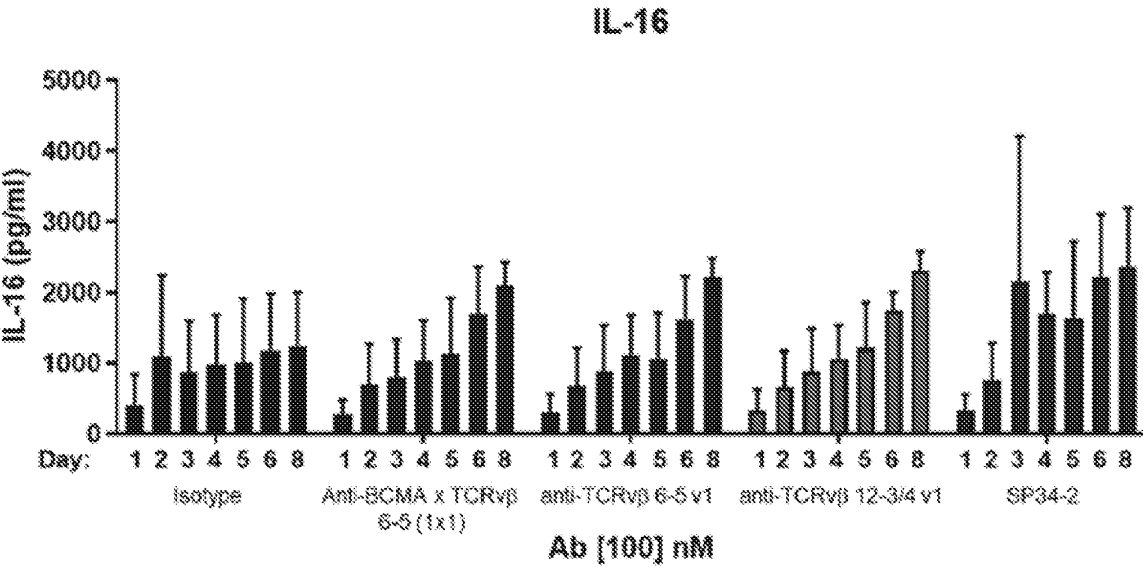


FIG. 87X

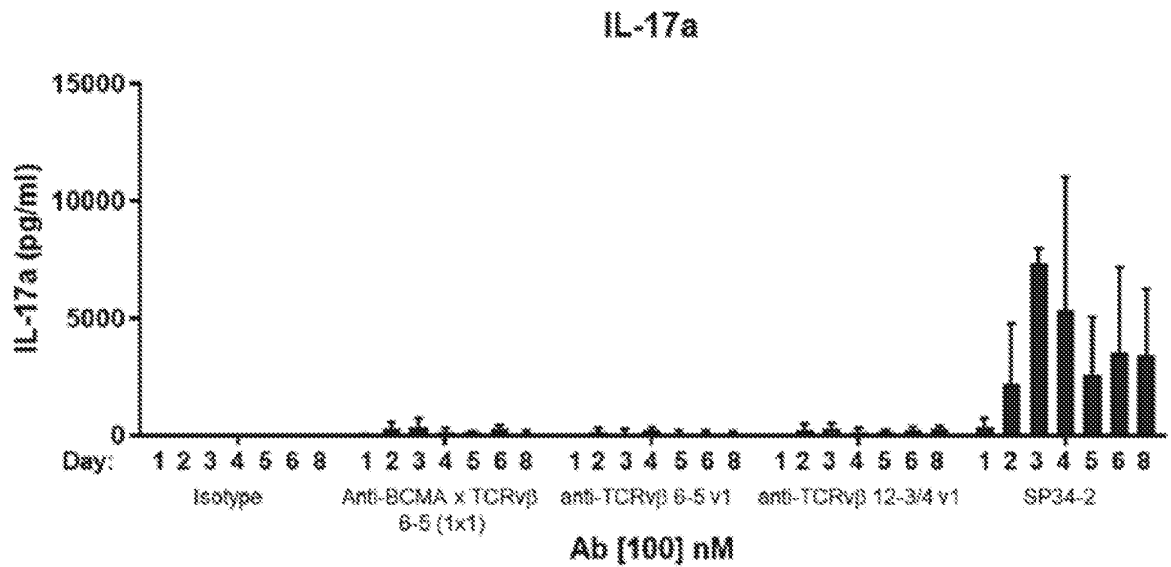


FIG. 87Y

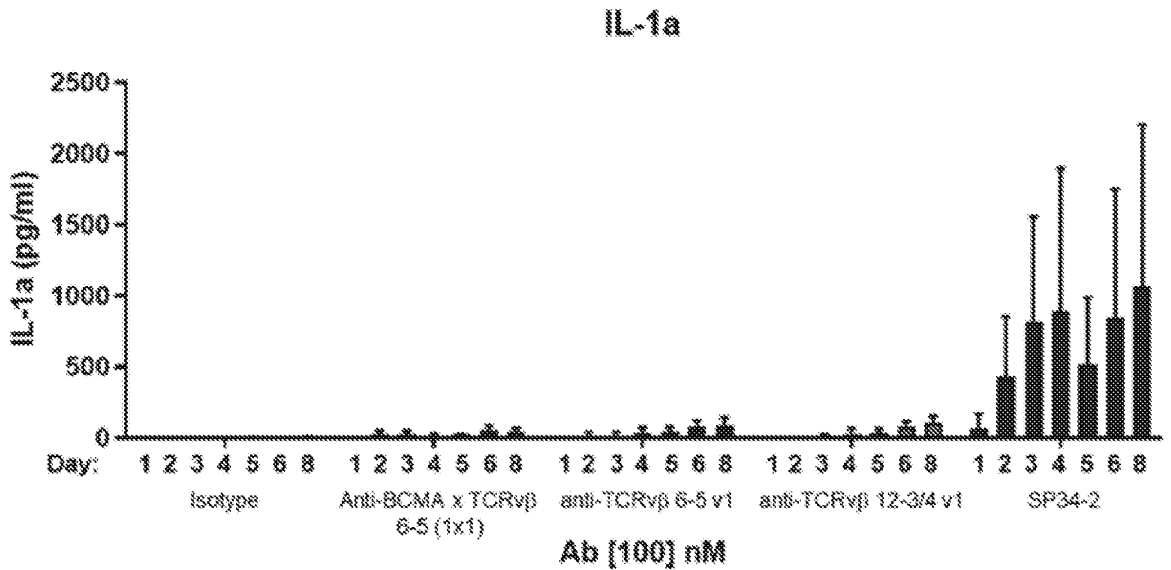


FIG. 87Z

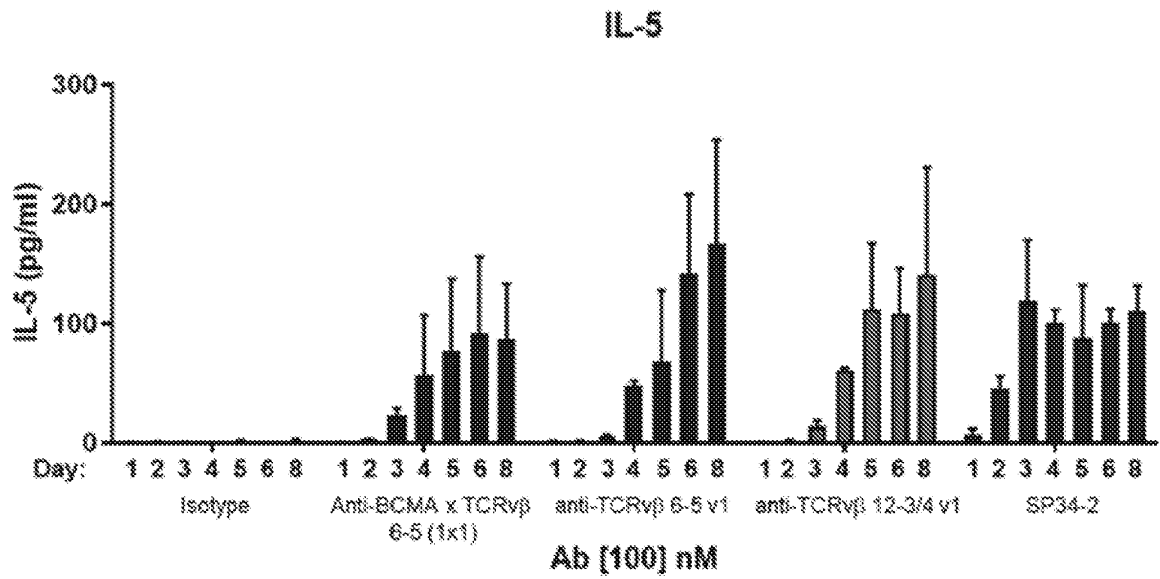


FIG. 87AA

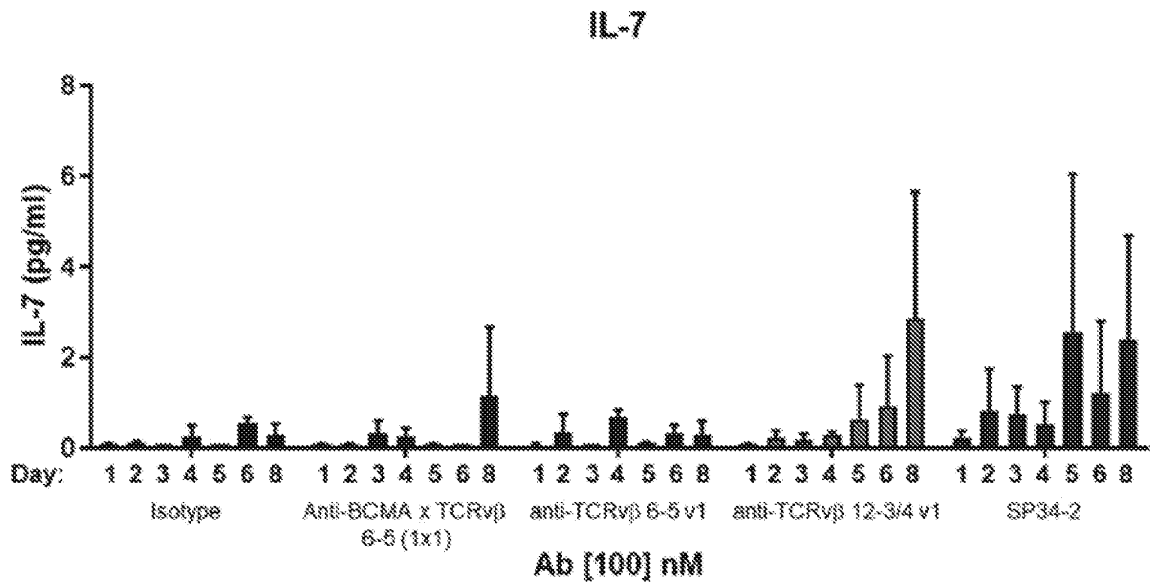


FIG. 87BB

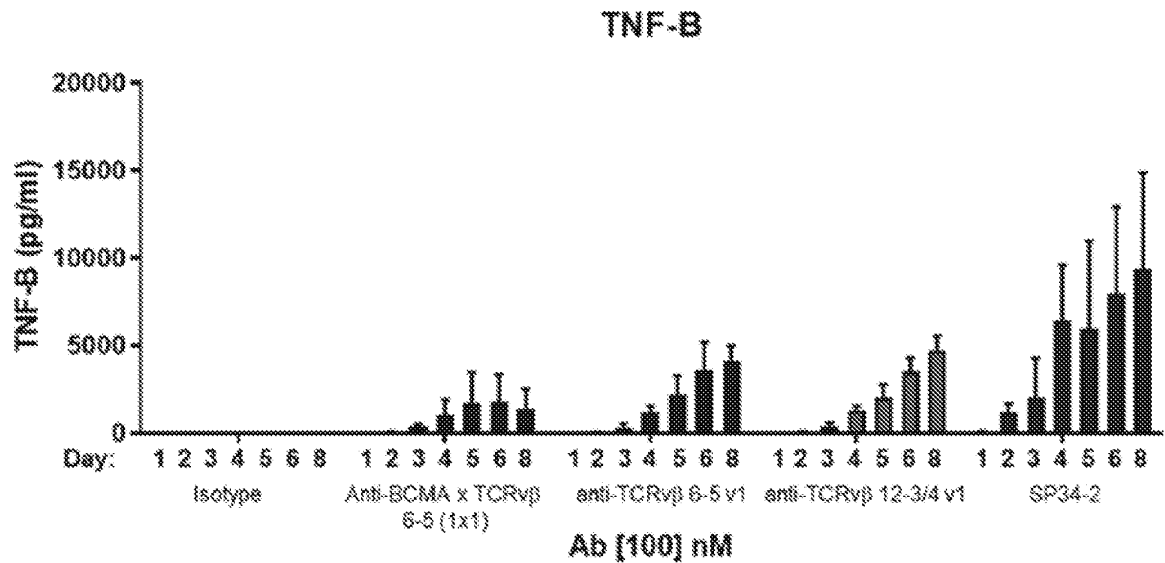


FIG. 87CC

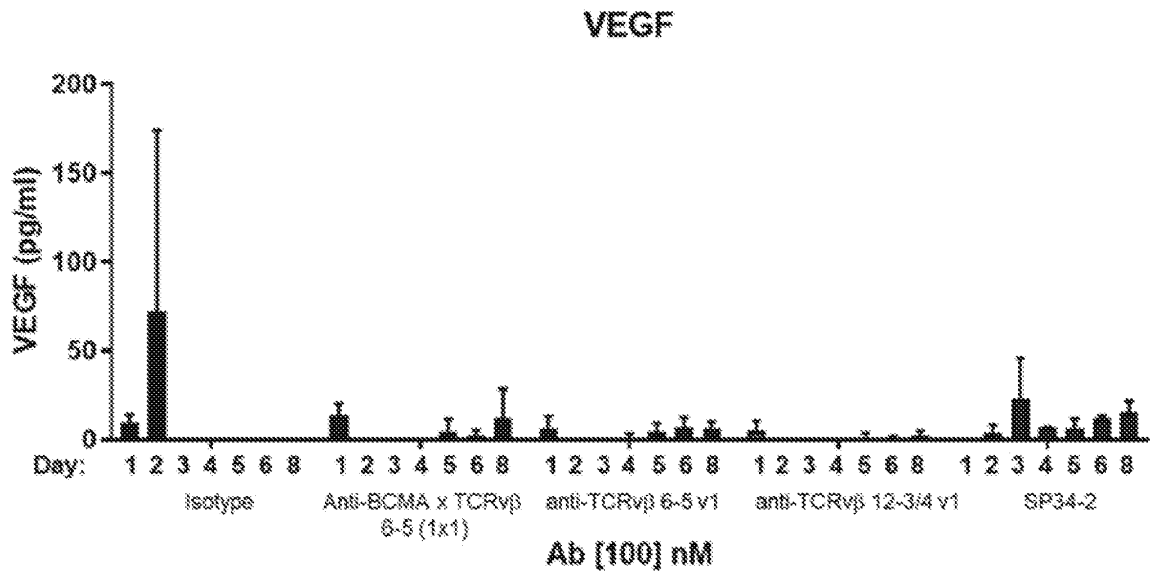


FIG. 87DD

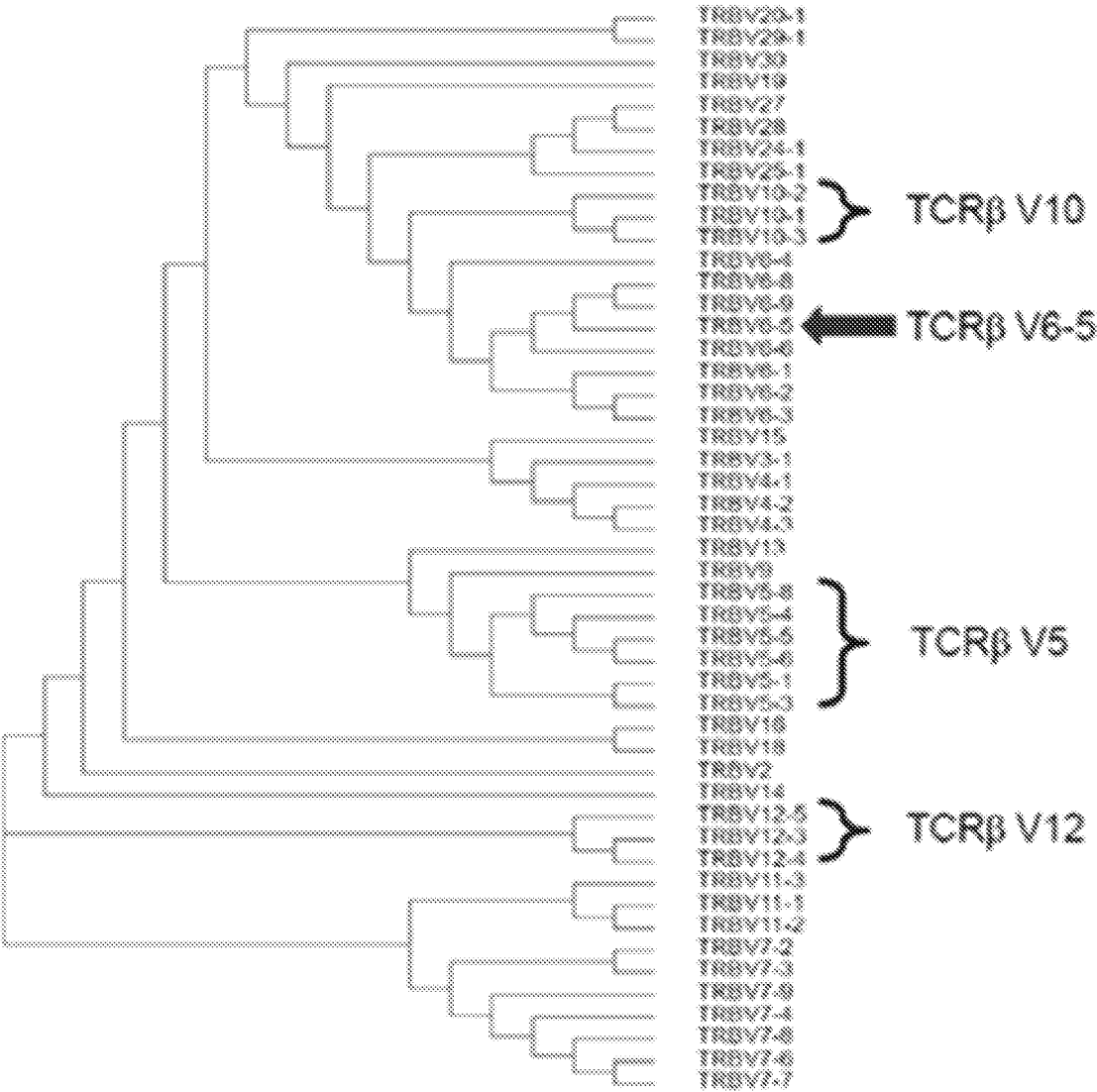


FIG. 88

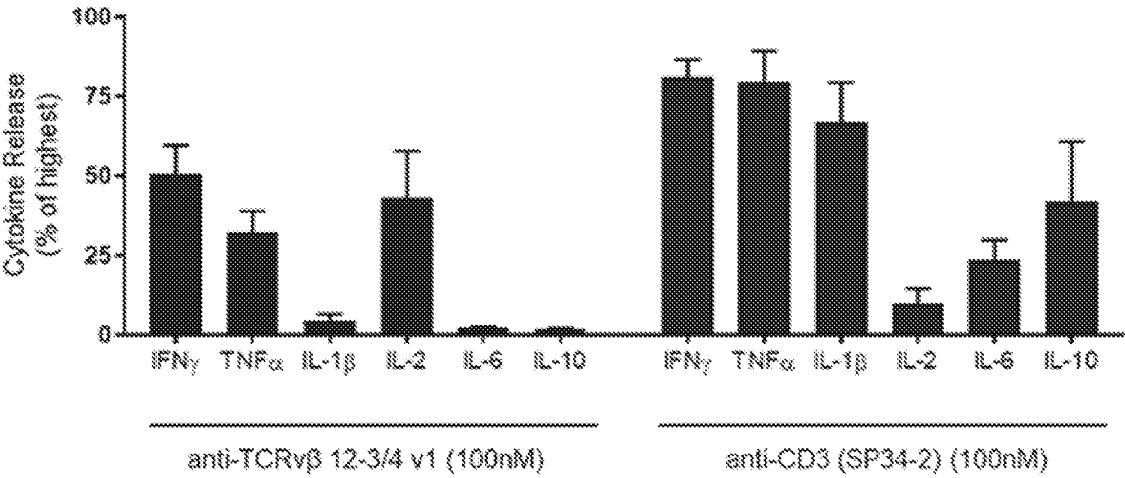


FIG. 89A

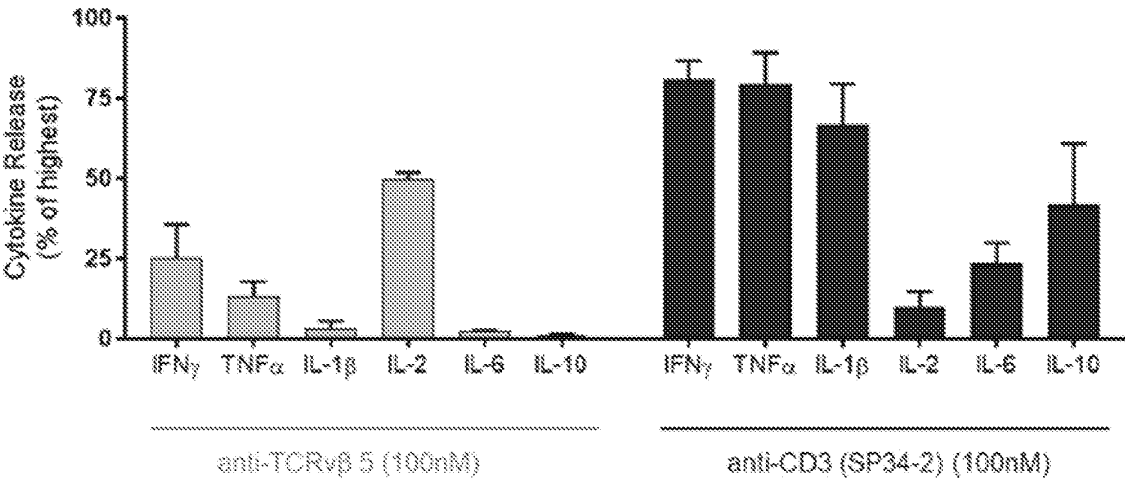


FIG. 89B

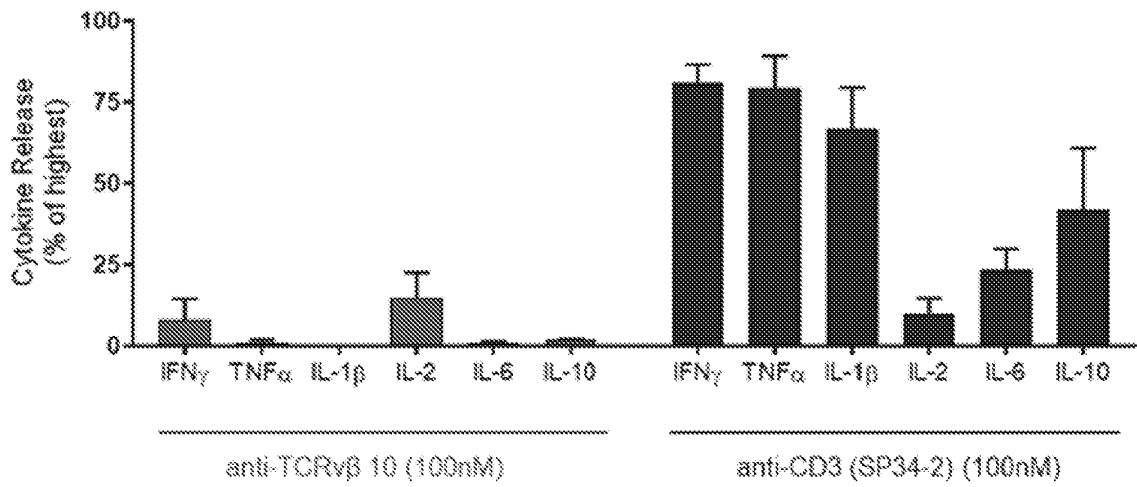


FIG. 89C

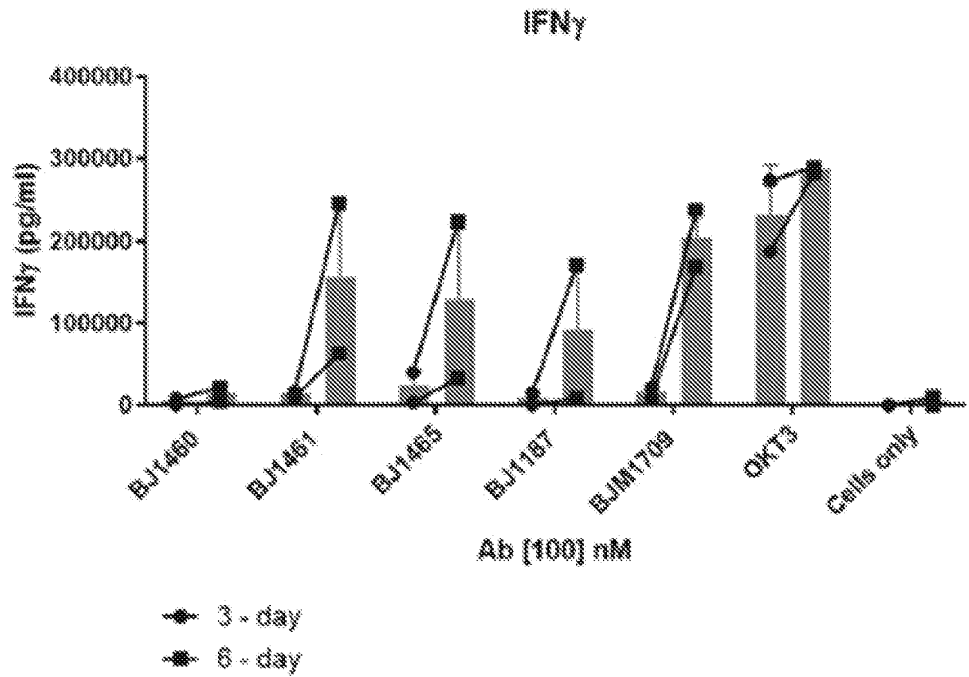


FIG. 90A

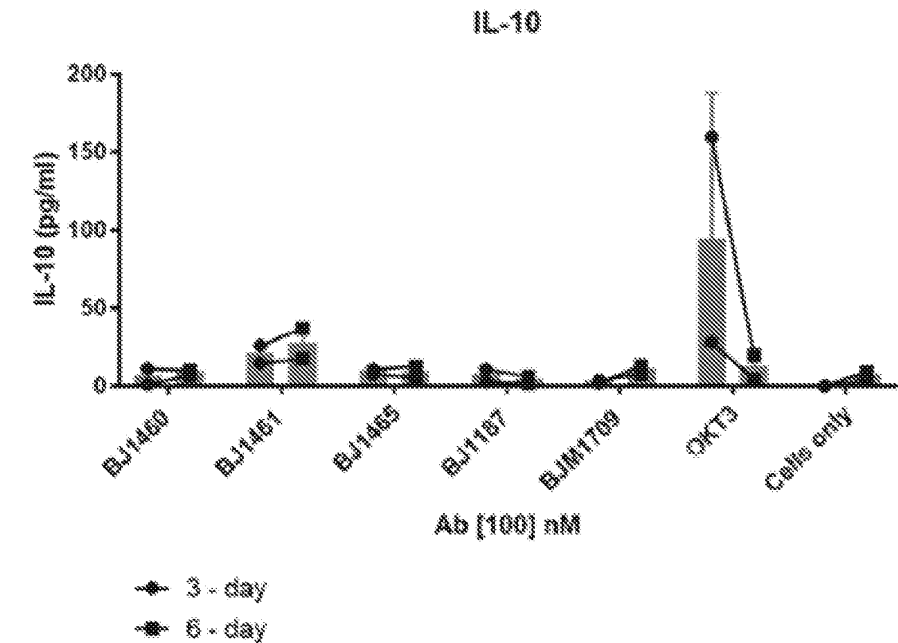


FIG. 90B

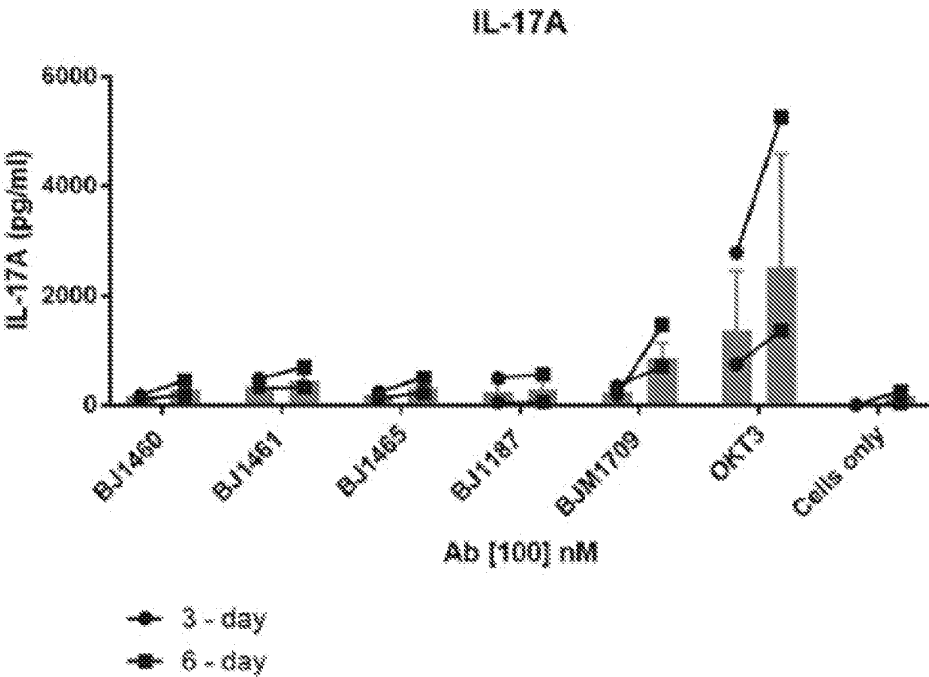


FIG. 90C

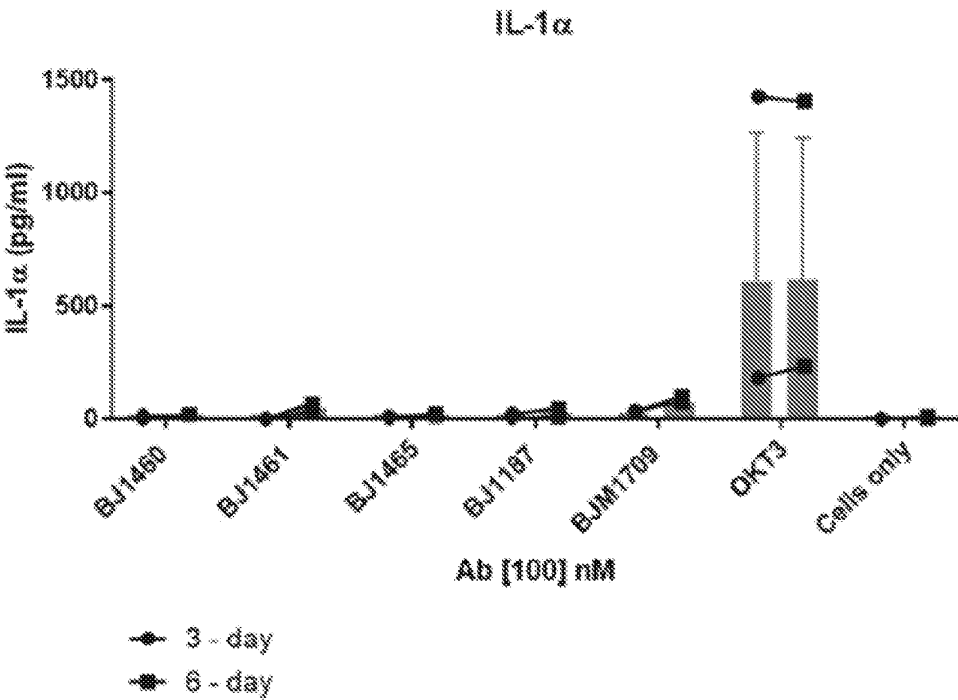


FIG. 90D

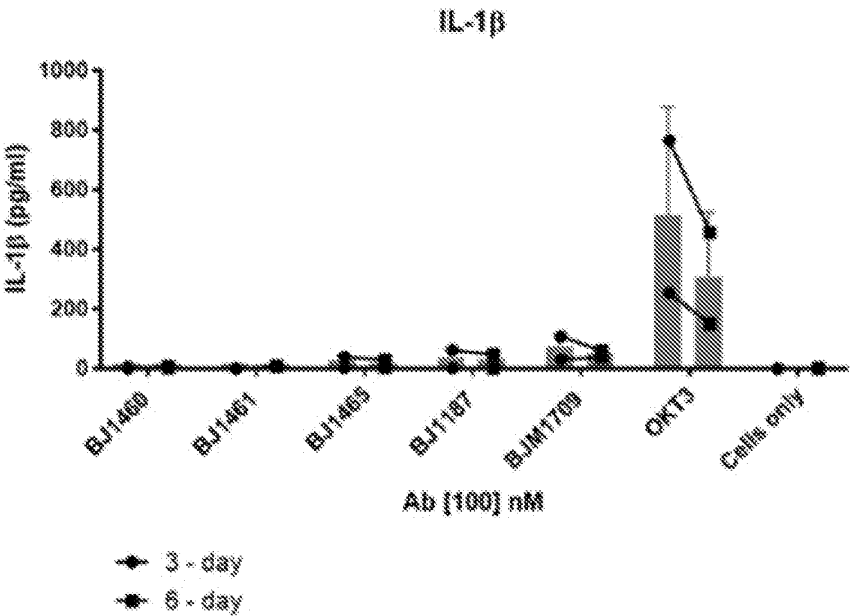


FIG. 90E

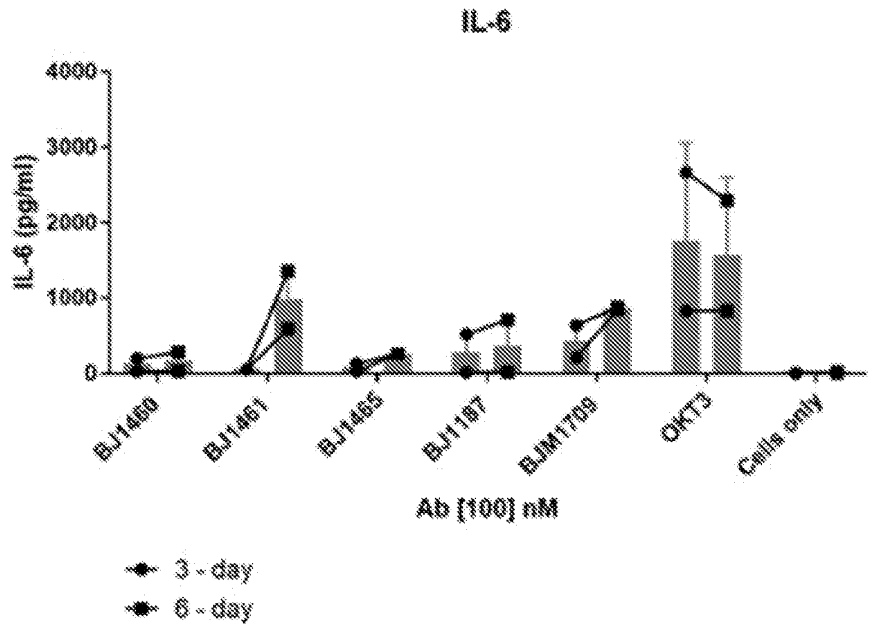


FIG. 90F

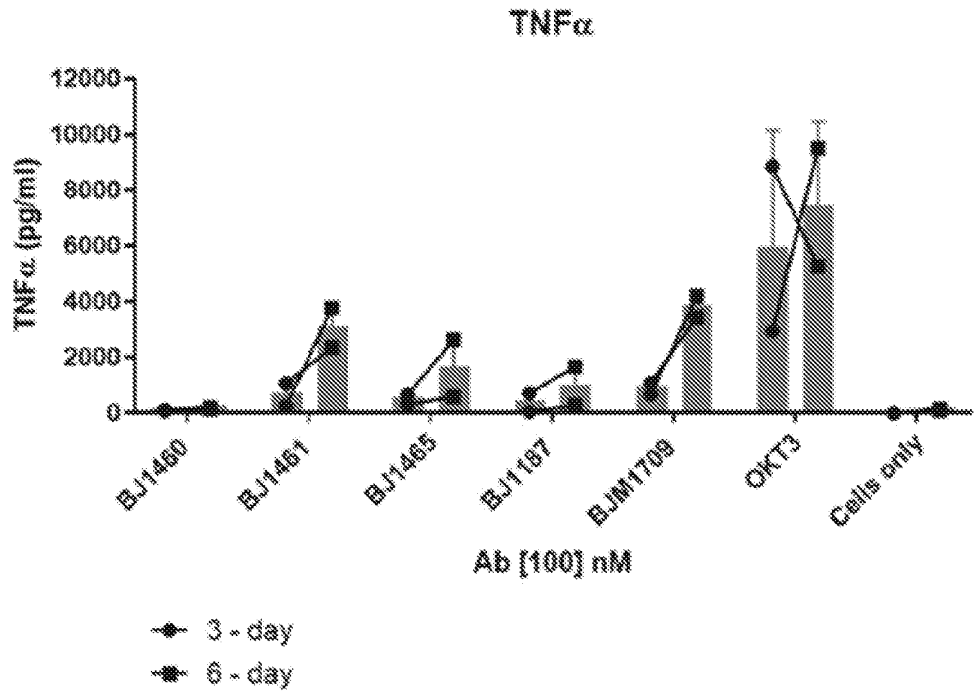
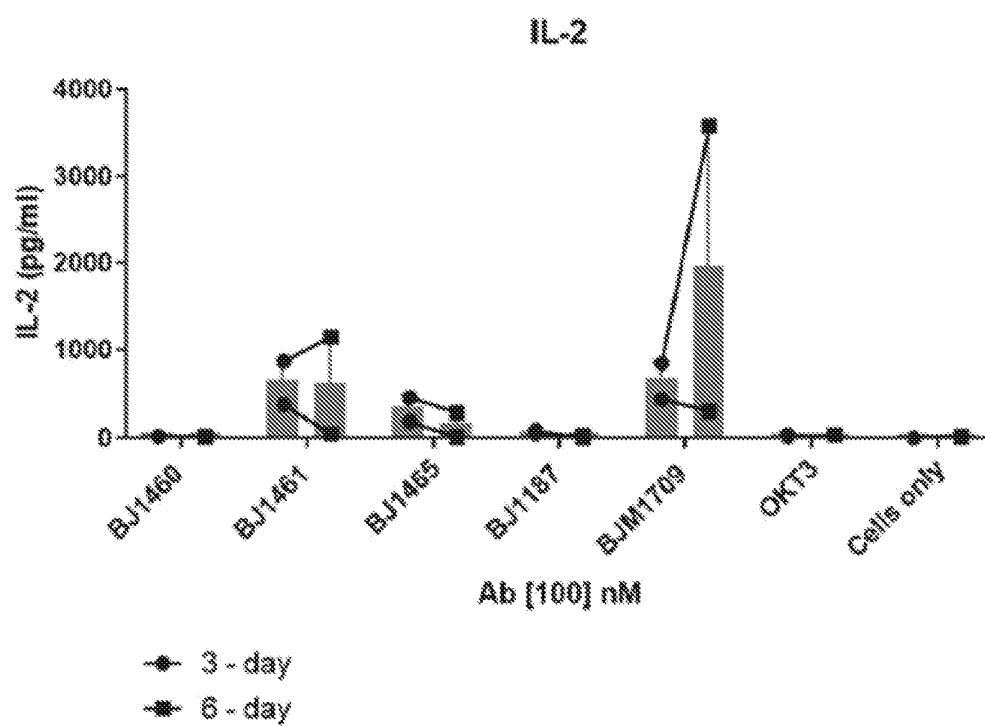


FIG. 90G

**FIG. 90H**

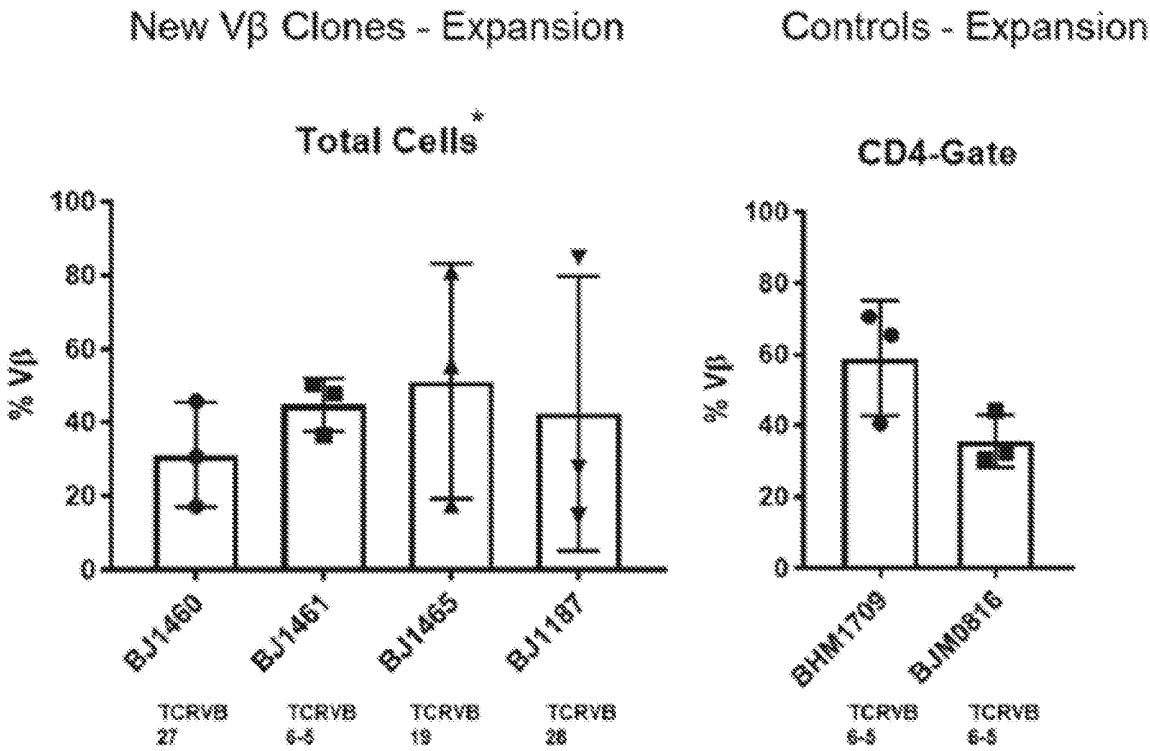


FIG. 91

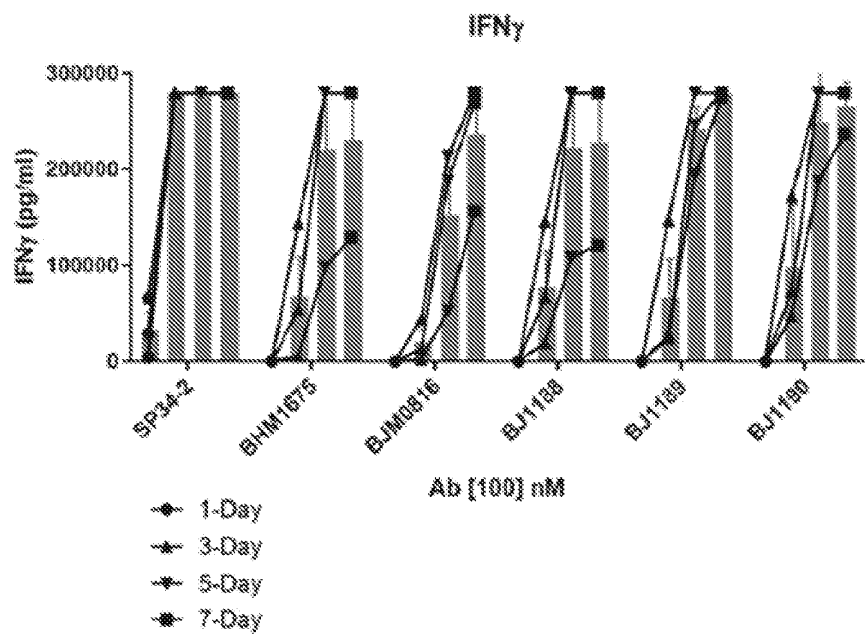


FIG. 92A

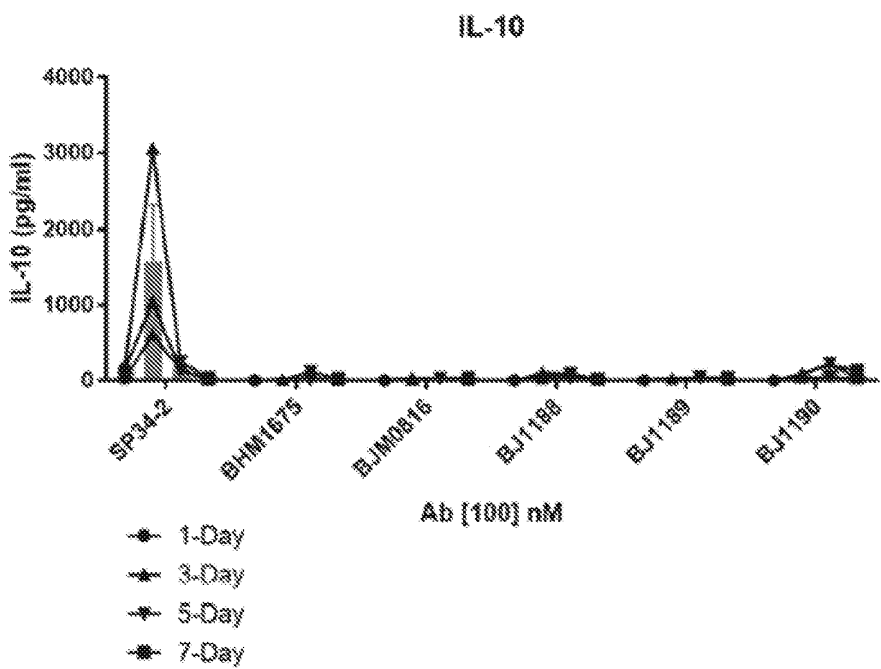


FIG. 92B

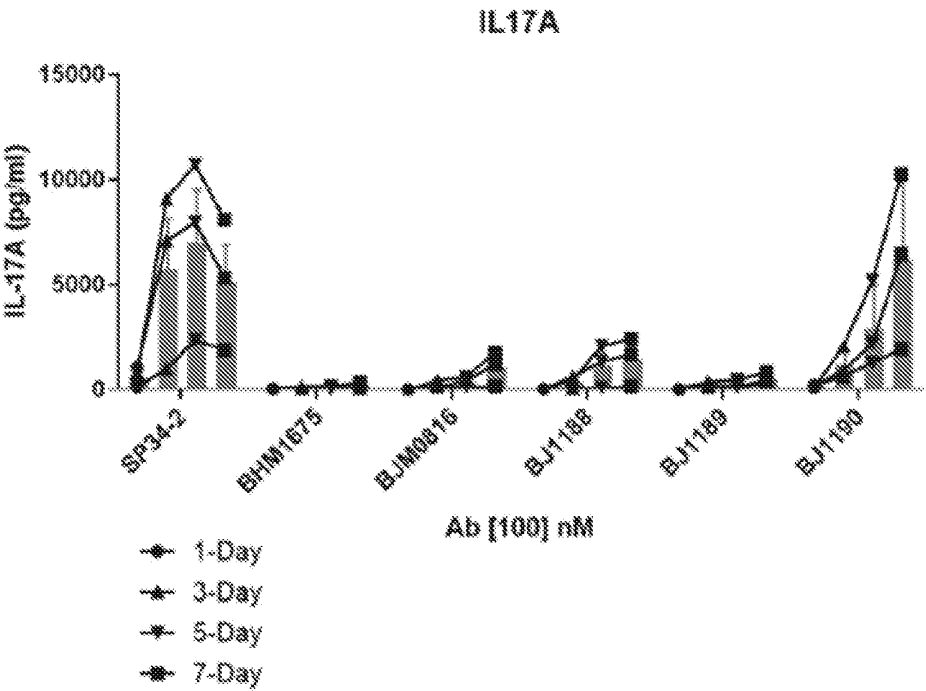


FIG. 92C

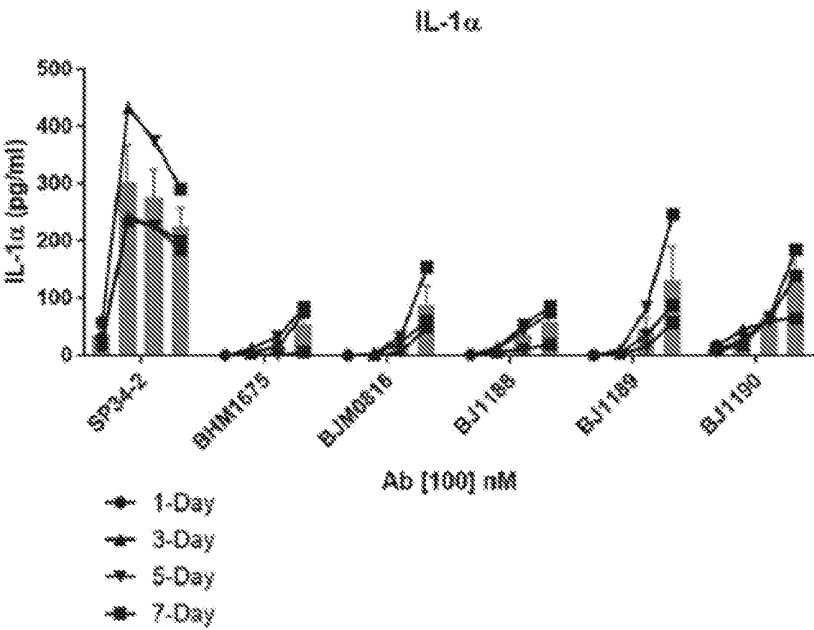


FIG. 92D

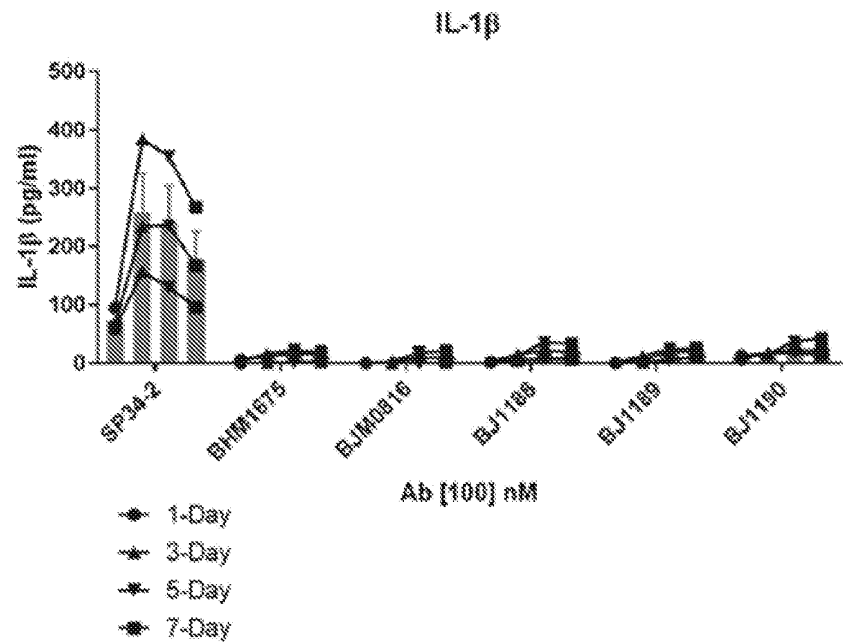


FIG. 92E

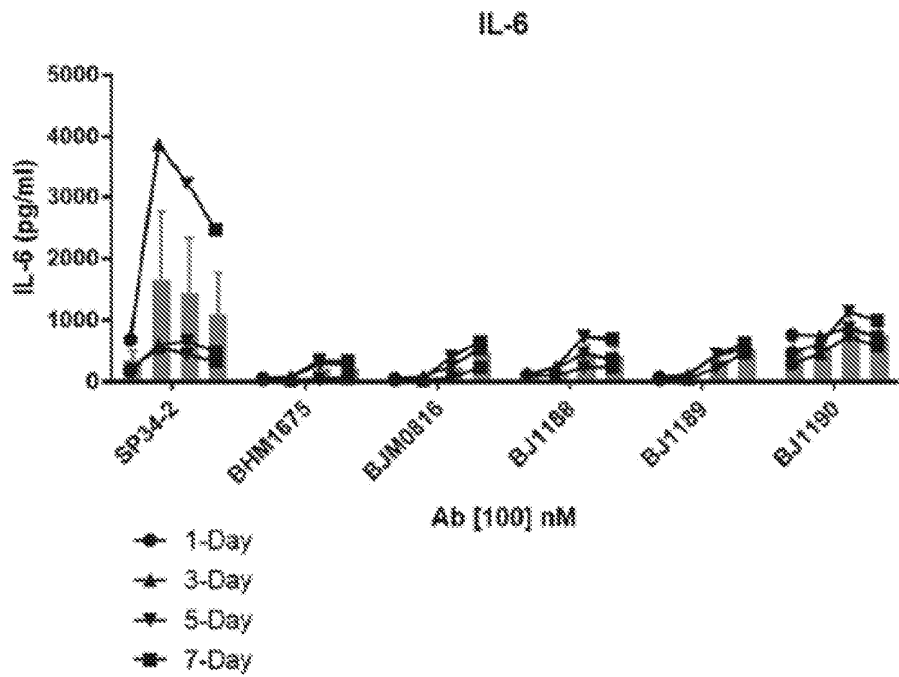


FIG. 92F

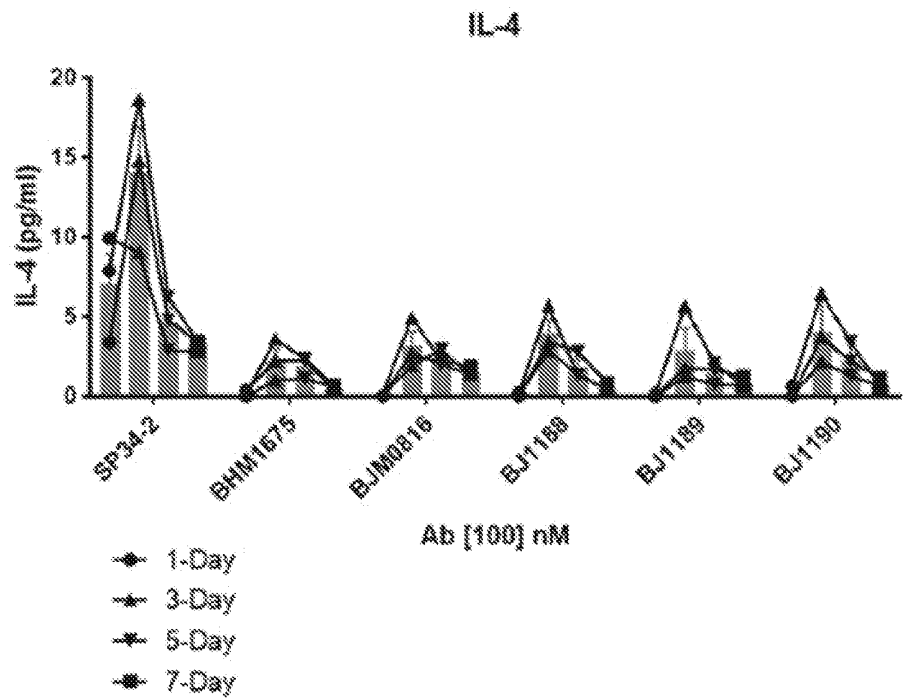


FIG. 92G

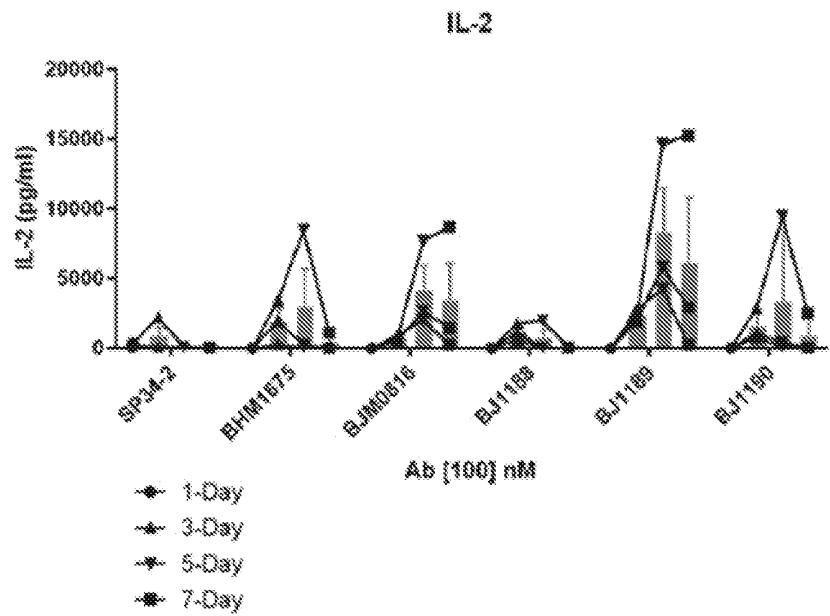


FIG. 92H

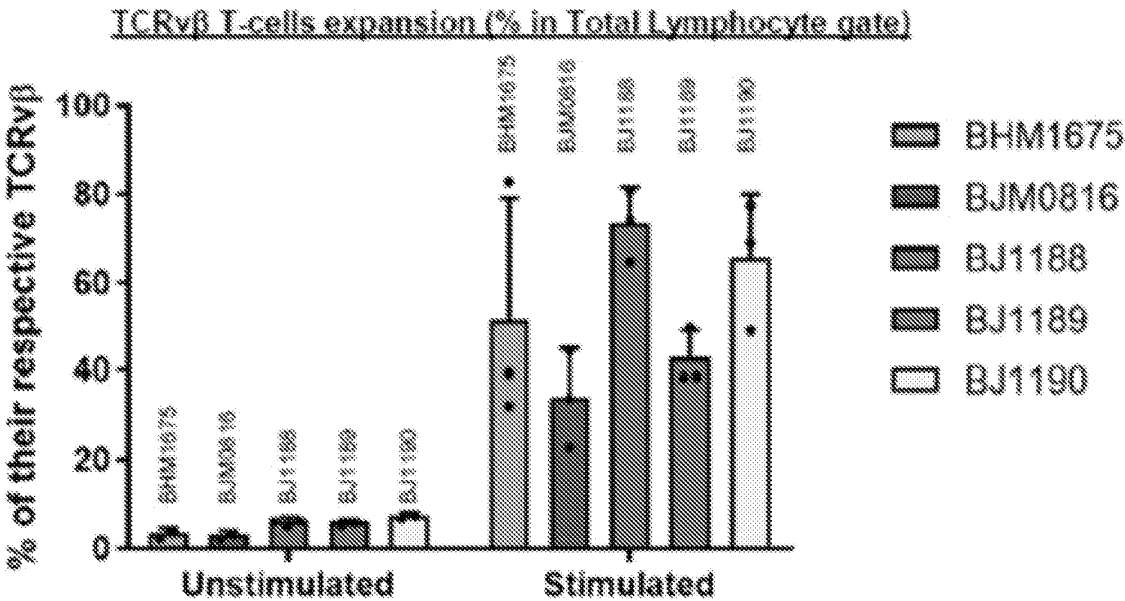


FIG. 93

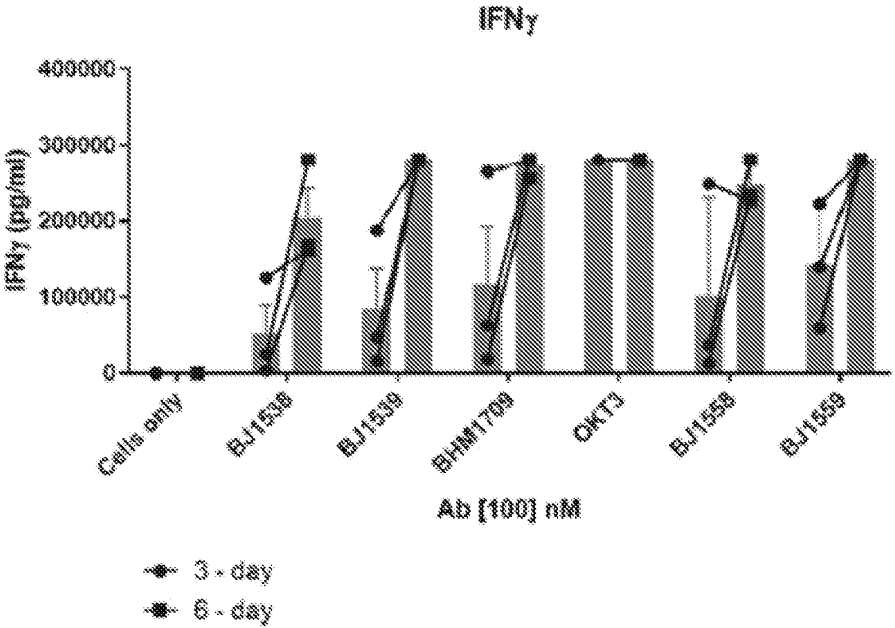


FIG. 94A

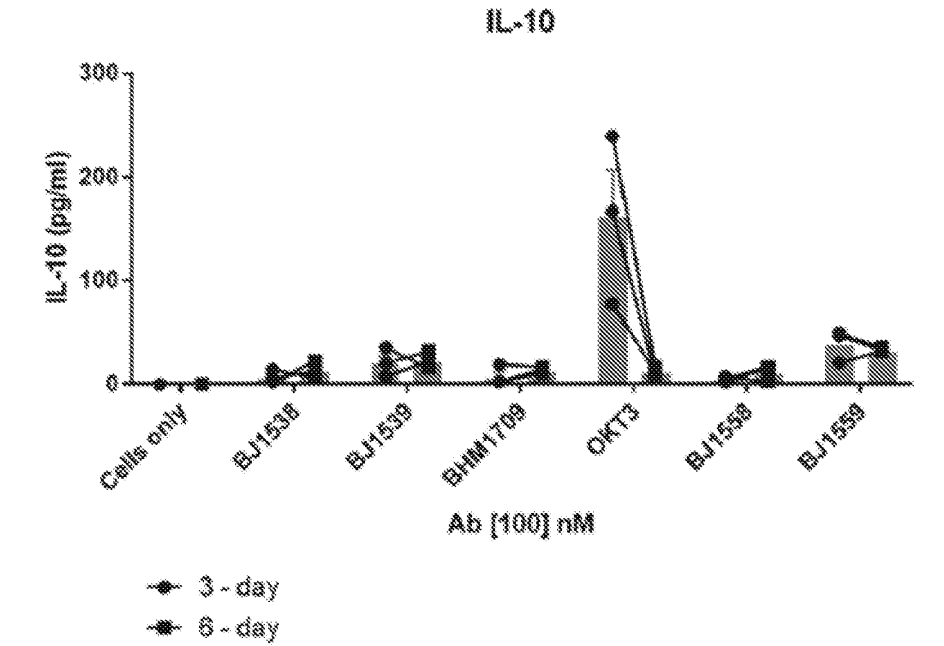


FIG. 94B

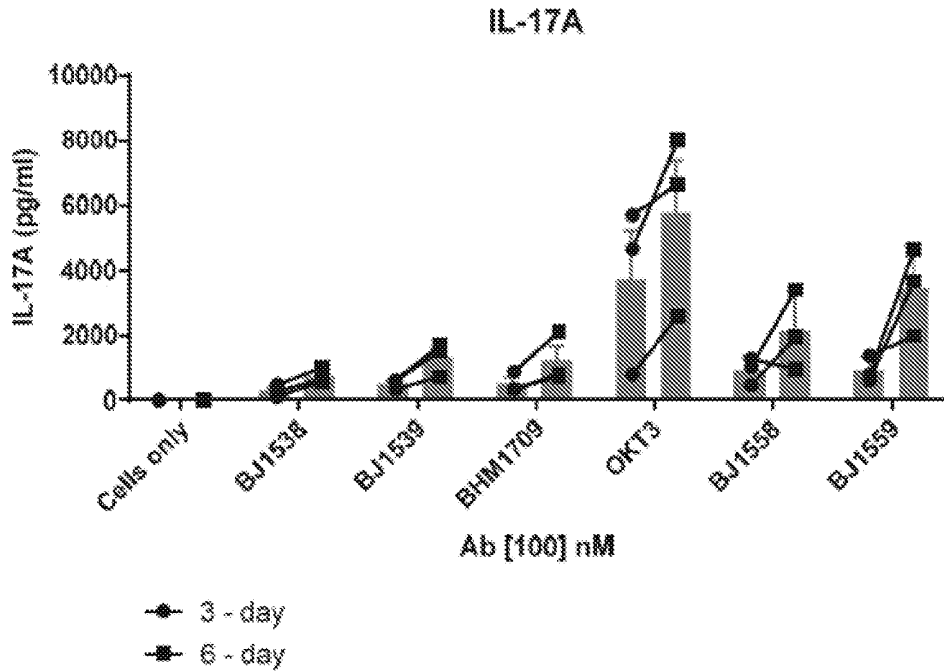


FIG. 94C

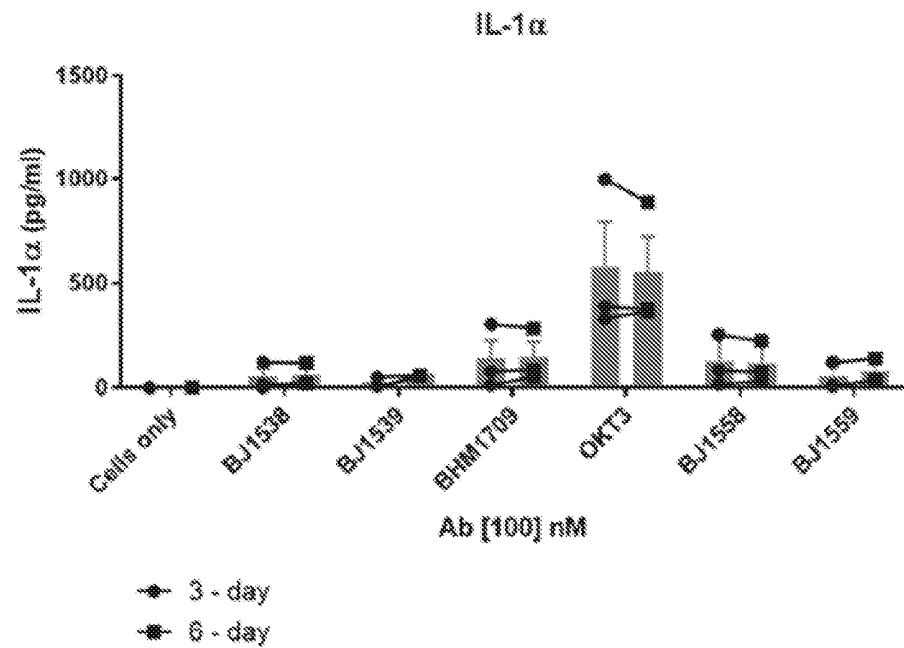


FIG. 94D

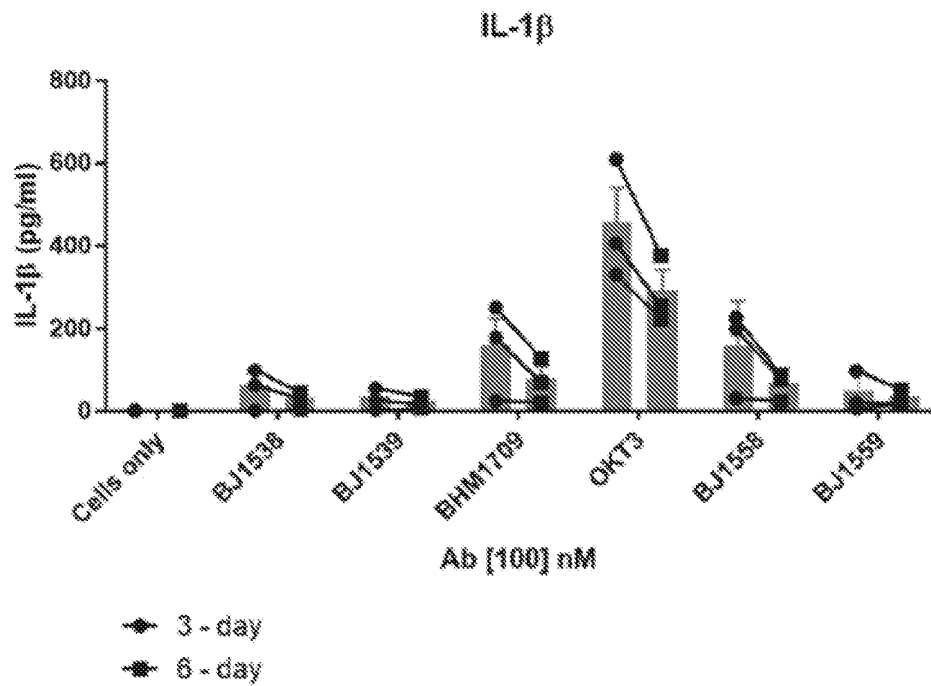


FIG. 94E

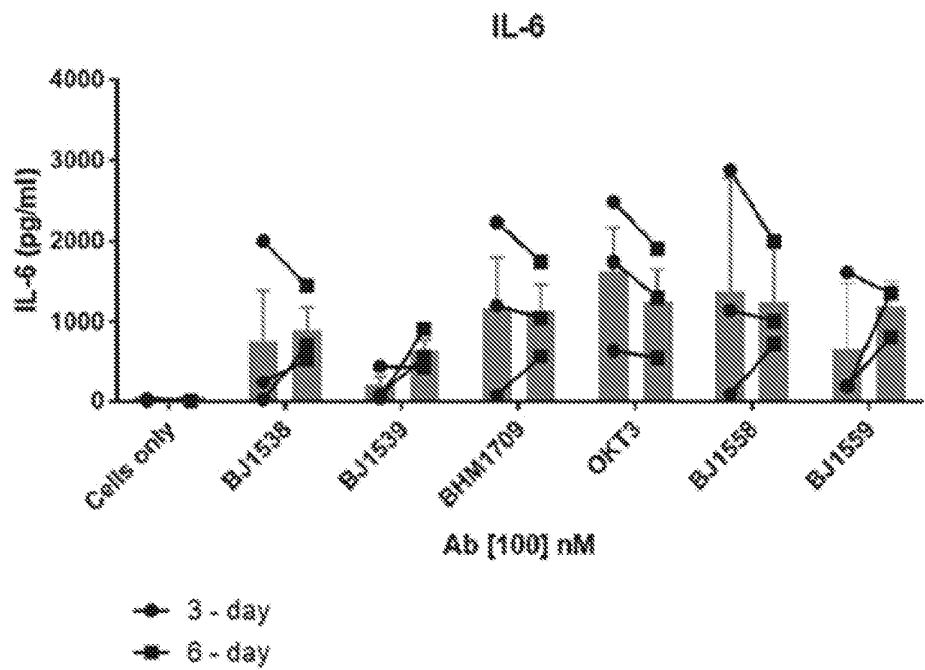


FIG. 94F

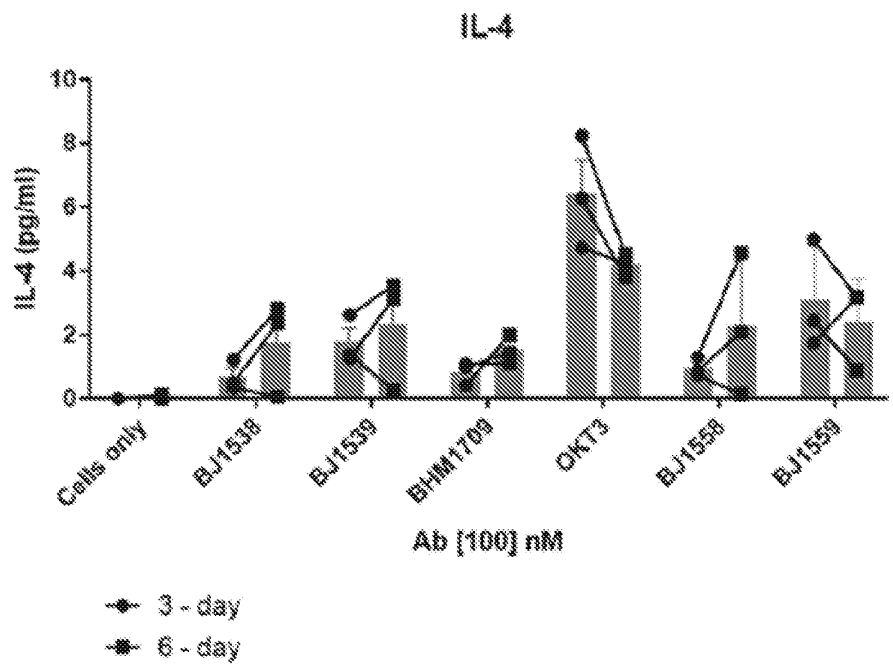


FIG. 94G

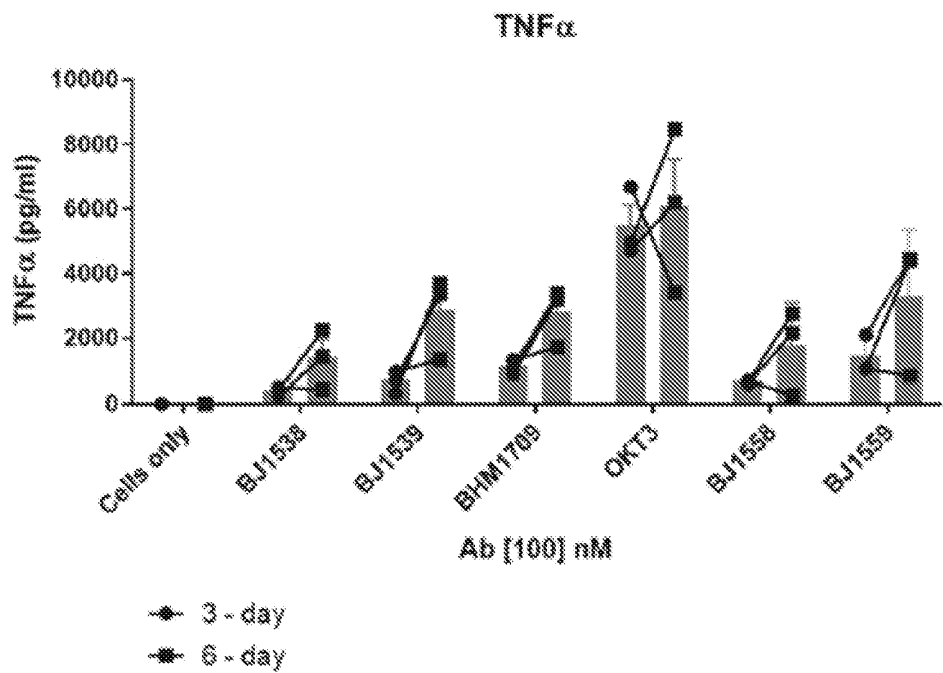


FIG. 94H

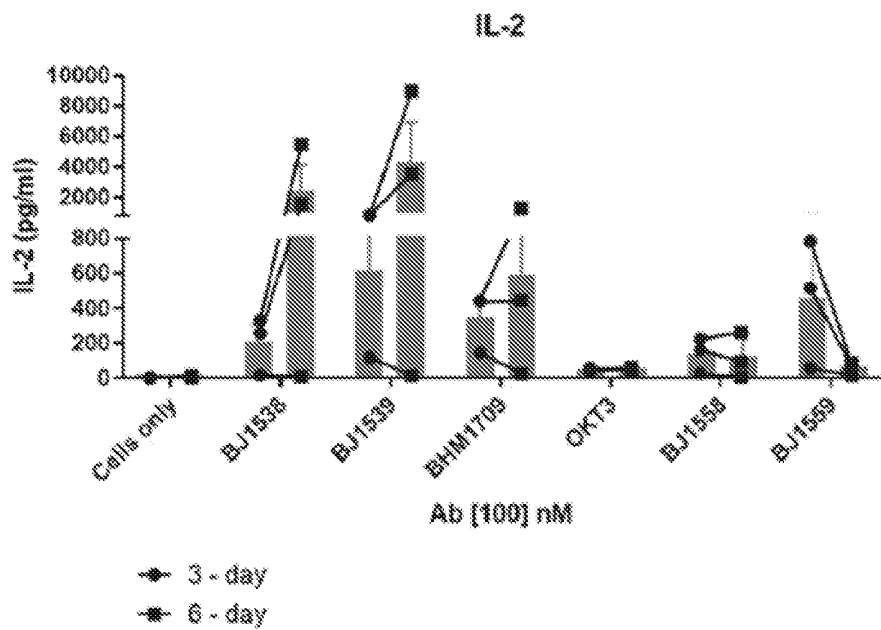


FIG. 94I

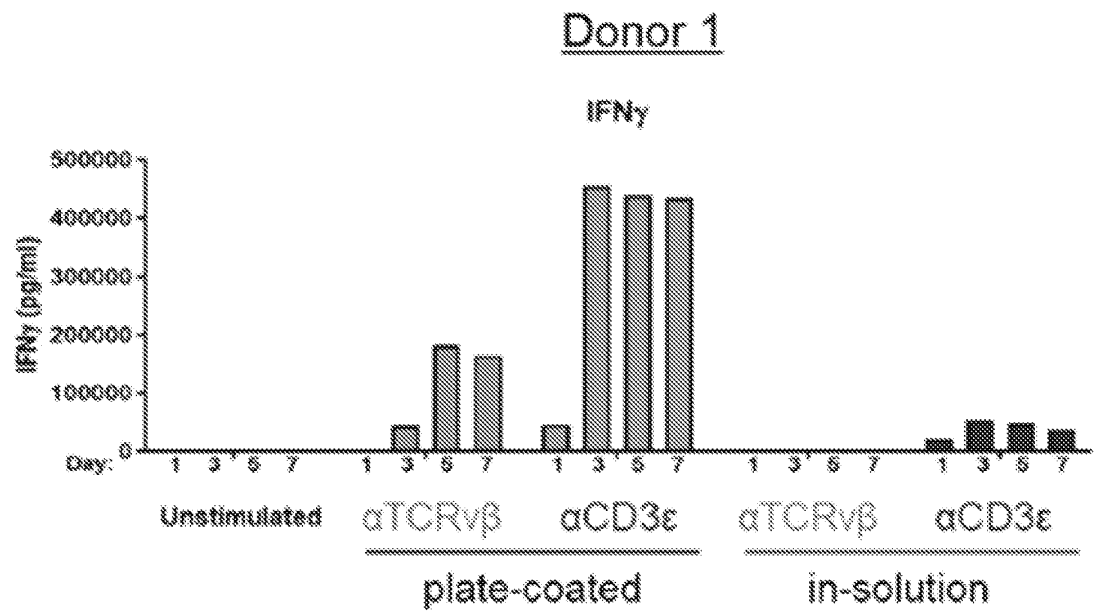


FIG. 95A

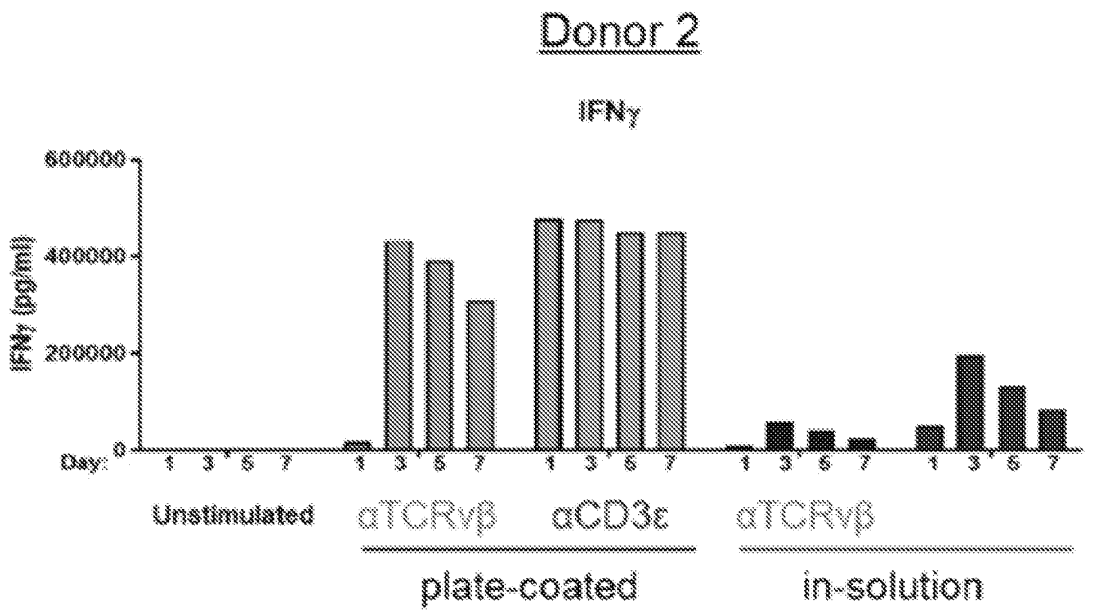


FIG. 95B

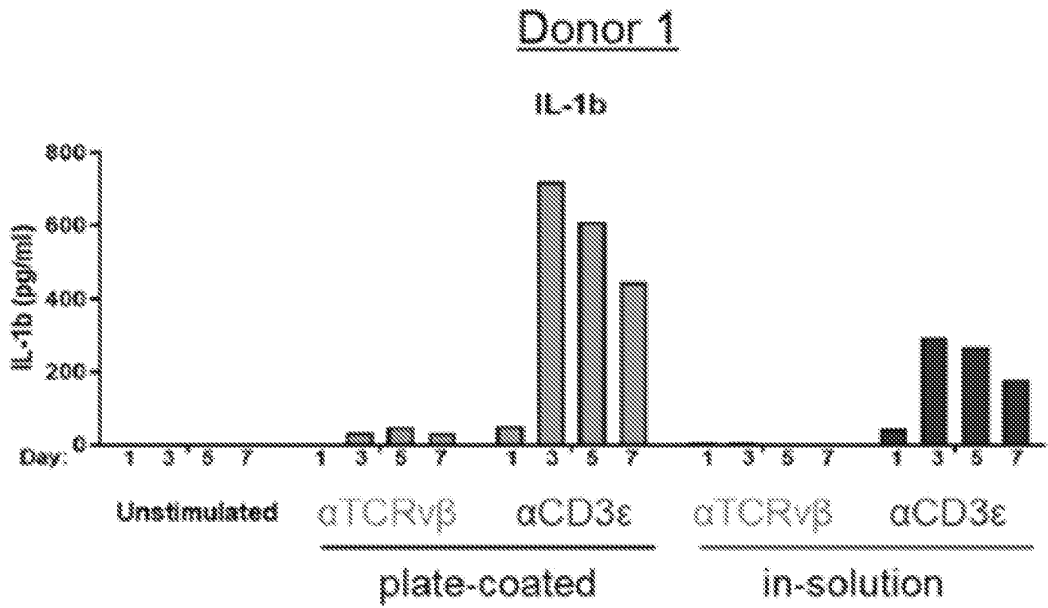


FIG. 95C

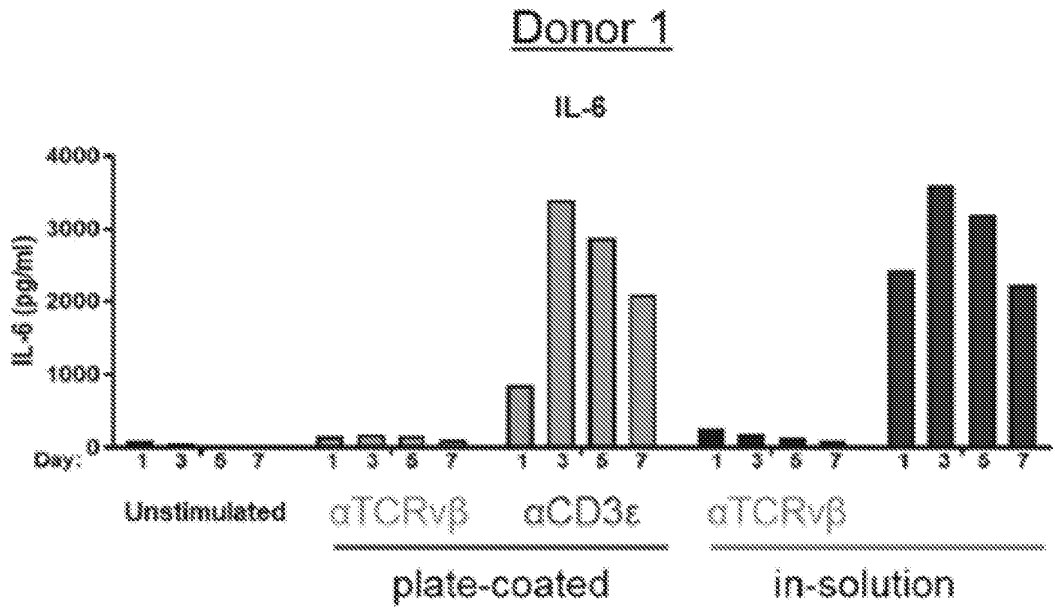


FIG. 95D

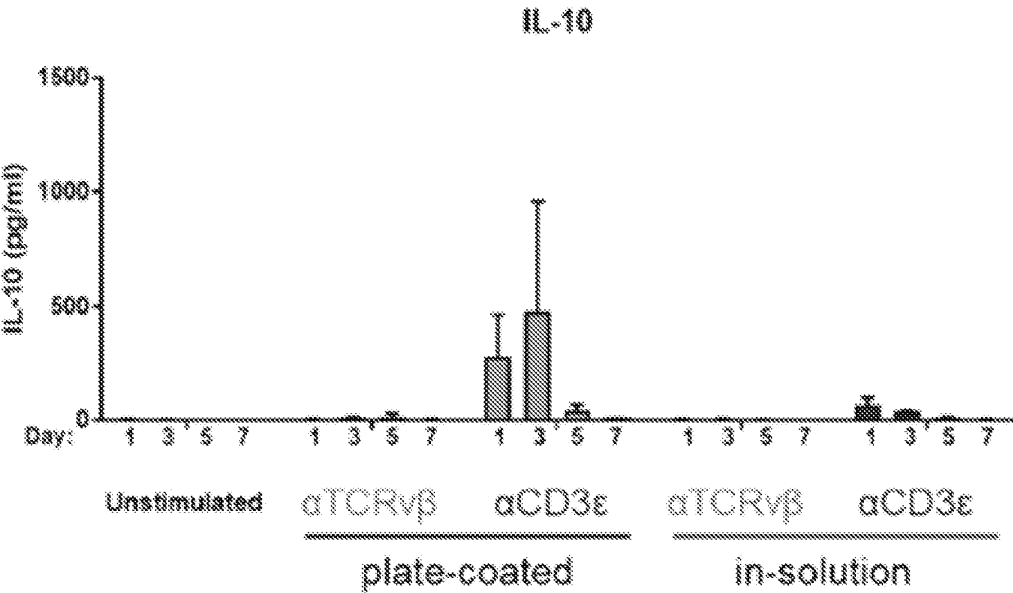


FIG. 95E

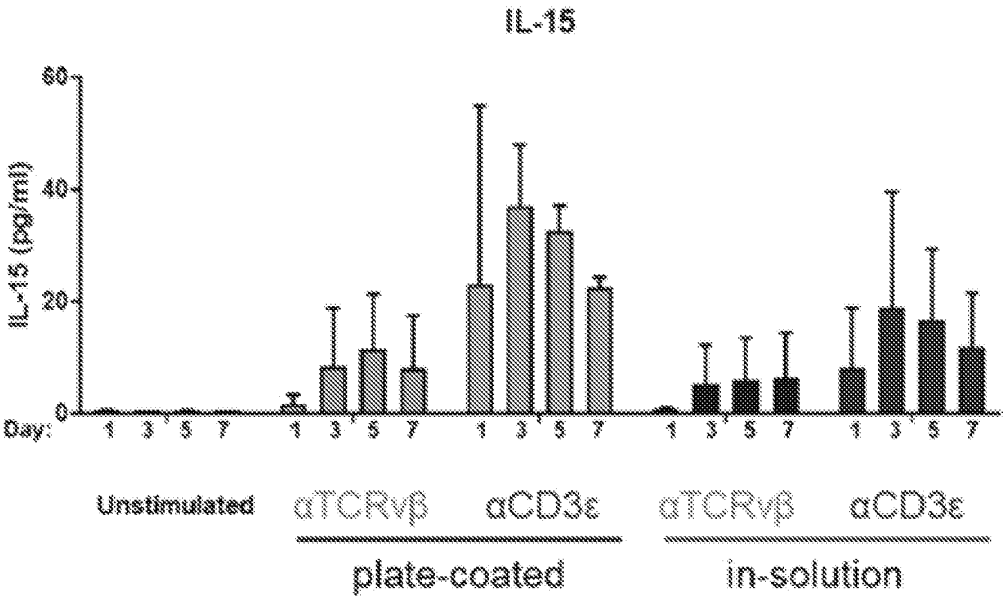


FIG. 95F

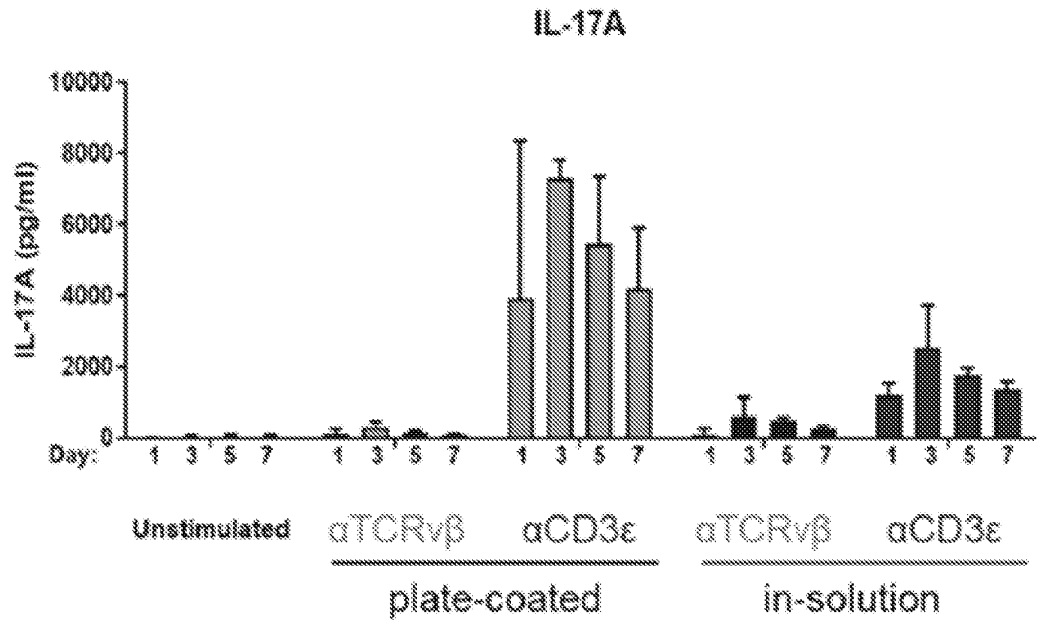


FIG. 95G

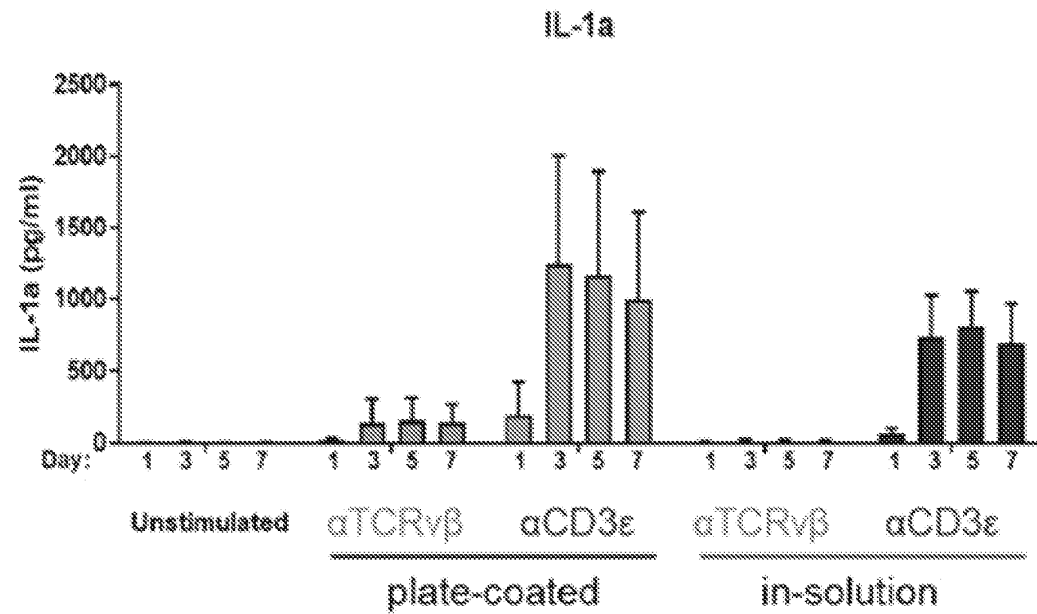


FIG. 95H

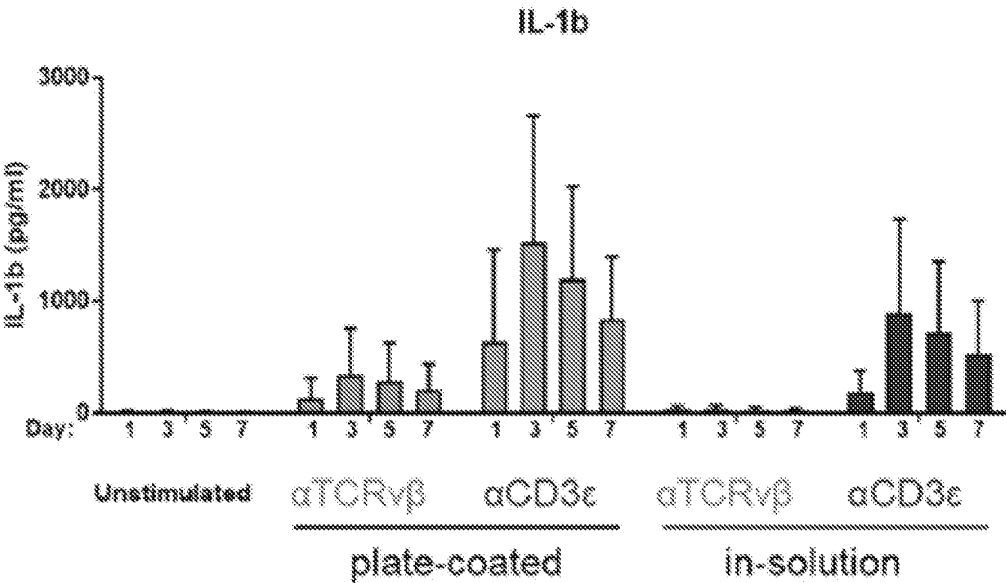


FIG. 95I

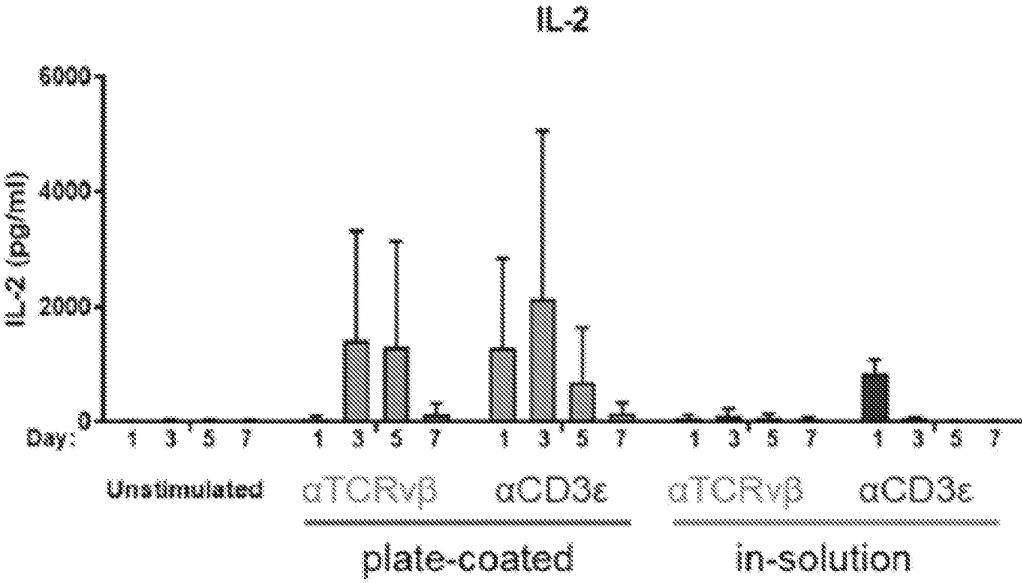


FIG. 95J

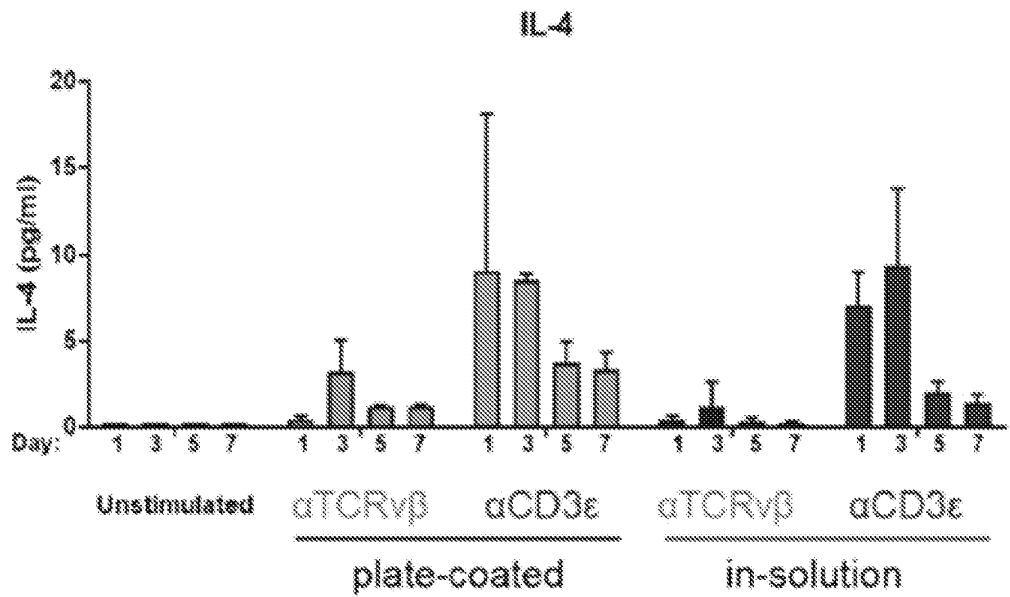


FIG. 95K

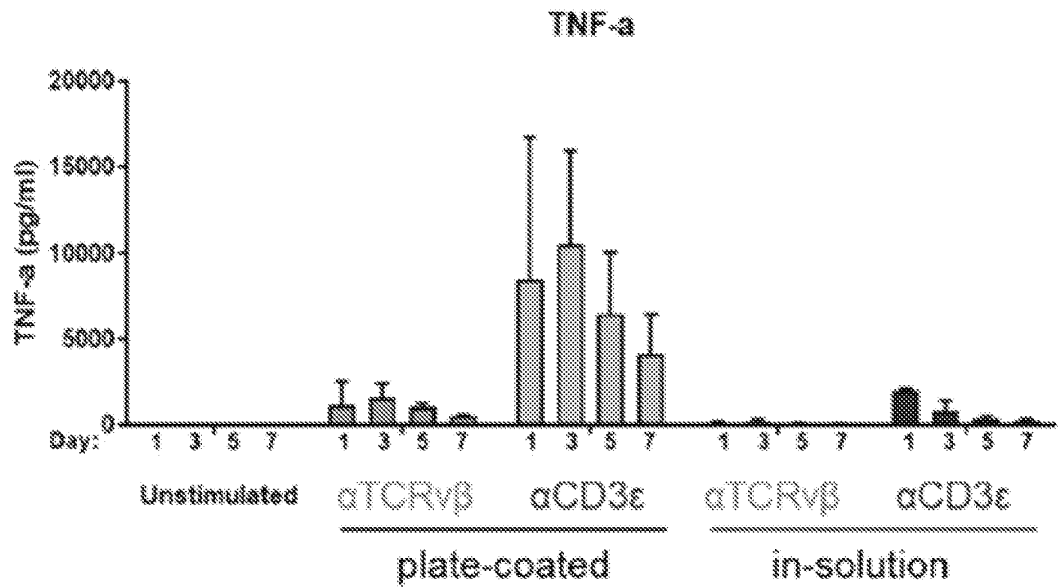


FIG. 95L

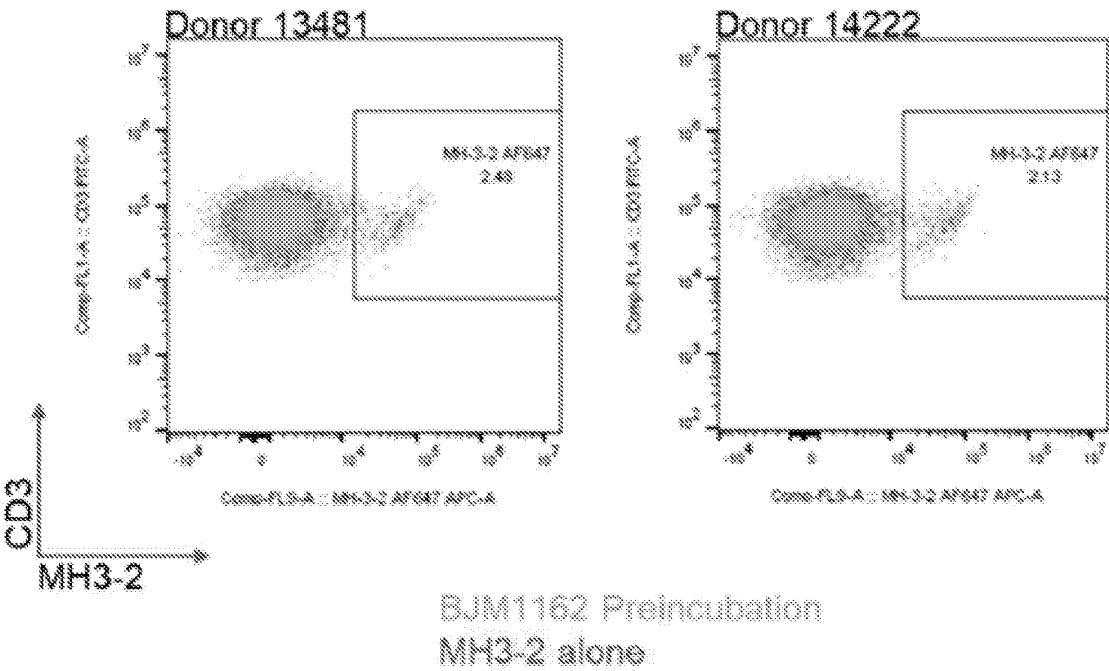


FIG. 96

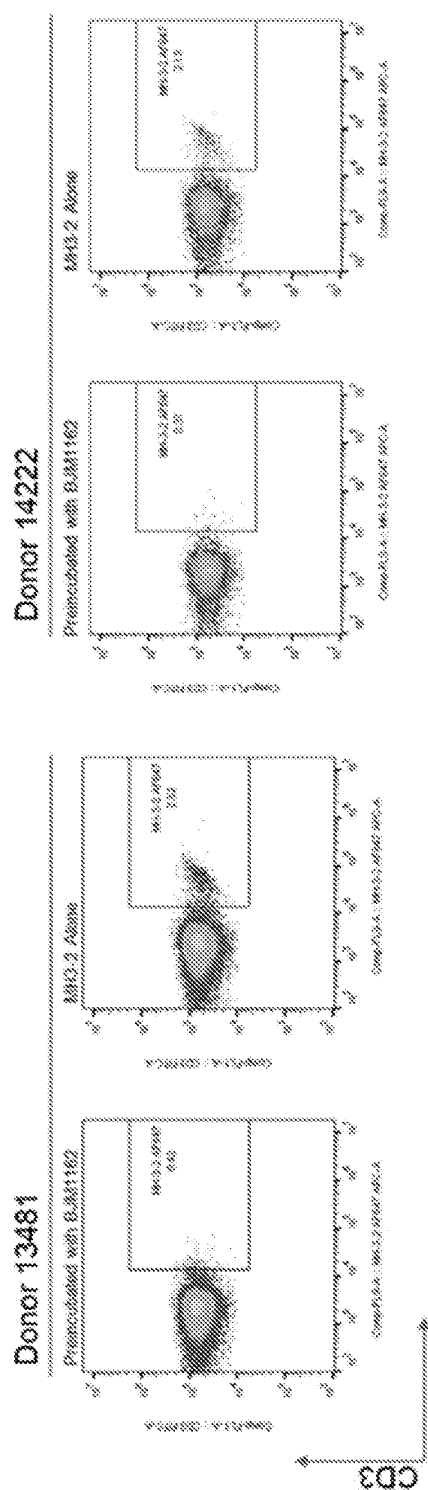


FIG. 97

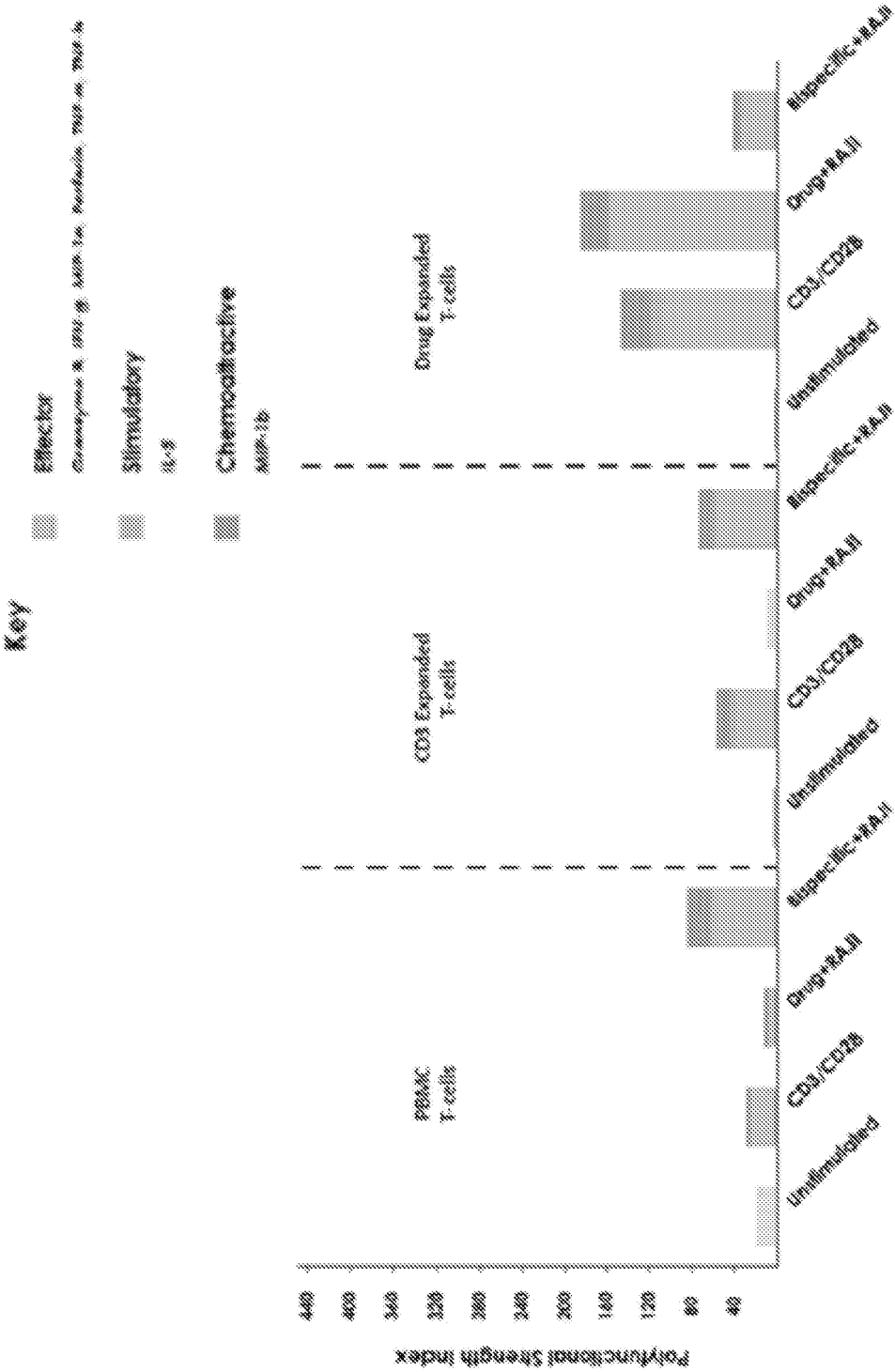


FIG. 98A

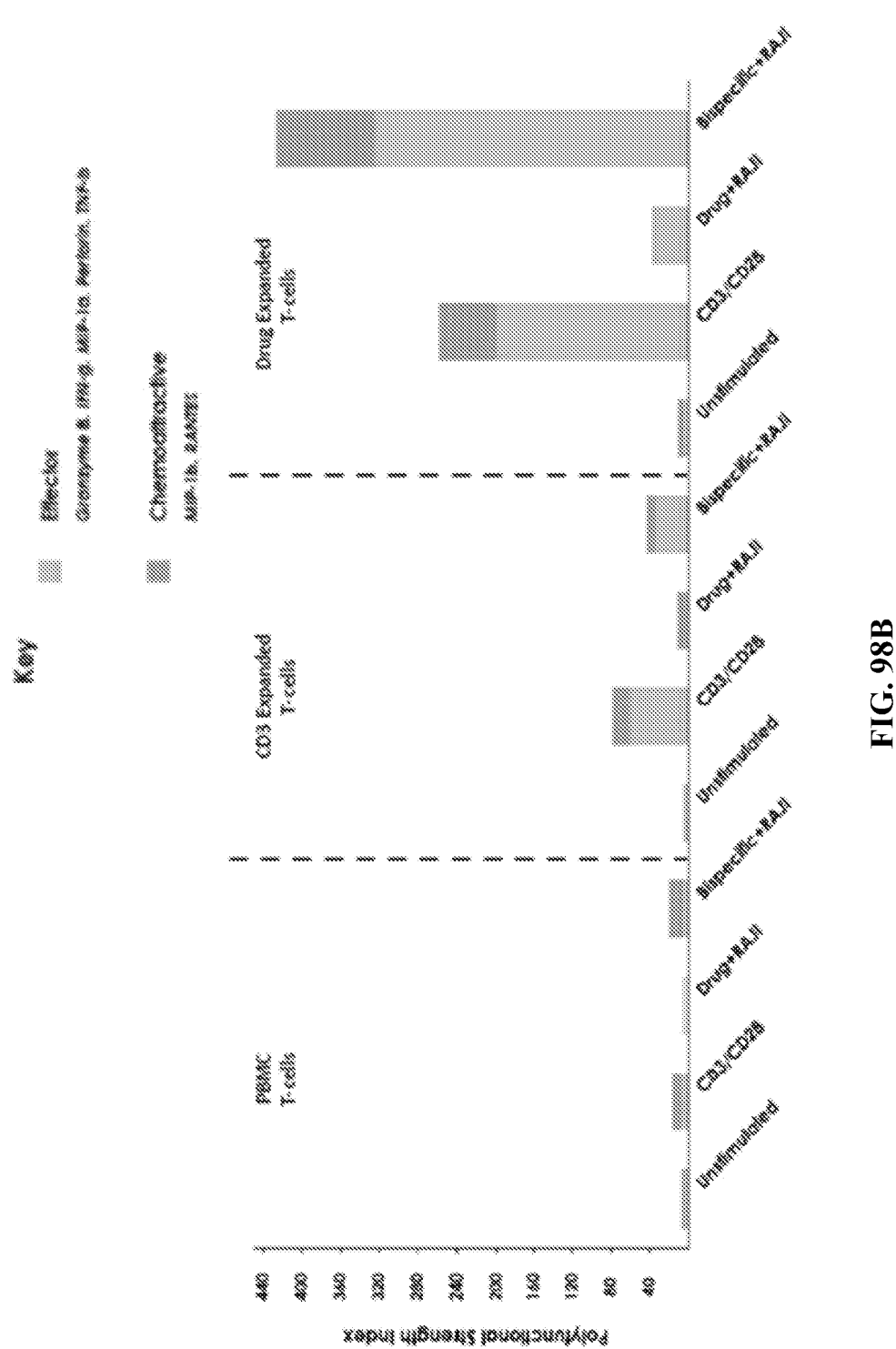


FIG. 98B

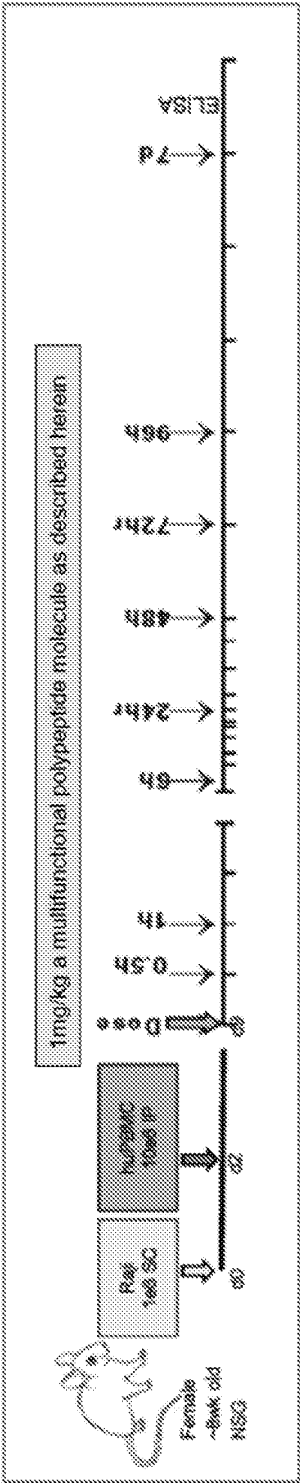


FIG. 99

Table 9: Alignment of TCRBV amino acid sequences

Gene	5'UTR-1802T	CDS1-1802T	5'UTR-1802T	CDS2-1802T	5'UTR-1802T	CDS3-1802T
	(1-26)	(27-38)	(39-53)	(54-65)	(66-104)	(105-117)
	A	B	BC	C	C'	C''
	(1-15)	(16-26)	(27-38)	(39-46)	(47-53)	(54-65)
	1	10	15	16	23	26
	2	30	34	42	46	47
	3	55	56	65	66	74
	75	84	85	89	96	97
	104	105				
	117					
	128					
	139					
	150					
	161					
	172					
	183					
	194					
	205					
	216					
	227					
	238					
	249					
	260					
	271					
	282					
	293					
	304					
	315					
	326					
	337					
	348					
	359					
	370					
	381					
	392					
	403					
	414					
	425					
	436					
	447					
	458					
	469					
	480					
	491					
	502					
	513					
	524					
	535					
	546					
	557					
	568					
	579					
	590					
	601					
	612					
	623					
	634					
	645					
	656					
	667					
	678					
	689					
	700					
	711					
	722					
	733					
	744					
	755					
	766					
	777					
	788					
	799					
	810					
	821					
	832					
	843					
	854					
	865					
	876					
	887					
	898					
	909					
	920					
	931					
	942					

FIG. 100

TR8V6-1	NADVQTPRFXVLKT QDXTLLCAQD NQH.....NG NNNNQD QDGLLIY SAA.....EGT TNGZVP.N GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-2	NADVQTPRFXVLKT QDXTLLCAQD NQH.....EY NNNNQD QDGLLIY SVG.....EGT TNGZVP.D GNVNRL.NK QNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-3	NADVQTPRFXVLKT QDXTLLCAQD NQH.....EY NNNNQD QDGLLIY SVG.....EGT TNGZVP.D GNVNRL.NK QNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-4	TACITQAPTQSILAA QDXTLLCAQD NQH.....NA NNNNQD QDGLLIY SNT.....AGT TNGZVP.D GNVNRL.NK QNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-5	NADVQTPRFXVLKT QDXTLLCAQD NQH.....EY NNNNQD QDGLLIY SVG.....AGI TNGZVP.N GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-6	NADVQTPRFXVLKT QDXTLLCAQD NQH.....NY NNNNQD QDGLLIY SVG.....AGI TNGZVP.N GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-7	NADVQTPRFXVLKT QDXTLLCAQD NQH.....EY NNNNQD QDGLLIY SVA.....AAL TNGZVP.N GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-8	NADVQTPRFXVLKT QDXTLLCAQD NQH.....CY NNNNQD QDGLLIY SAA.....AGT TNGZVP.N GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V6-9	NADVQTPRFXVLKT QDXTLLCAQD NQH.....CY NNNNQD QDGLLIY SVA.....AGI TNGZVP.D GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V7-1	QADVQSLSHNVARK QDXTLLCAQD NQH.....NA NNNNQD QDGLLIY FQD.....NQA ADGGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V7-2	QADVQSPSHKXTER QDXTLLCAQD NQH.....TA NNNNQD QDGLLIY FQD.....NQA RNSGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V7-3	QADVQSPSHKXTER QDXTLLCAQD NQH.....TA NNNNQD QDGLLIY FQD.....NQA ADGGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V7-4	QADVQSPSHKXTER QDXTLLCAQD NQH.....VT NNNNQD QDGLLIY FQD.....CAG RNSGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V7-5	QADVQSPSHKXTER QDXTLLCAQD NQH.....VS NNNNQD QDGLLIY FNY.....EAG QDGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V7-7	QADVQSPSHKXTER QDXTLLCAQD NQH.....AT NNNNQD QDGLLIY FNY.....EAG RNSGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V7-8	QADVQSPSHKXTER QDXTLLCAQD NQH.....VS NNNNQD QDGLLIY FQD.....EAG LNSGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V7-9	QADVQSPSHKXTER QDXTLLCAQD NQH.....NR NNNNQD QDGLLIY FQD.....EAG LNSGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V8	QDVTQTPRFXVLKT QDXTLLCAQD NQH.....LS NNNNQD QDGLLIY FNY.....GEE RNSGLPND RFAZRP.EG GISTLIQRTQD QDZTVYTC ASSE
TR8V10-1	QADVQSPSHKXTER QDXTLLCAQD NQH.....NS NNNNQD QDGLLIY SVG.....VQD TNGZVP.D GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V10-2	QADVQSPSHKXTER QDXTLLCAQD NQH.....EY NNNNQD QDGLLIY SAA.....AGI TNGZVP.D GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V10-3	QADVQSPSHKXTER QDXTLLCAQD NQH.....EY NNNNQD QDGLLIY SVG.....VQD TNGZVP.D GNVNRL.NK RNFPLRLSAAAP QDZTVYTC ASSE
TR8V11-1	EADVQSPSHKXTER QDXTLLCAQD NQH.....AT NNNNQD QDGLLIY FQD.....EAV VEDGLPND RFAZRP.EG VESTLIQRTQD QDZTVYTC ASSE
TR8V11-2	EADVQSPSHKXTER QDXTLLCAQD NQH.....AT NNNNQD QDGLLIY FQD.....NQV VEDGLPND RFAZRP.EG VESTLIQRTQD QDZTVYTC ASSE
TR8V11-3	EADVQSPSHKXTER QDXTLLCAQD NQH.....NT NNNNQD QDGLLIY FQD.....EAA VEDGLPND RFAZRP.EG VESTLIQRTQD QDZTVYTC ASSE

FIG. 100 (continued)

788V12-1	CAQVIGPBNKVTEN QGVTLKCP1 SOH.....ND LMYQTF VQGLLW PCS.....MTL YQDQNSGD *FZAGWP.DV SESTLIQFSEP KQGLTYC ASSE
788V12-2	CAGLIQSEKHEVTEN QGVTLKCP1 FOK.....NF LPWQCTF VQGLLWY FNS.....*SI IQDQNPTE RFZASRP.QS SESTLIQFSEZ QDSAVYTC ASBL
788V12-3	CAGVIGPBNKVTEN QGVTLKCP1 SOH.....NS LPWQCTX KQGLLWY FNS.....WVP IQDQNPED RFZASRP.NA SESTLIQFSEP KDSAVYTC ASBL
788V12-4	CAGVIGPBNKVTEN QGVTLKCP1 SOH.....OT LPWQCTX KQGLLWY FNS.....WVP IQDQNPED RFZASRP.NA SESTLIQFSEP KDSAVYTC ASBL
788V12-5	CARYTTPBNKVTEN QGVTLKCP1 LOK.....NT VFWQCTX KQGLLWY FNS.....RAP IQDQNPED RFZASRP.EA TLATLIQFSEP KDSAVYTC ASGL
788V13	AAGVIGPBNKHEK KETATLKCP1 FNS.....OT VFWQCTP QGVTLKCP FVE.....KMQ SKQGLP.D RFZAGQK.QD YHSELNWSLEL QDSALYTC ASGL
788V14	EAGVTPBNKSVIEK QGVTLKCP1 SOH.....DN LYWYBWM QGLIFLL FVK.....EKK QDSQNPKN RFZASRP.QS YISTLWQWALL KDSQVYTC ASQ
788V15	CARYTTPBNKVTQF QGVTLKCP1 LOK.....WV KMYQCKS QKAPLLE FVD.....KUF NHEASTP.D KIQGNRP.NT SECFIDIRSEGL QDSALYTC ATSR
788V16	SEEVNQTBNKLVQDE QGVTLKCP1 KOK.....ST VFWQCVL KHEFFLLS FOK.....ENV FULTQNPKE RFZASCL.FN SECSLIQFATKL KDSAVYTC ASQ
788V17	EPCVQTPBNKVTEN QGVTLKCP1 SOH.....KP UNWQCNL KQGLLWY FOK.....ONI AYDQNPKE RFZASRP.NO TOSTLIKHFSEP KDSAVYTC SSE
788V18	NAGVQBNKHLVBAR QGVTLKCP1 KOK.....SE VFWQCLP KECLEFMY LOK.....ENI IQDQNPKE RFZASRP.KQ QGLLIQGVTR QDSALYTC ASRP
788V19	COGITQSPFLFNEZ QGVTLKCP1 LOK.....CA KMYNQCP QGLALYV SOI.....VND FQKQSLA.E QVYSRE.KK ESFFLTVTZACK NPTATYTC ASSE
788V20-1	GAVYQBNKSVICS QGVTLKCP1 EQ.....ATF NFWNQCP KQSLKMAT SNES.....SEA TYEQWED RFILNHA.EI TLATITVTASRP KDSBYTC SAR
788V21-1	QTVTQBNKLLVKAZ KQANNDVPI FAK.....SY VFWHKKL KEELEFVY FOK.....EEL IQRATINE RFZAGS.FN SECTLIQFSEZ QDSALYTC ASSE
788V23-1	NAGVTPBNKLVQGR QGVTLKCP1 KOK.....TP VFWQCNQ KHEFFLLS FOK.....EQV LQZETENKK RFZAGCP.FN APCSLALSEEP QDSALYTC ASQ
788V24-1	DADVTPBNKATKT QGVTLKCP1 KOK.....OR KMYNQCP QGLALYV SFO.....VMS INKQSL.D QVYSRO.AQ APFSLSLSEAP NQATLYTC ATSEL
788V25-1	EADVTPBNKLVGT QGVTLKCP1 KOK.....DK KMYNQCP QHELEFVY SVO.....VMS TEKQDL.S KETYSKI.KT ESFFLTREASRP QKISQYTC ASSE
788V26	DAVYTPBNKLVGT QGVTLKCP1 KOK.....VT KMYNQCP QGLALYV SFO.....TOS TEKQDL.S KETYS*N.YI ASFFLTREAST NQTSVYTC ASSE
788V27	EAGVTPBNKLVYTF QGVTLKCP1 KOK.....SY KMYNQCP QGLAQVY SNH.....VEY TQKQNP.E QVYSRO.KK RHEFFLLESEP NQTSYTC ASBL
788V28	QVETQBNKSVLQRY QGVTLKCP1 KOK.....EK KMYNQCP QGLALYV SVD.....VKK KEEQGLP.E QVYSRE.KK KESFLLESEST NQTSYTC ASBL
788V29-1	GAVLSQBNKSDQGR QGVTLKCP1 SOV.....TM KMYNQCP QGLALYV ANQO.....SEA TYEQWED RFZASRP.NL TOSTLYWNSRP KDSBYTC SVE
788V30	QVTLQBNKATLVQPV QGVTLKCP1 QTS.....NPN LTNQCAA QKQGLLYV SVO.....IG QVYSRP.Q KLEASRP.QD RHEFFLLEKLL QDSBYTC AMS

FIG. 100 (continued)

SEQ ID NO: 3377	a5-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVENKRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3378	c1d2d4-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVNKKVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3379	h3-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVNRRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3380	f5-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVEDRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3381	e4b6g3c8h2c2d1a6c3a3e6d6g2-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVEDRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3382	e3-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVEDRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3383	d5-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVEDRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3384	d3f1g1-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVEDRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3385	c4f4f2a2a1-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVEDRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3386	b5h4a4-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVNRRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3387	h2c5b3e2g4h6-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVGDRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3388	h1-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVGNRRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3389	b4e1f3-VL	DIQMTQSPFSLASASGVDRVITITCKASQNVGNRRVANWQKQKPKAPKALIIYSSSHRYKGVPS 60
SEQ ID NO: 3377	a5-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3378	c1d2d4-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3379	h3-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3380	f5-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3381	e4b6g3c8h2c2d1a6c3a3e6d6g2-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3382	e3-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3383	d5-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3384	d3f1g1-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3385	c4f4f2a2a1-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3386	b5h4a4-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3387	h2c5b3e2g4h6-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3388	h1-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107
SEQ ID NO: 3389	b4e1f3-VL	RFSGSGGTFTLTISIQPEDFATYFCQKFSPYPLTFQGGTLEIK 107

SEQ ID NO: 3390	A-H. 52-VH	SEQ ID NO: 3414	f2-VH
SEQ ID NO: 3391	A-H. 53-VH	SEQ ID NO: 3415	d3-VH
SEQ ID NO: 3392	A-H. 54-VH	SEQ ID NO: 3416	a4e4-VH
SEQ ID NO: 3393	A-H. 51-VH	SEQ ID NO: 3417	d2-VH
SEQ ID NO: 3394	A-H. 50-VH	SEQ ID NO: 3418	g1-VH
SEQ ID NO: 3395	A-H. 47-VH	SEQ ID NO: 3419	c6-VH
SEQ ID NO: 3396	A-H. 49-VH	SEQ ID NO: 3420	g2-VH
SEQ ID NO: 3397	A-H. 48-VH	SEQ ID NO: 3421	b4-VH
SEQ ID NO: 3398	A-H. 45-VH	SEQ ID NO: 3422	a6-VH
SEQ ID NO: 3399	A-H. 46-VH	SEQ ID NO: 3423	a2g4-VH
SEQ ID NO: 3400	c2-VH	SEQ ID NO: 3424	b6f1-VH
SEQ ID NO: 3401	f5-VH	SEQ ID NO: 3425	g3-VH
SEQ ID NO: 3402	f3-VH	SEQ ID NO: 3426	d1-VH
SEQ ID NO: 3403	e2-VH	SEQ ID NO: 3427	h4-VH
SEQ ID NO: 3404	e1-VH	SEQ ID NO: 3428	b2-VH
SEQ ID NO: 3405	c1-VH	SEQ ID NO: 3429	h6-VH
SEQ ID NO: 3406	a1-VH	SEQ ID NO: 3430	b1-VH
SEQ ID NO: 3407	b3-VH	SEQ ID NO: 3431	f4-VH
SEQ ID NO: 3408	h3-VH	SEQ ID NO: 3432	a3-VH
SEQ ID NO: 3409	c3-VH	SEQ ID NO: 3433	e6-VH
SEQ ID NO: 3410	a5b5c4-VH	SEQ ID NO: 3434	e3-VH
SEQ ID NO: 3411	d6-VH	SEQ ID NO: 3435	d4-VH
SEQ ID NO: 3412	h2-VH	SEQ ID NO: 3436	d5-VH
SEQ ID NO: 3413	c5-VH		

FIG. 102

A-H.52-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNIKY 60
 A-H.53-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNIKY 60
 A-H.54-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNIKY 60
 A-H.51-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNIKY 60
 A-H.50-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNIKY 60
 A-H.47-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNTKY 60
 A-H.49-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNTKY 60
 A-H.48-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFPGSGNTKY 60
 A-H.45-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFSAGSGNTKY 60
 A-H.46-VH QVQLVQSGAEVKKPGSSVKVSCKASGYSTLTGYIHWVRQAPGQGLEWMGWFFSAGSGNTKY 60
 c2-VH QVQLVQSGAEVKKPGSSVKVSCKASGGTFRLTYYIHWVRQAPGQGLEWMGRVYFPGSGNTKY 60
 f5-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTLTYYIHWVRQAPGQGLEWMGRVSPFGSGNTKY 60
 f3-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRISFPGSGNTKY 60
 e2-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRISFPGSGNTKY 60
 e1-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRVSPAGSGNVKY 60
 c1-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRVSPFGSGNTKY 60
 e1-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRVSPFGSGNTKY 60
 b3-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRVSPAGSGNVKY 60
 h3-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRISFPGSGNVKY 60
 c3-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRIFPGSGNTKY 60
 a5b5c4-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRIFPGSGNVKY 60
 d6-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRIFPGSGNTKY 60
 h2-VH QVQLVQSGAEVKKPGSSVKVSCKASGGTFRLTYYIHWVRQAPGQGLEWMGRVSPAGSGNVKY 60
 c5-VH QVQLVQSGAEVKKPGSSVKVSCKASGGTFRLTYYIHWVRQAPGQGLEWMGRISAGSGNVKY 60
 f2-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRISAGSGNTKY 60
 d3-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTLTYYIHWVRQAPGQGLEWMGRISAGSGNVKY 60
 a4e4-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTLTYYIHWVRQAPGQGLEWMGRISAGSGNVKY 60
 d2-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLTYYIHWVRQAPGQGLEWMGRISAGSGNVKY 60
 g1-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTLTYYIHWVRQAPGQGLEWMGRIFPGSGNVKY 60
 c6-VH QVQLVQSGAEVKKPGSSVKVSCKASGGTFRDXTYYIHWVRQAPGQGLEWMGRISAGSGNTKY 60
 g2-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTDXTYYIHWVRQAPGQGLEWMGRISAGSGNVKY 60
 b4-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTDXTYYIHWVRQAPGQGLEWMGRVSPAGSGNTKY 60
 a6-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTDXTYYIHWVRQAPGQGLEWMGRIFAGSGNTKY 60
 a2g4-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTDXTYYIHWVRQAPGQGLEWMGRISAGSGNVKY 60
 b6f1-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTDXTYYIHWVRQAPGQGLEWMGRISAGSGNTKY 60
 g3-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTDXTYYIHWVRQAPGQGLEWMGRISAGSGNIKY 60
 d1-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTDXTYYIHWVRQAPGQGLEWMGRISAGSGNTKY 60
 h4-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTDXTYYIHWVRQAPGQGLEWMGRVSPAGSGNTKY 60
 b2-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTDXTYYIHWVRQAPGQGLEWMGRIFAGSGNVKY 60
 h6-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTDXTYYIHWVRQAPGQGLEWMGRVSPAGSGNVKY 60
 b1-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTDXTYYIHWVRQAPGQGLEWMGRVSPAGSGNVKY 60
 f4-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTDXTYYIHWVRQAPGQGLEWMGRVSPAGSGNVKY 60
 a3-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTDXTYYIHWVRQAPGQGLEWMGRVSPAGSGNYRY 60
 e6-VH QVQLVQSGAEVKKPGSSVKVSCKASGTDFTLWYIHWVRQAPGQGLEWMGRVSPAGSGNYRY 60
 e3-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTLWYIHWVRQAPGQGLEWMGRISFPGSGNVKY 60
 d4-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTLWYIHWVRQAPGQGLEWMGRVSPAGSGNVKY 60
 d5-VH QVQLVQSGAEVKKPGSSVKVSCKASGHDFTLWYIHWVRQAPGQGLEWMGRVSPAGSGNTKY 60
 ***** * ***** , *** ;*

FIG. 102 (Continued)

FIG. 102 (Continued)

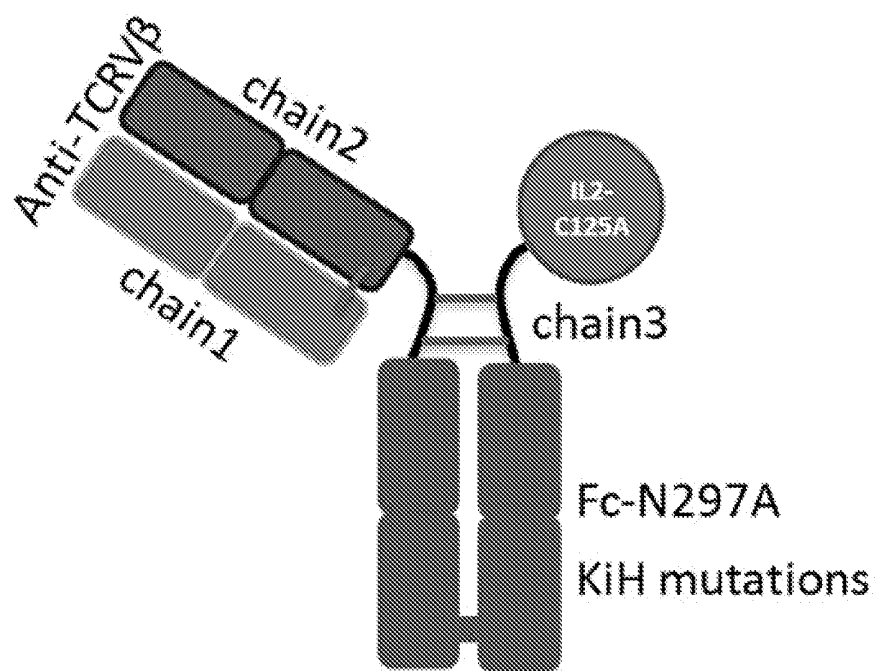


FIG. 103A

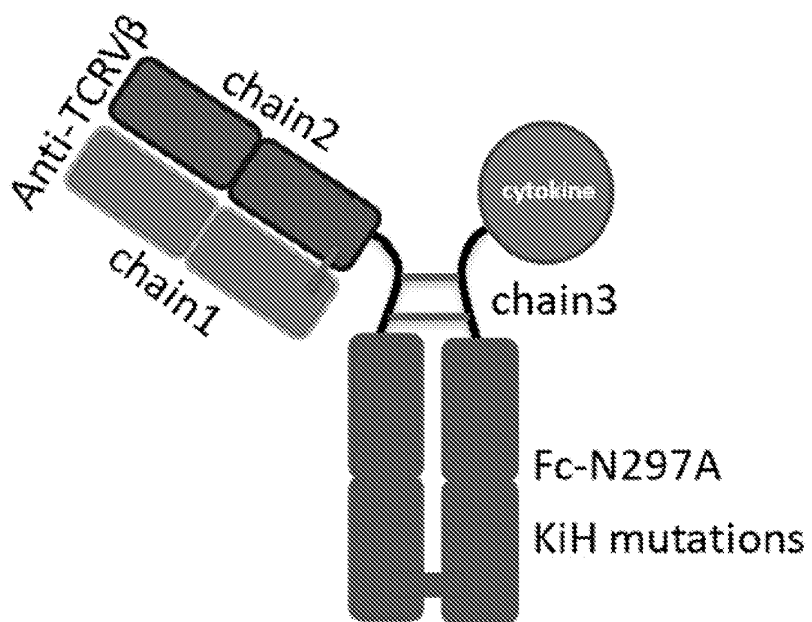


FIG. 103B

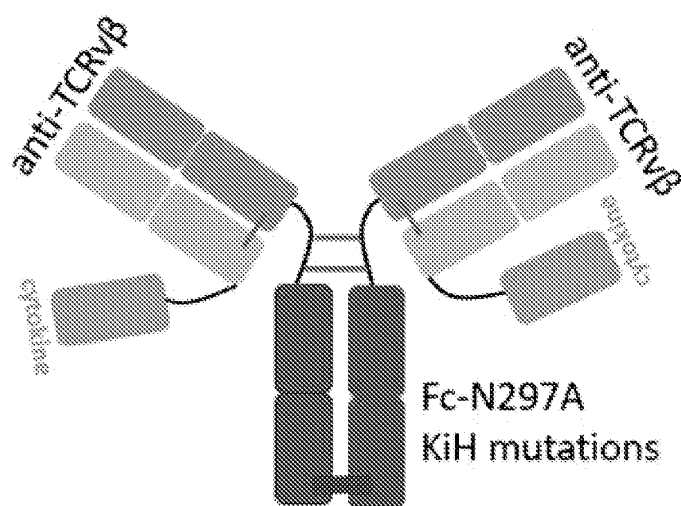


FIG. 103C

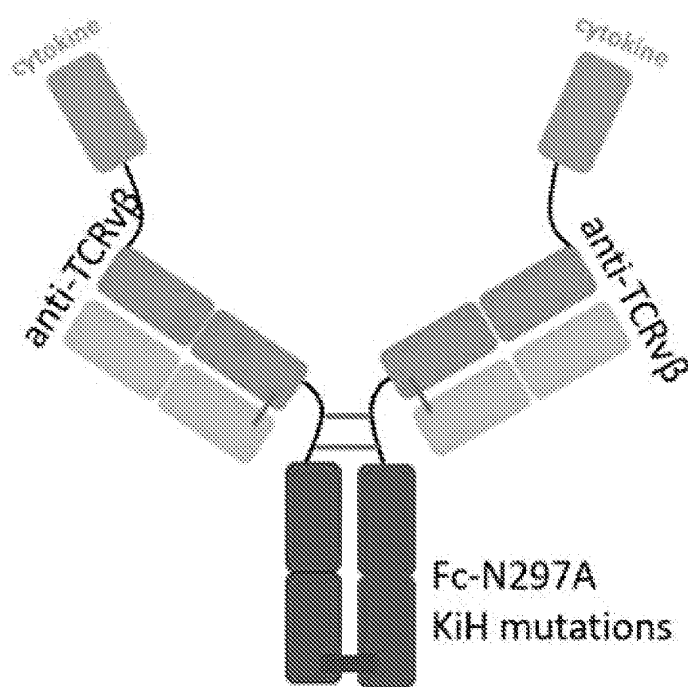


FIG. 103D

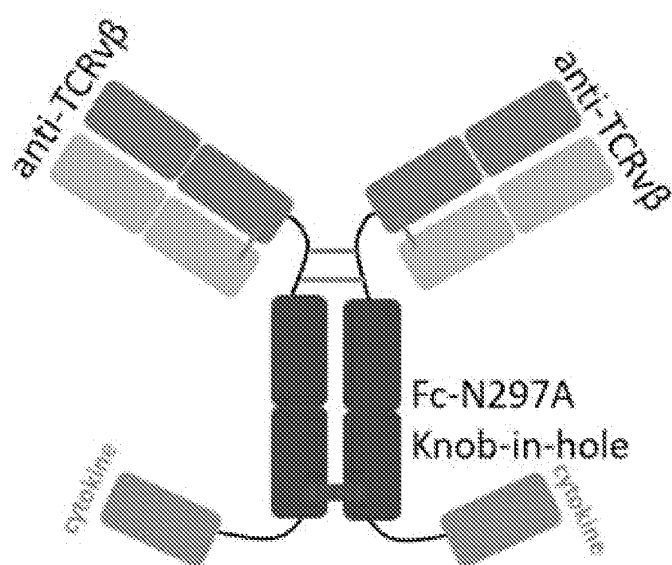


FIG. 103E

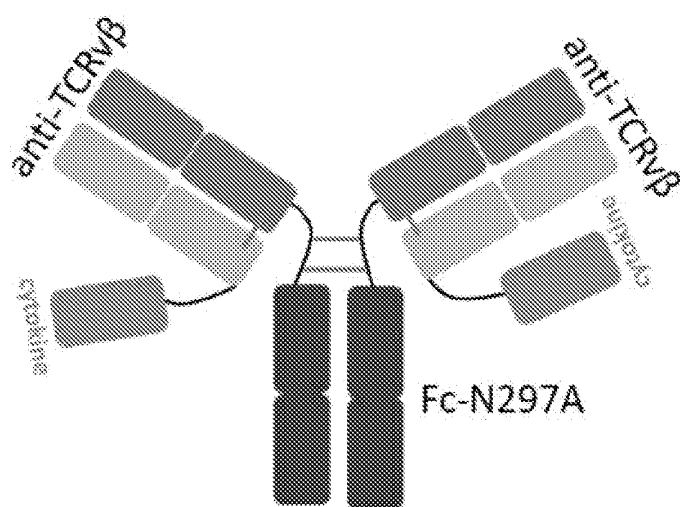


FIG. 103F

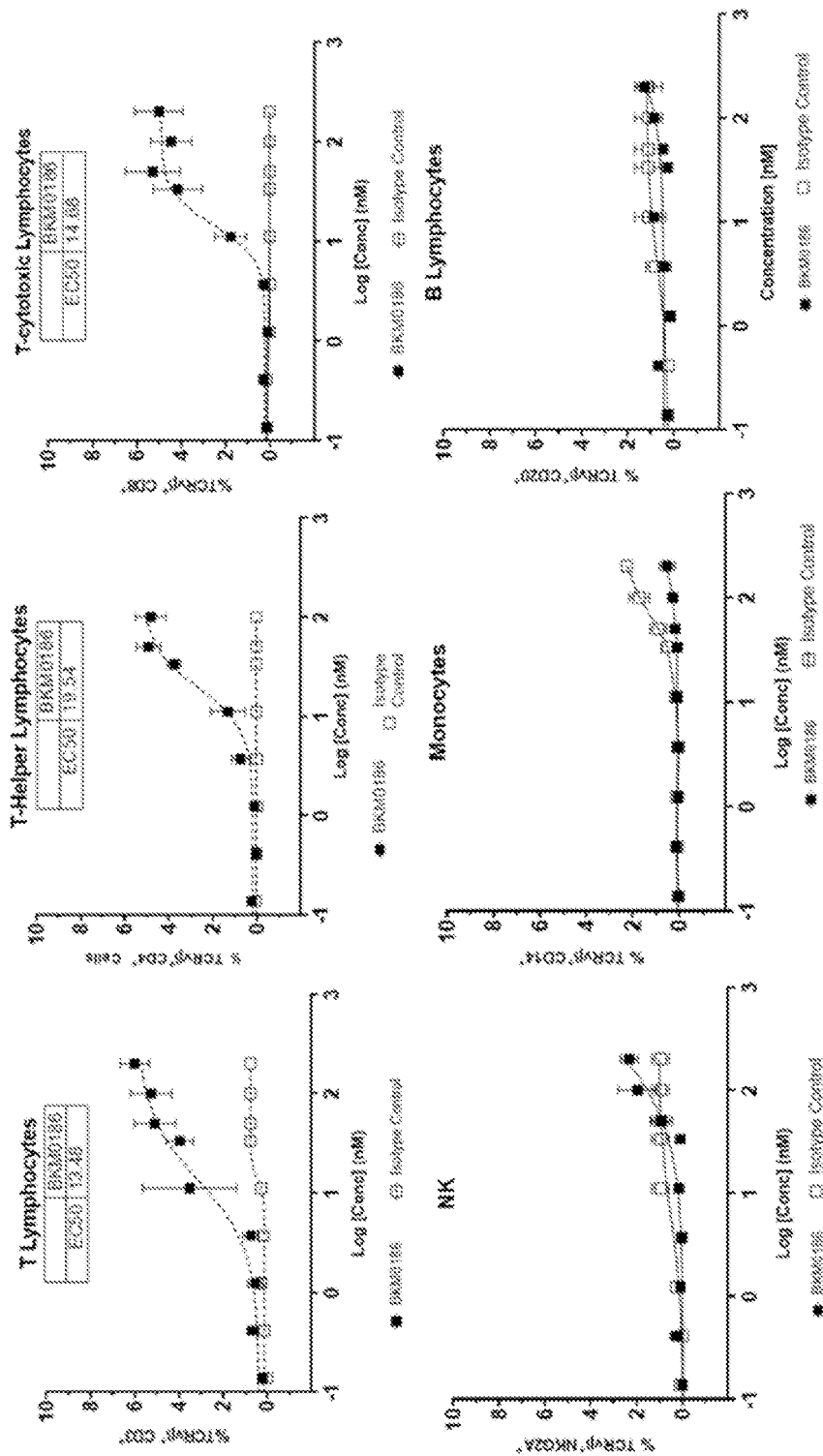


FIG. 104

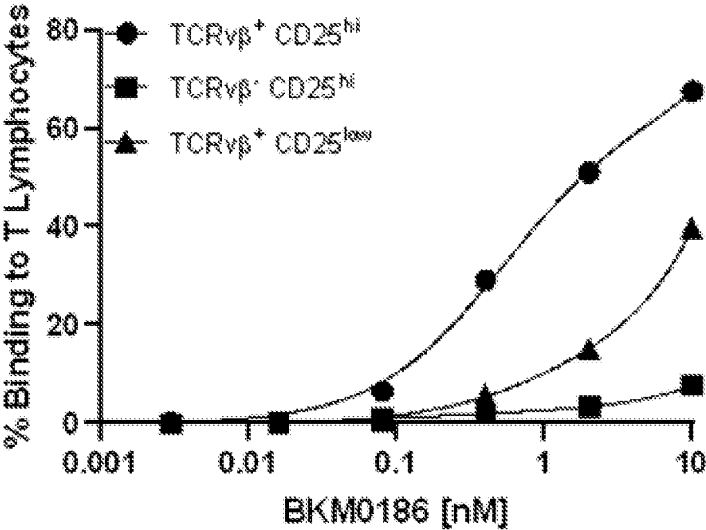


FIG. 105

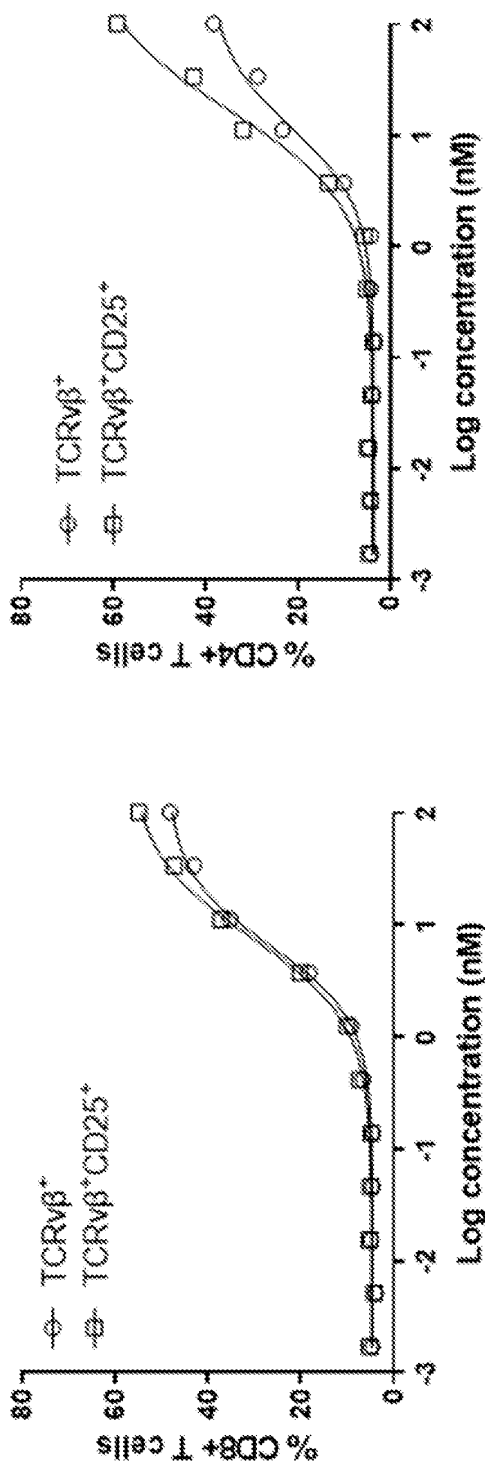


FIG. 106

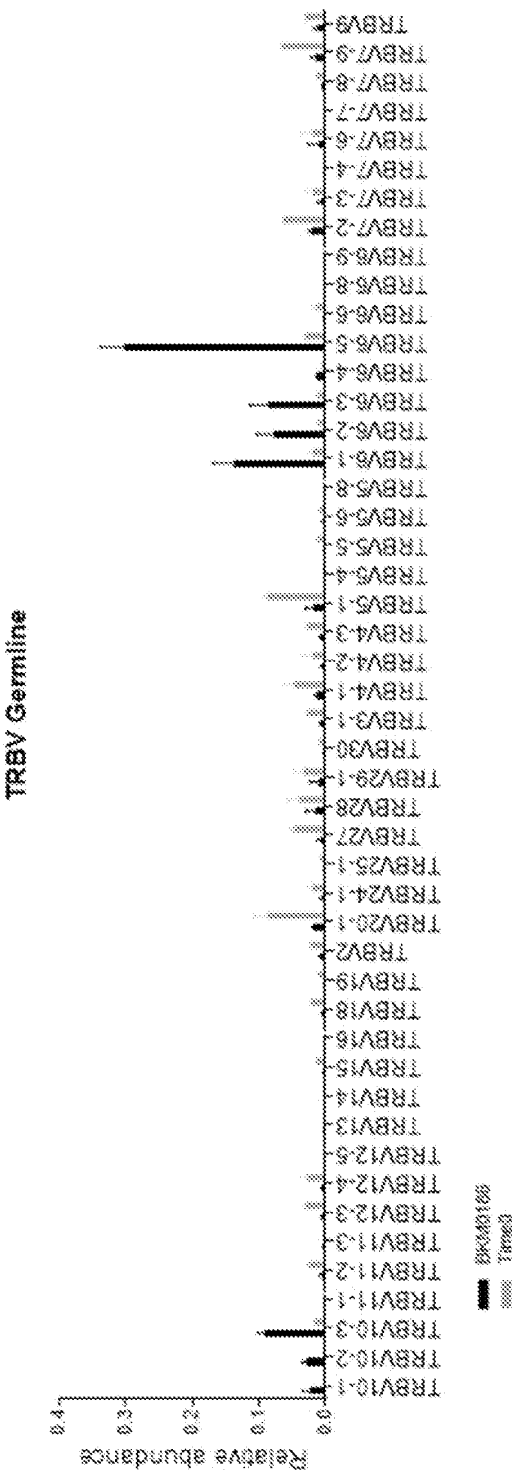


FIG. 107

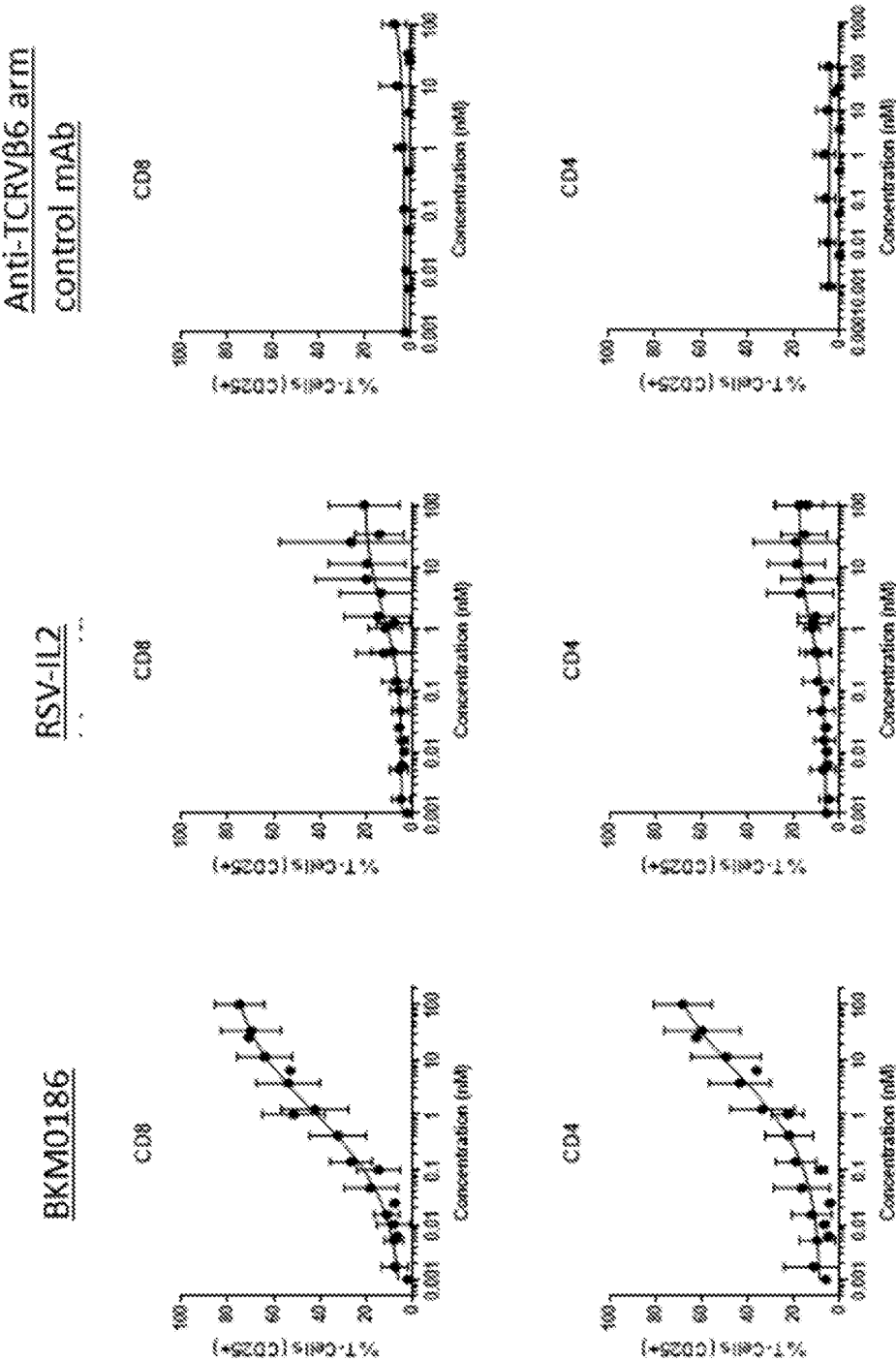
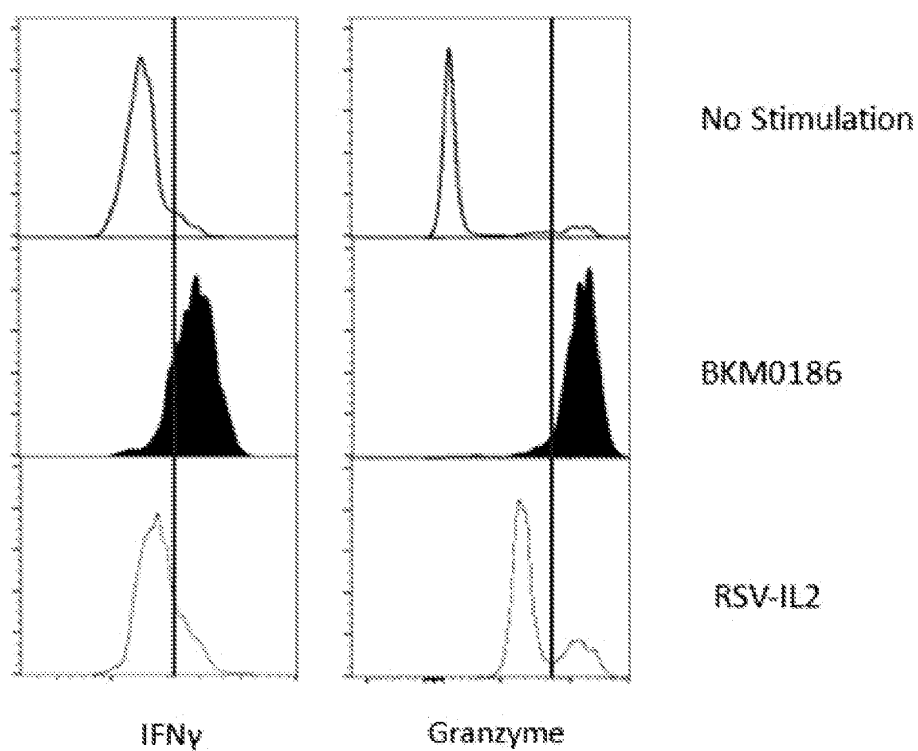


FIG. 108A

**FIG. 108B**

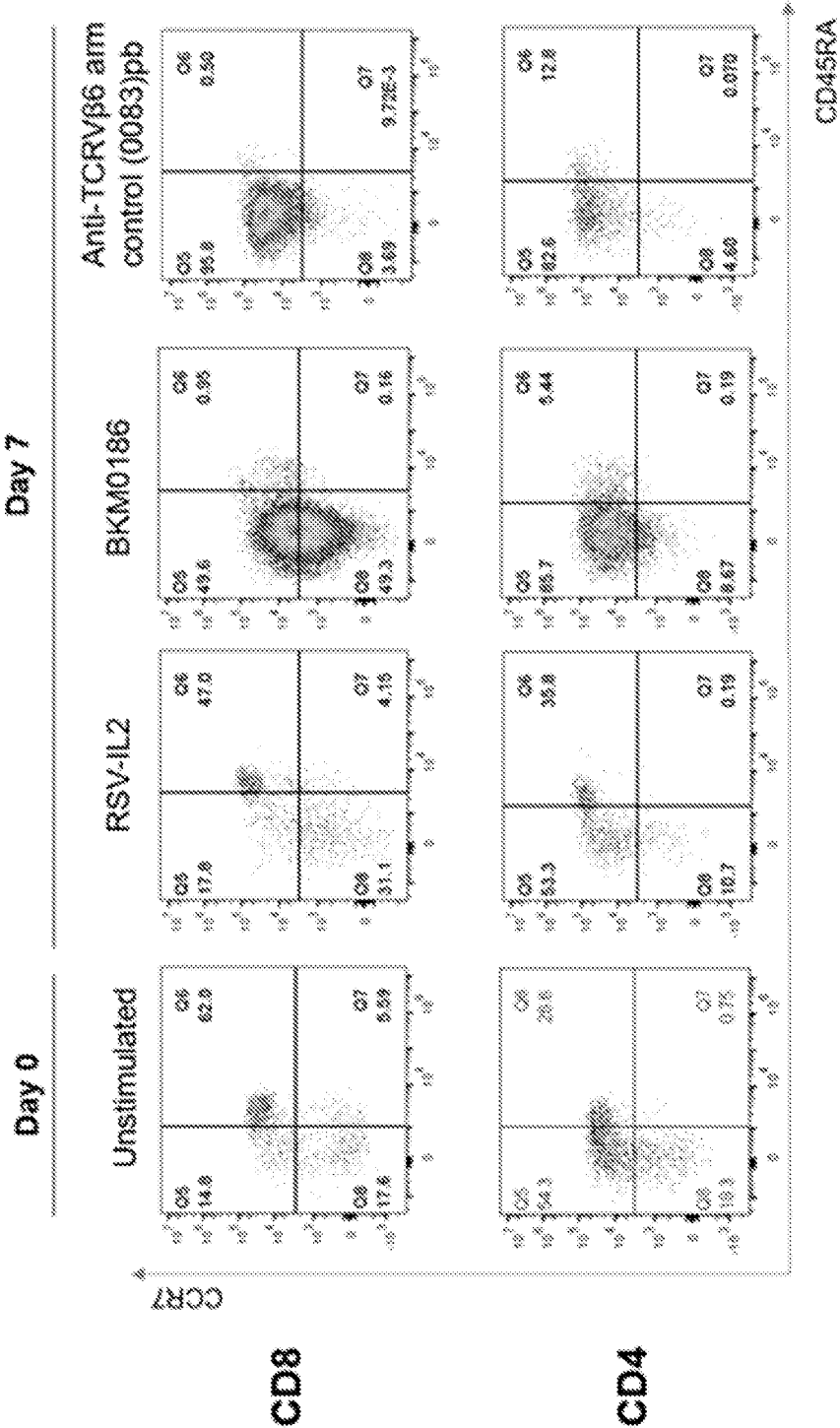


FIG. 109

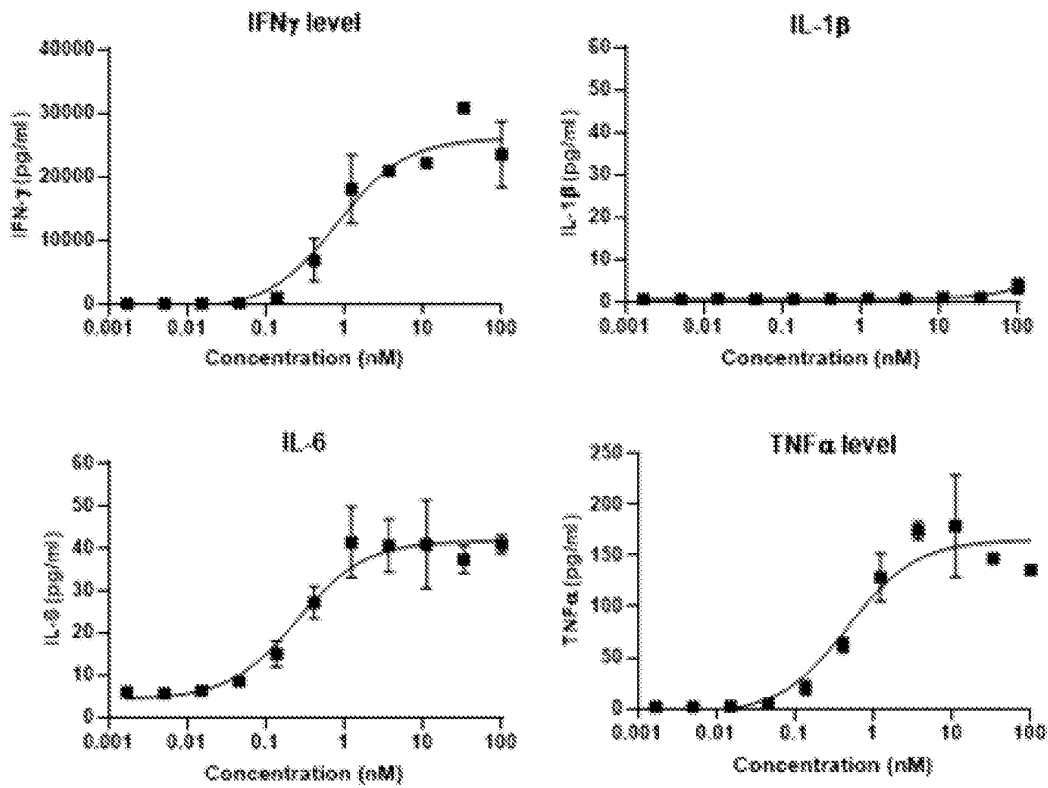


FIG. 110

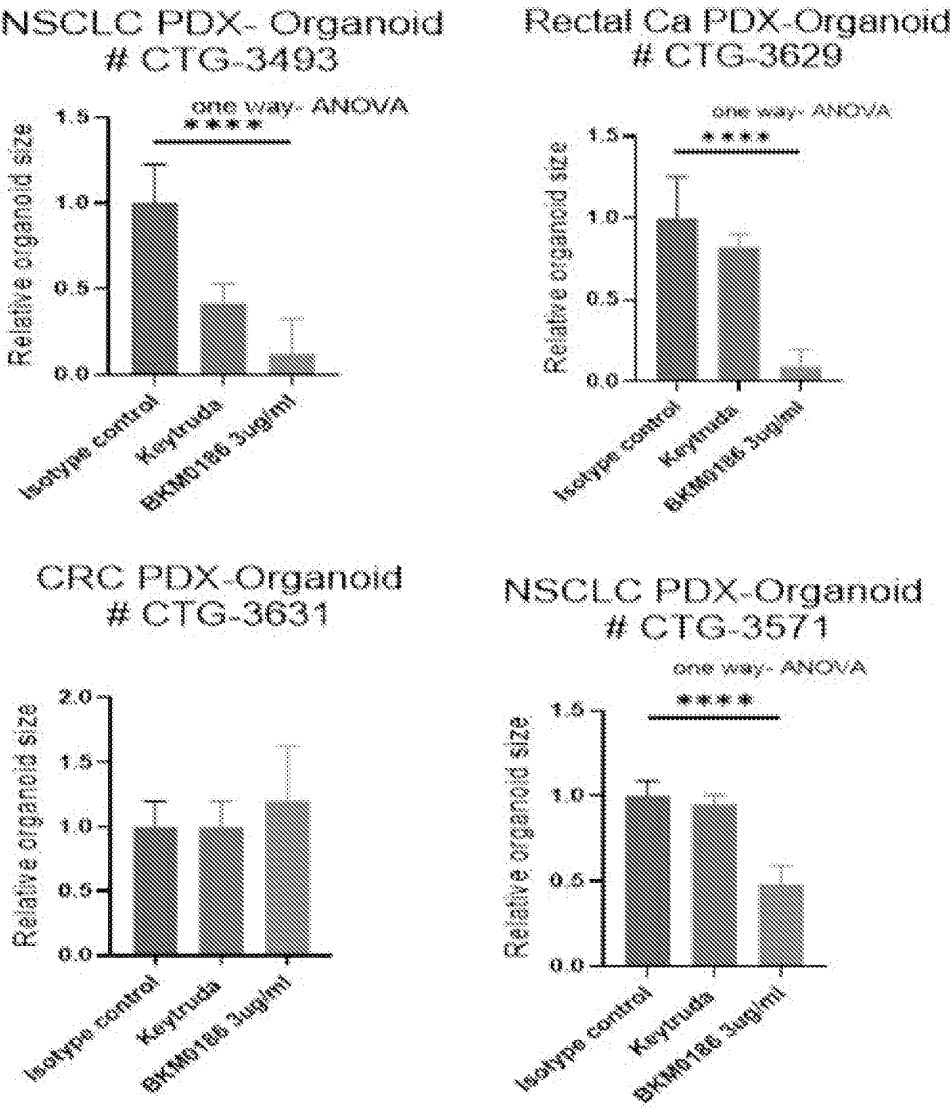


FIG. 111

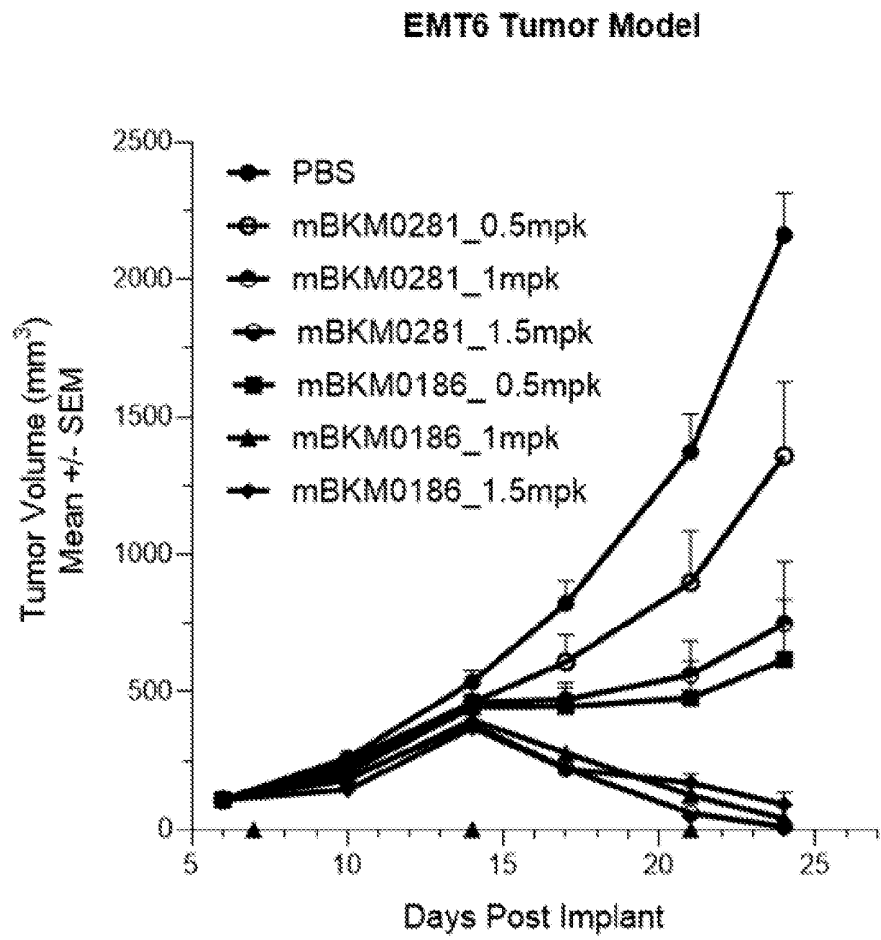


FIG. 112

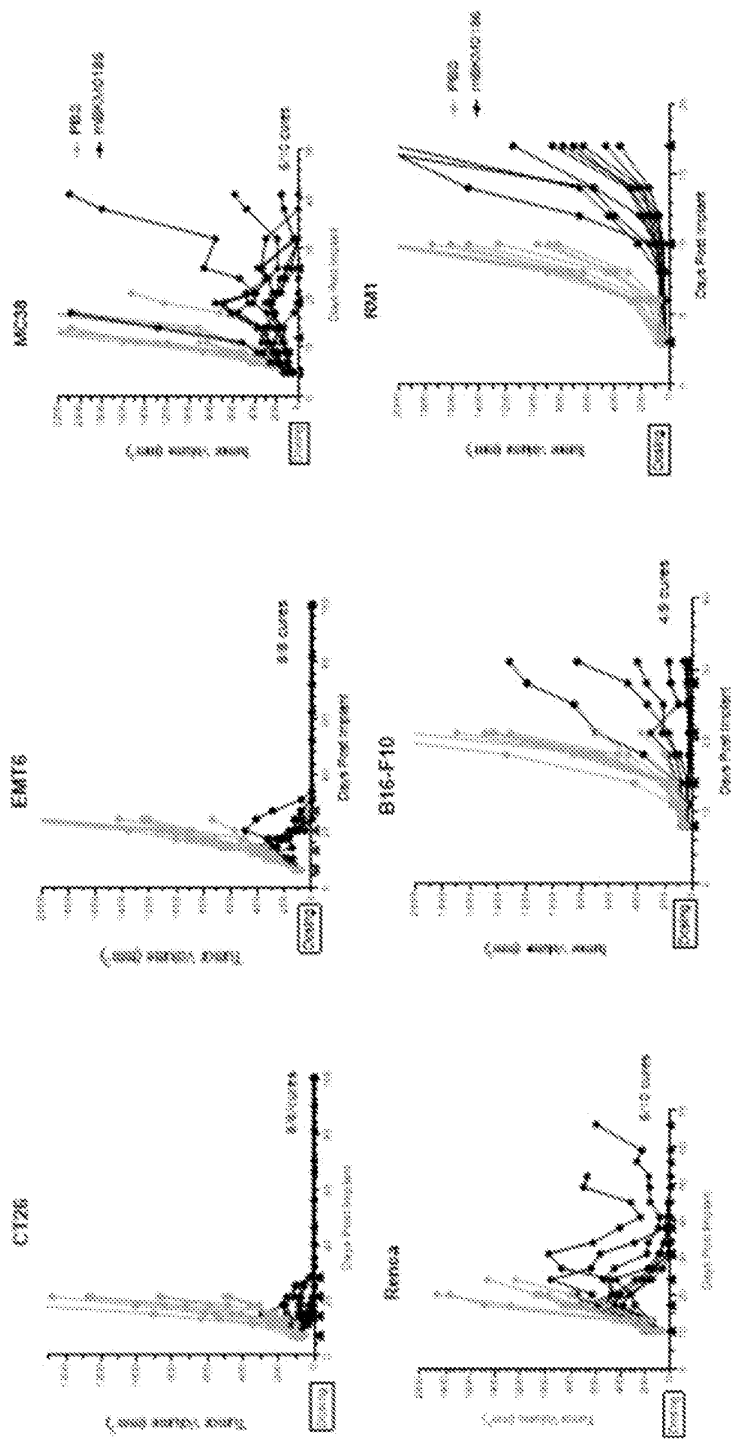


FIG. 113

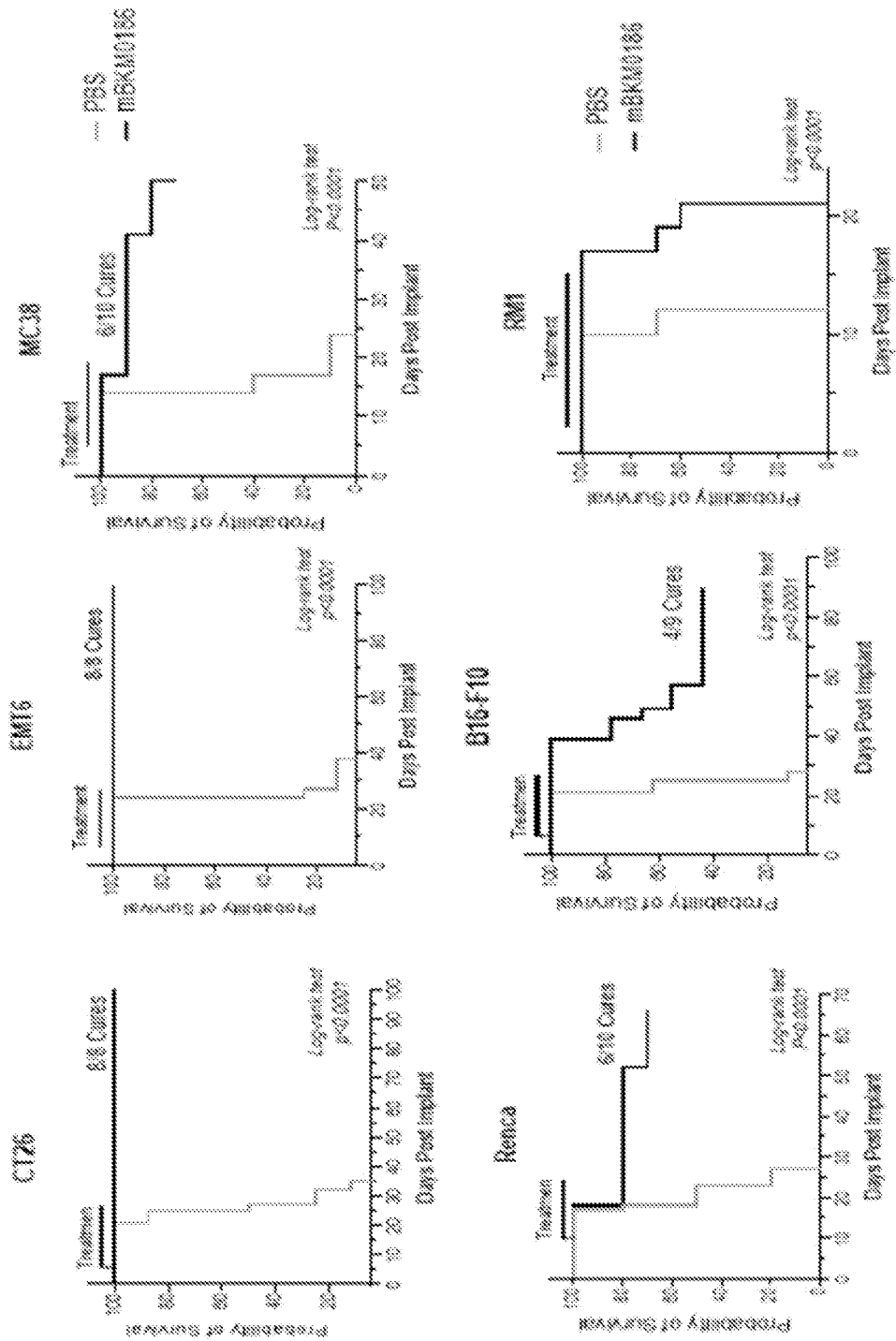


FIG. 114

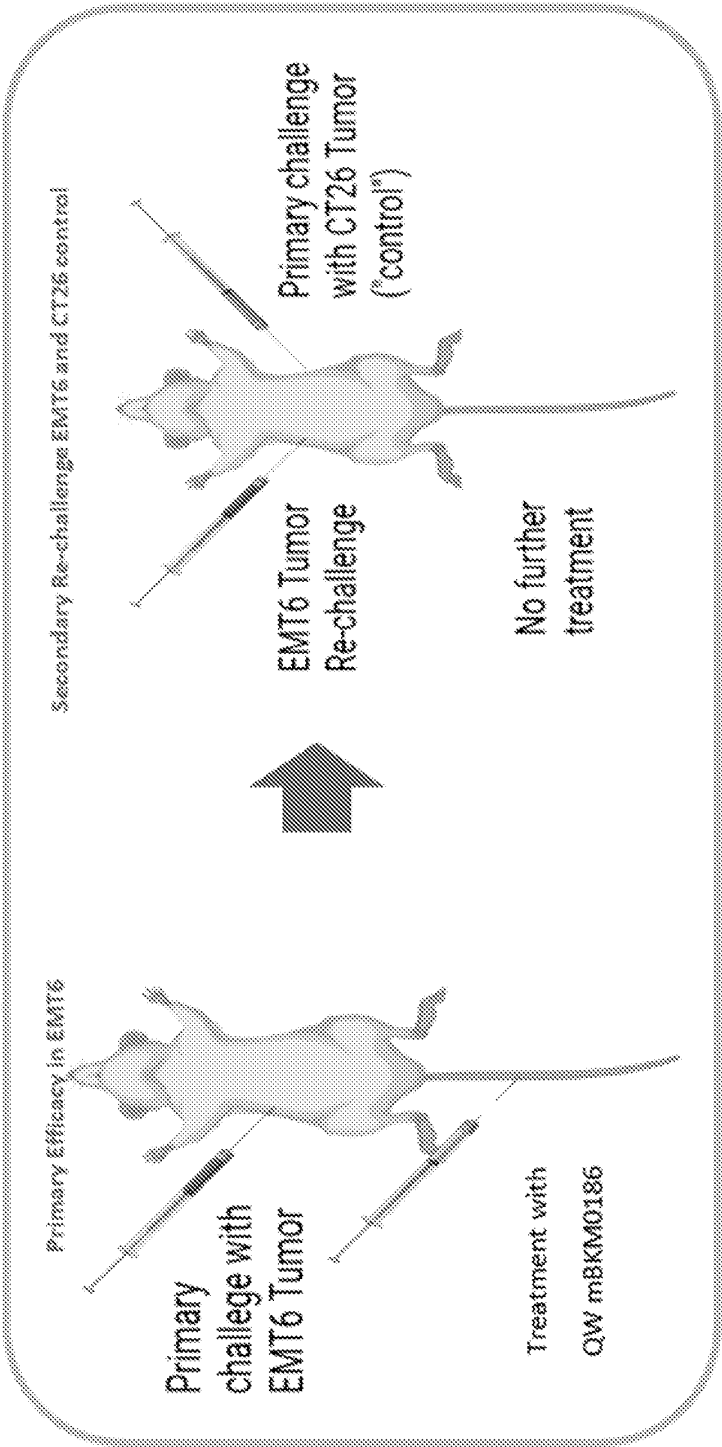


FIG. 115

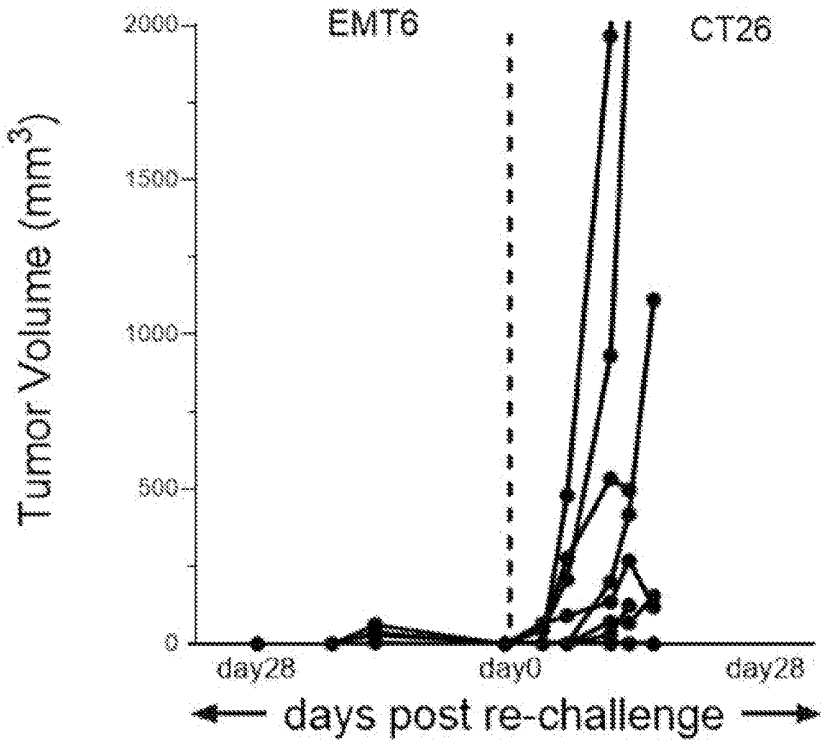


FIG. 116

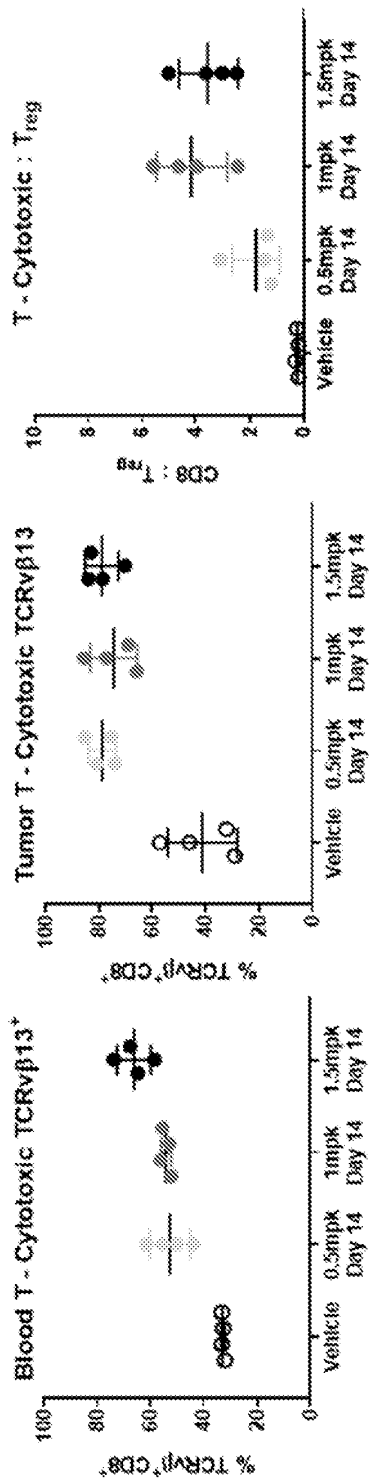


FIG. 117

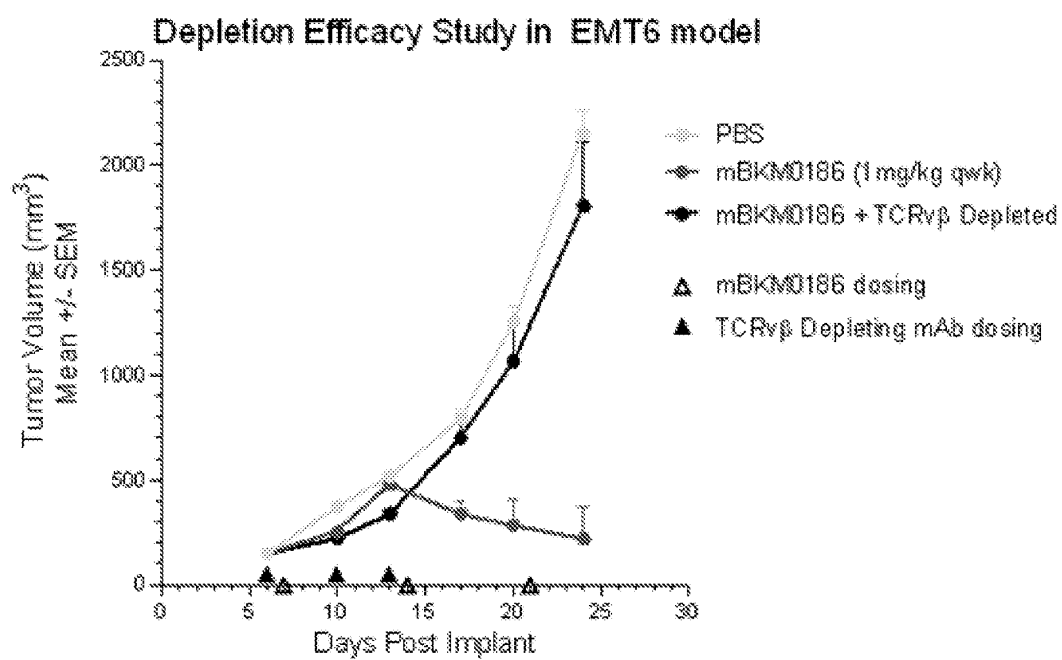


FIG. 118

Single IV Dose BKM0186
Pharmacokinetics in Cynomolgus
Monkeys

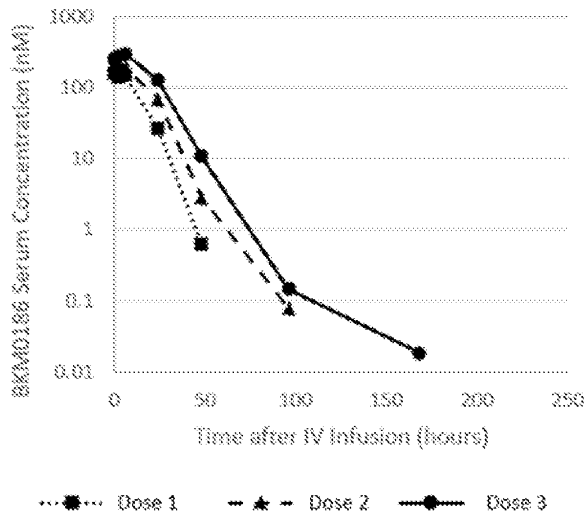


FIG. 119A

Single IV Dose BKM0281 Pharmacokinetics in
Cynomolgus Monkeys

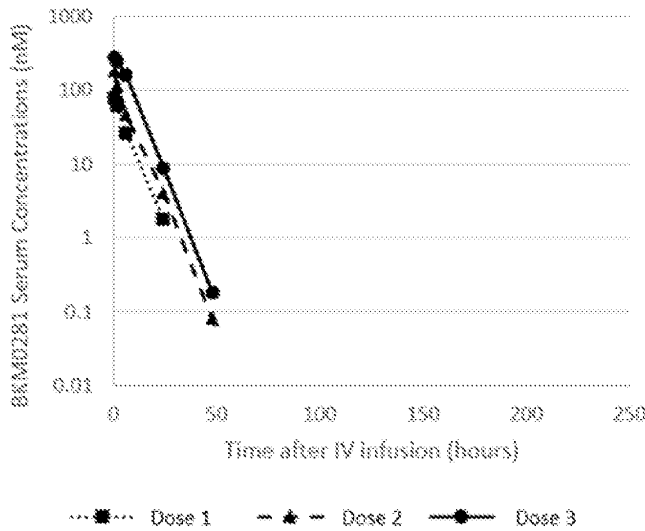


FIG. 119B

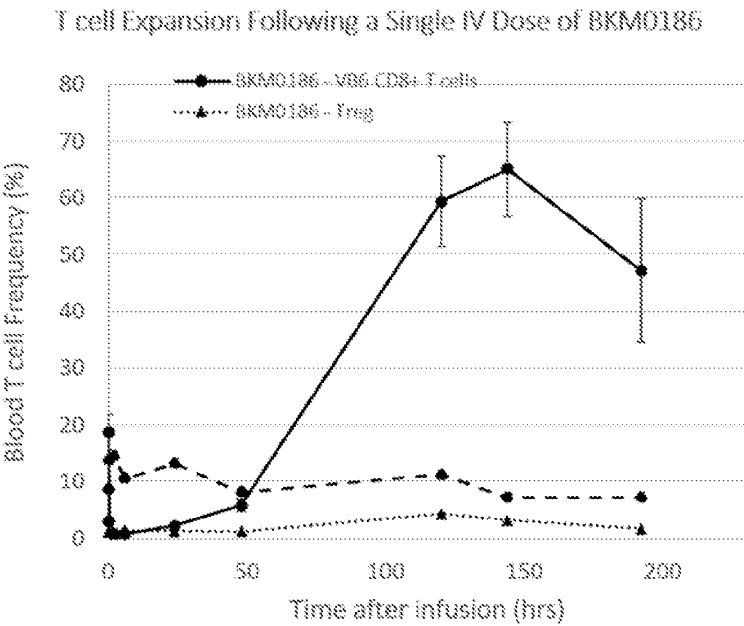


FIG. 120A

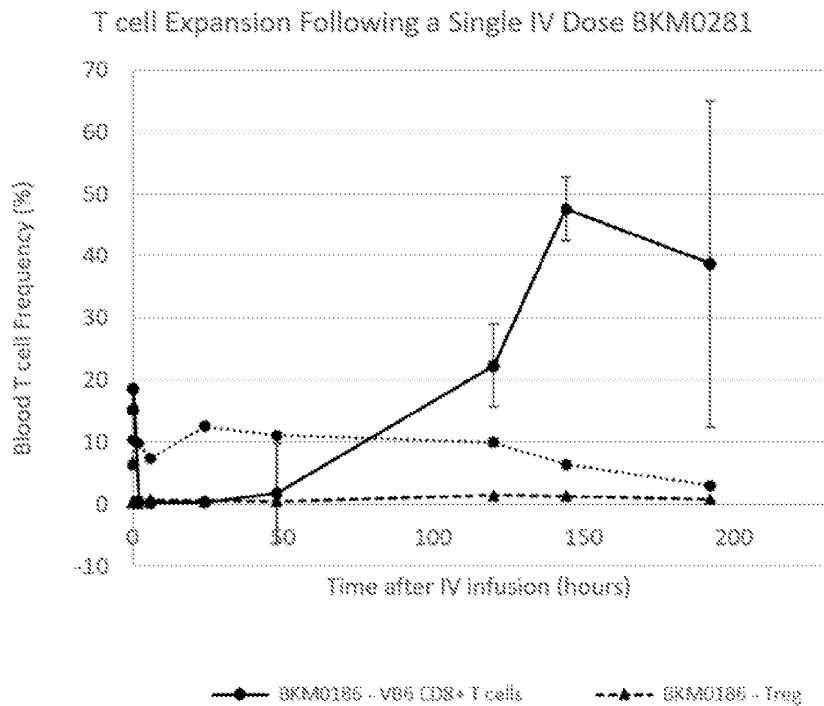


FIG. 120B

Serum Soluble CD25 levels in Monkeys Administered a single IV dose of BKM0186

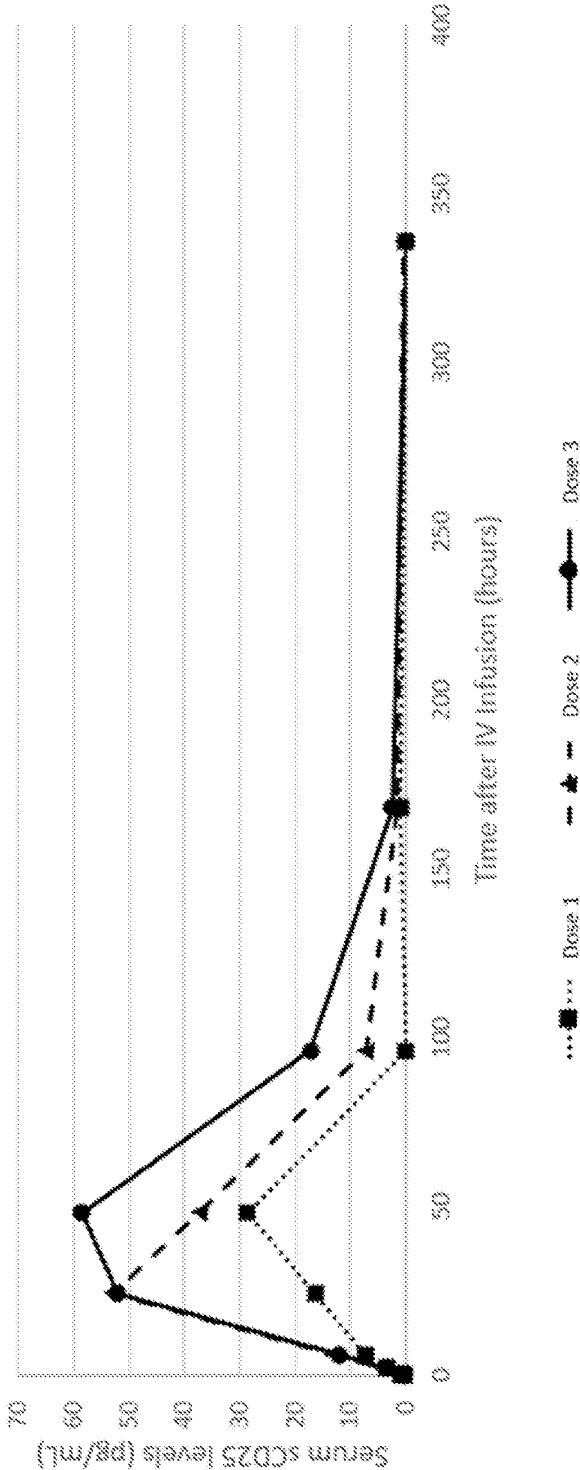


FIG. 121

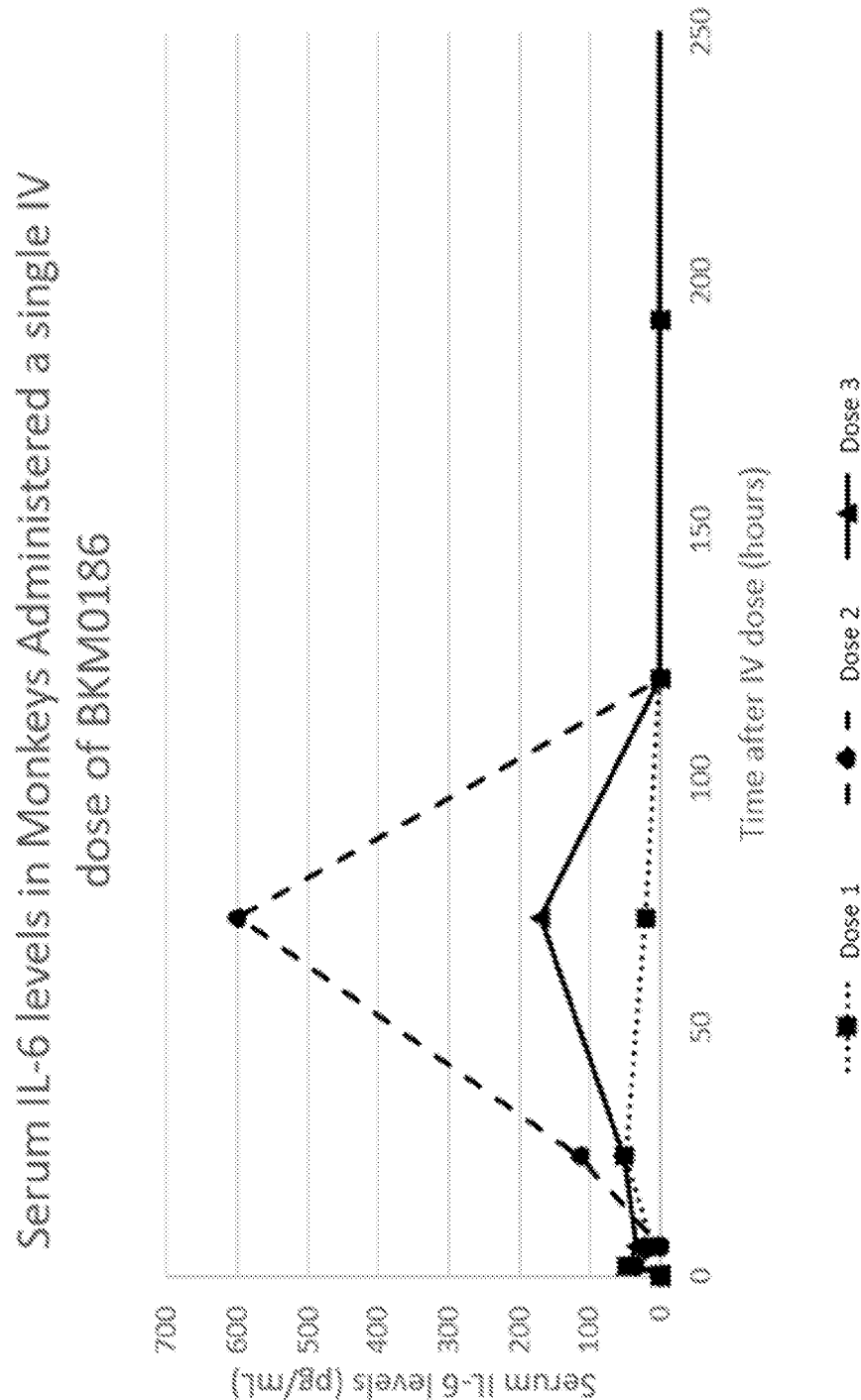


FIG. 122A

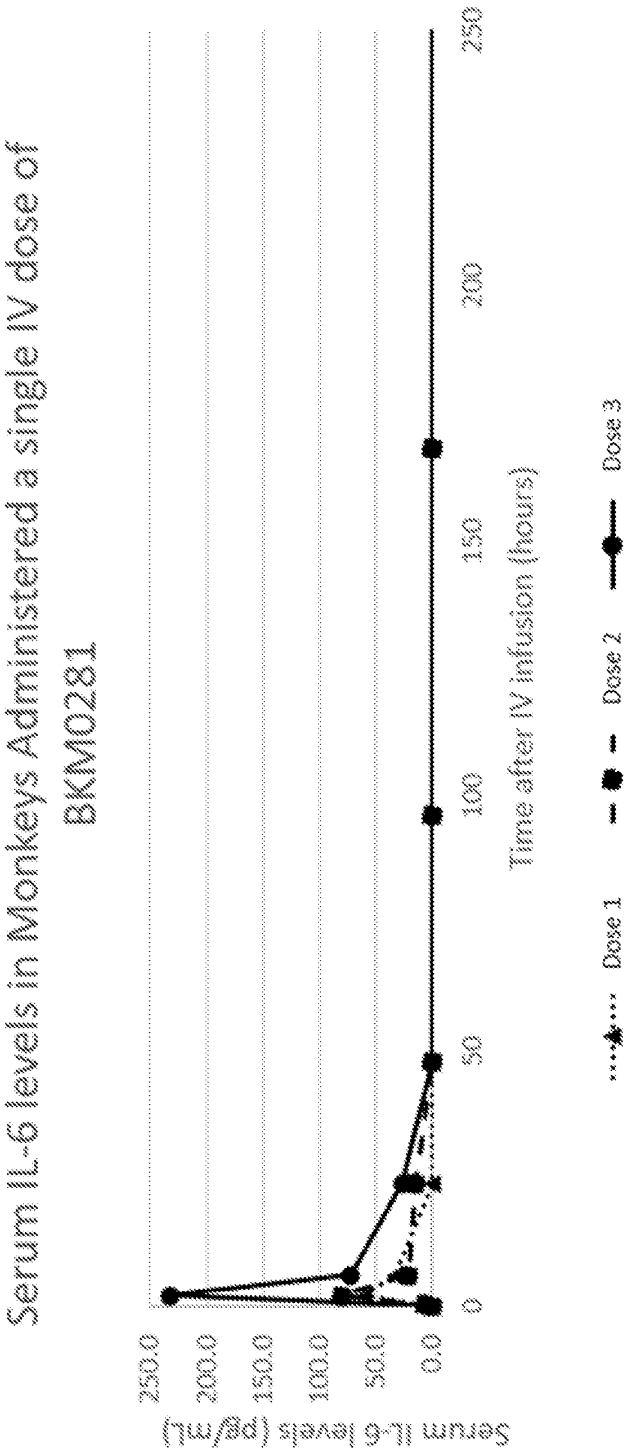


FIG. 122B

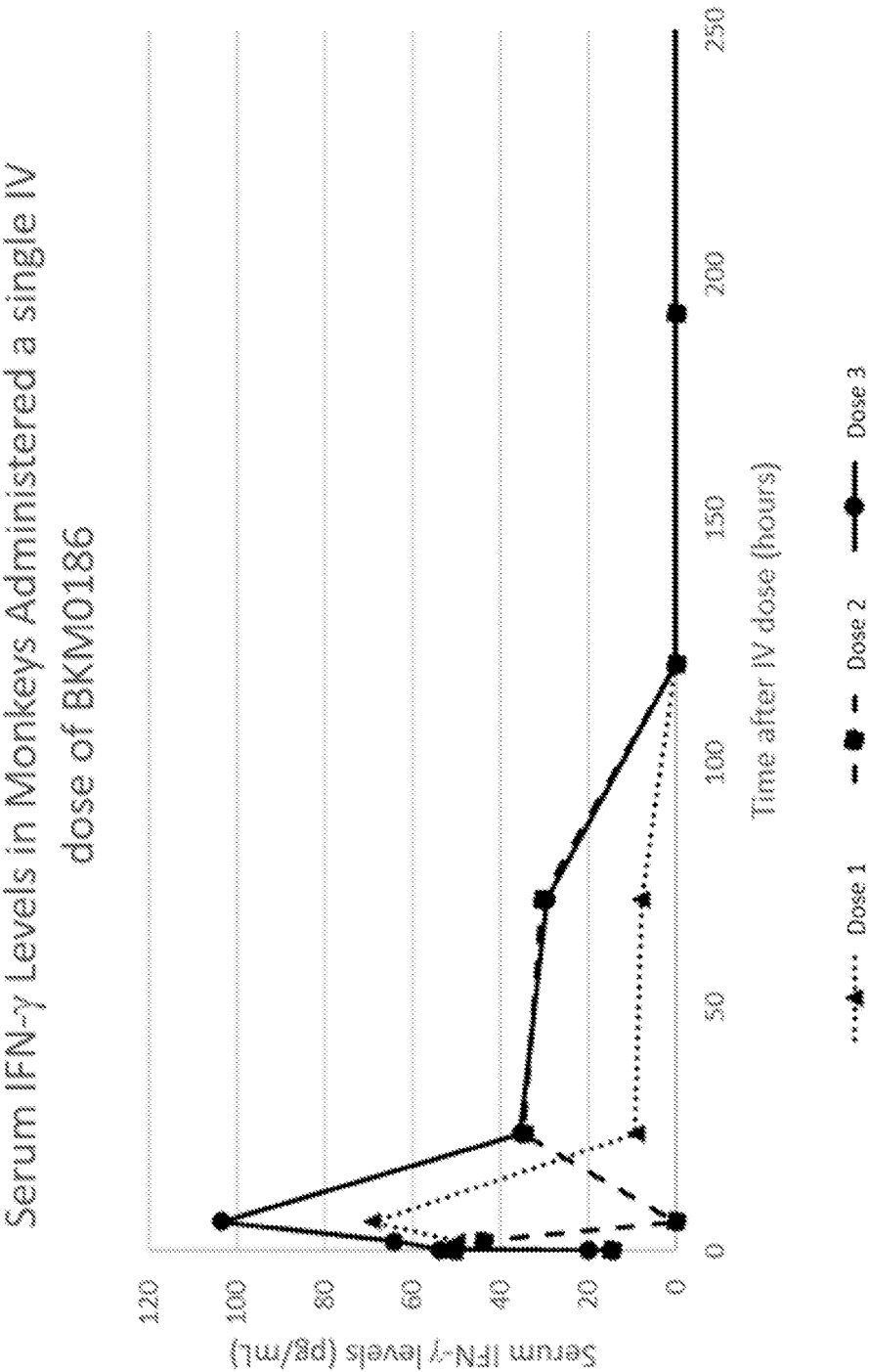


FIG. 123A

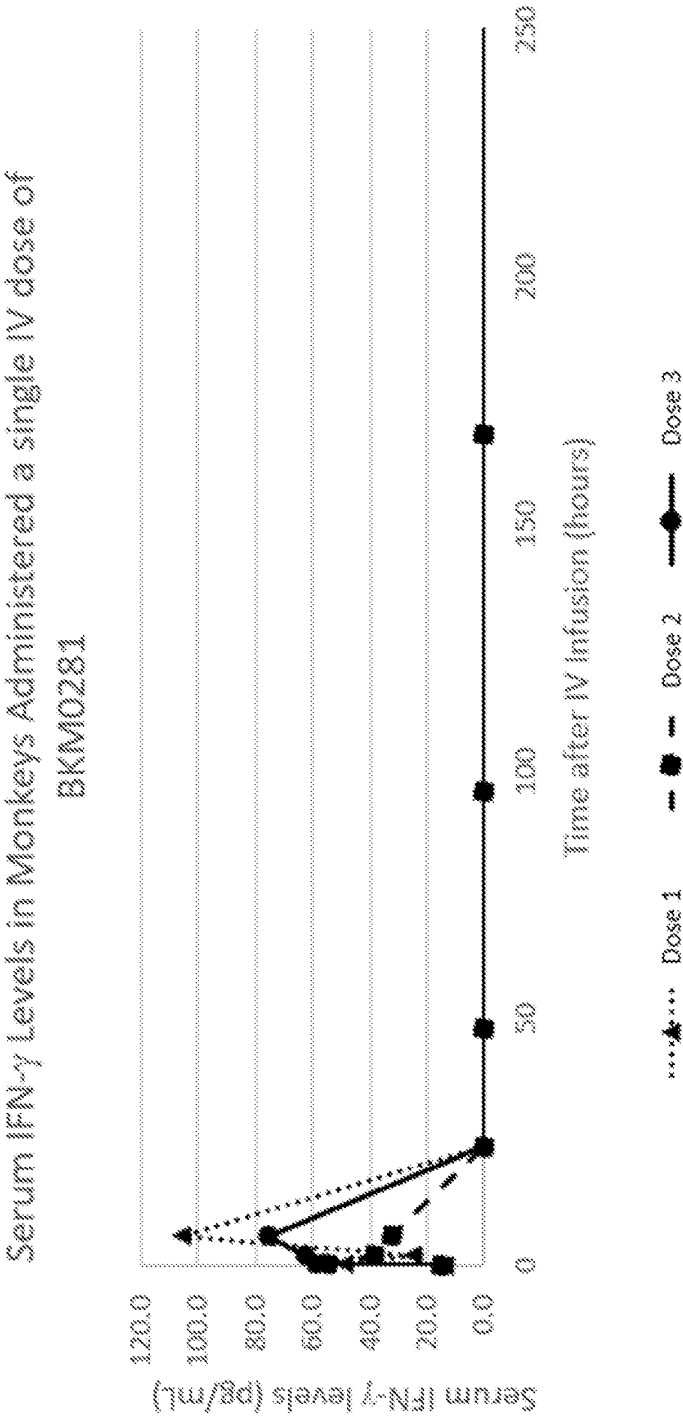


FIG. 123B

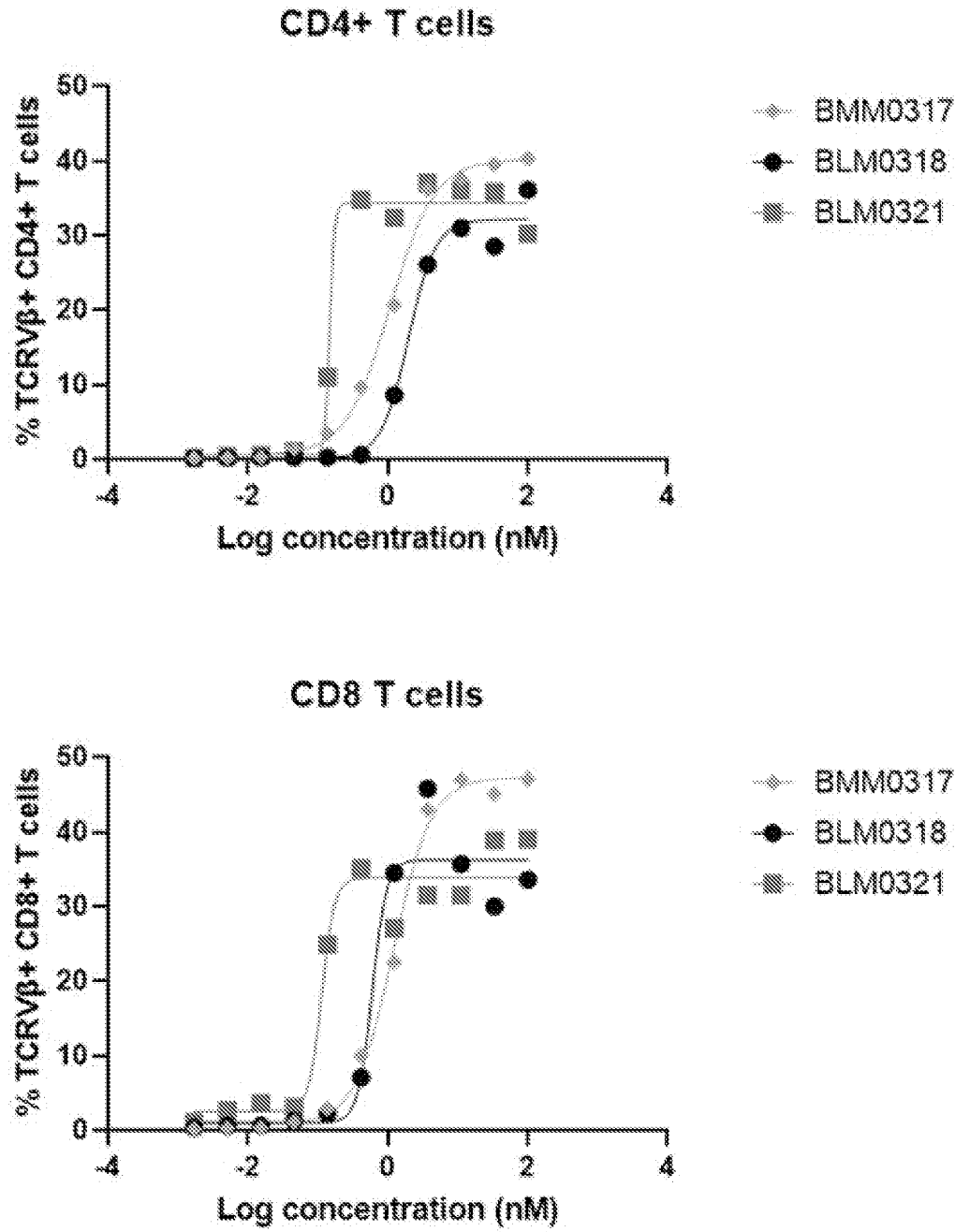


FIG. 124