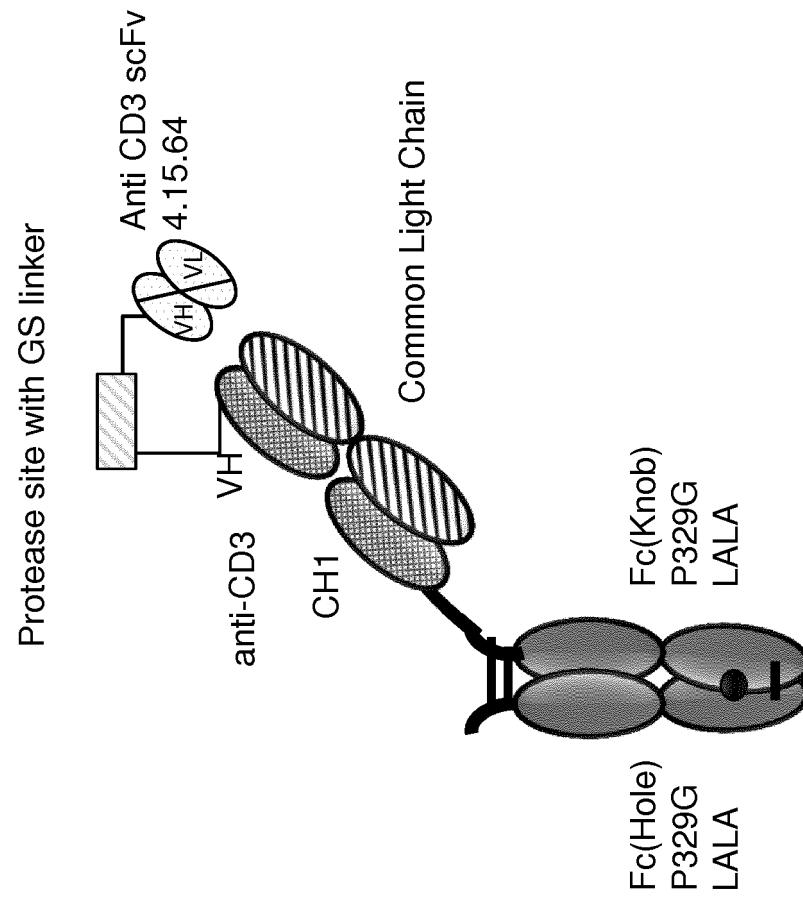


FIG. 1A



Anti CD3 scFv
4.15.64

4.15.64

anti-CD3

VH

CH1

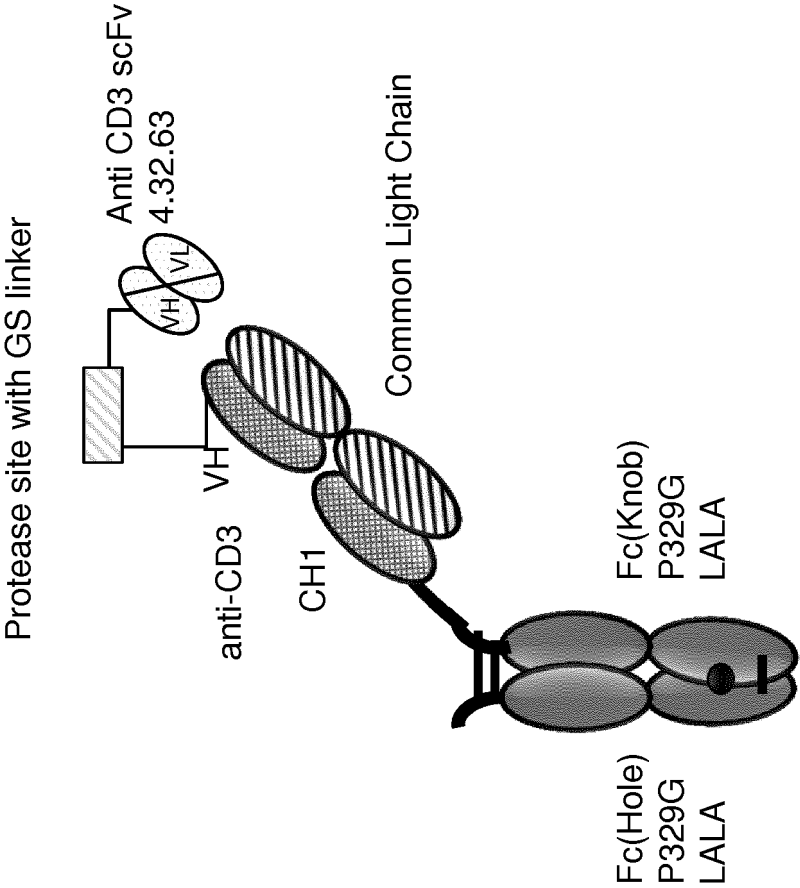
Common Light Chain

Fc(Hole)
P329G
LALA

Fc(Knob)
P329G
LALA

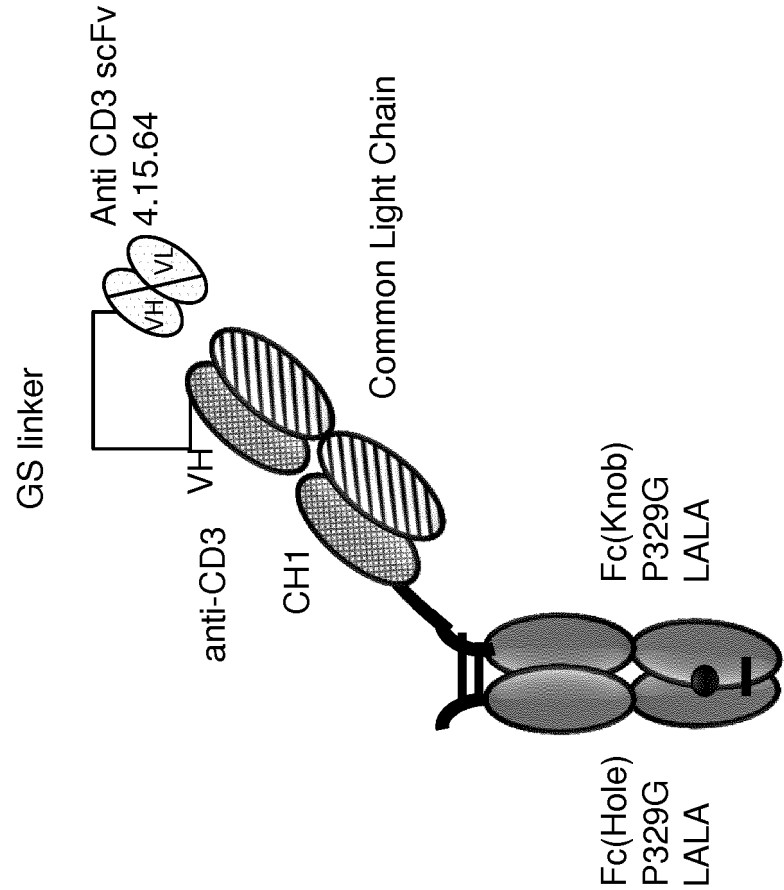
7859

FIG. 1B



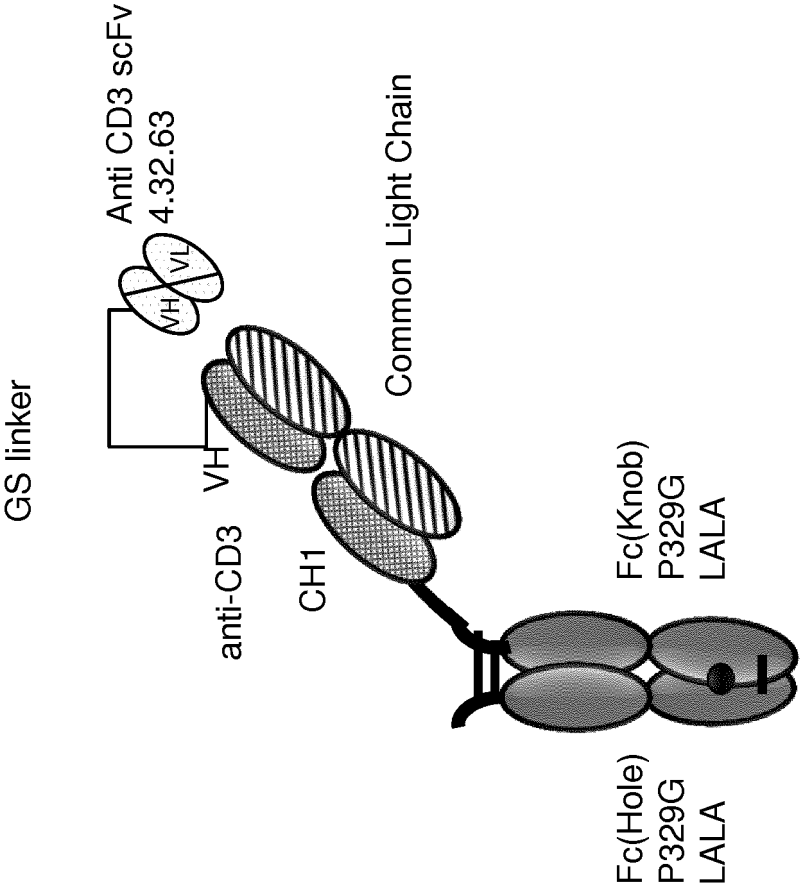
7860

FIG. 1C



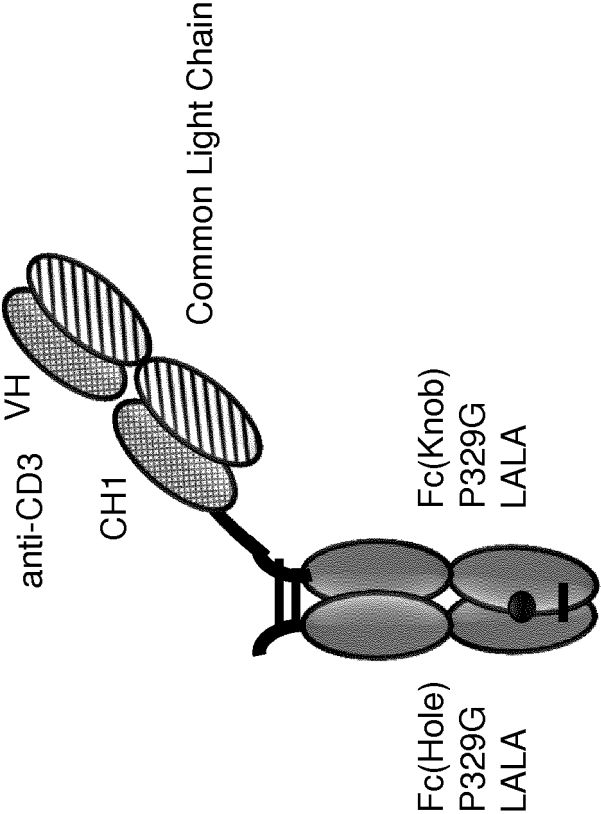
7857

FIG. 1D



7858

FIG. 1E



7861

FIG. 2

Clone ID	Isotype	Temp.	k_a (1/Ms)	k_d (1/s)	$t_{1/2}$ diss. (min)	K_D (nM)
4.32.63	IgG1, kappa	25°C	1.96E+05	1.05E-04	110	1
		37°C	3.46E+05	6.52E-04	18	2
4.35.77	IgG1, kappa	25°C	1.66E+05	2.09E-04	55	1
		37°C	2.68E+05	6.96E-04	17	3
4.33.88	IgG2b, kappa	25°C	2.71E+05	1.87E-03	6	7
		37°C	4.28E+05	3.24E-03	4	8
4.24.72	IgG1, kappa	25°C	8.72E+04	1.18E-03	10	14
		37°C	1.55E+05	4.45E-03	3	29
4.21.78	IgG1, kappa	25°C	1.31E+05	3.06E-03	4	23
		37°C	4.25E+05	9.28E-03	1	22
4.15.64	IgG2b, kappa	25°C	2.61E+04	2.50E-03	5	96
		37°C	1.44E+05	1.35E-02	1	94

FIG. 3B

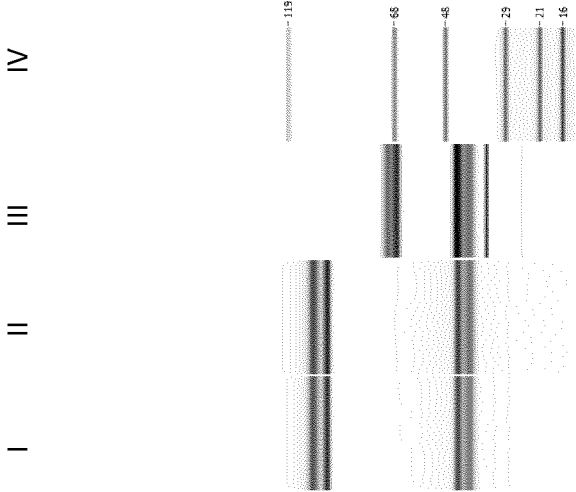


FIG. 3A

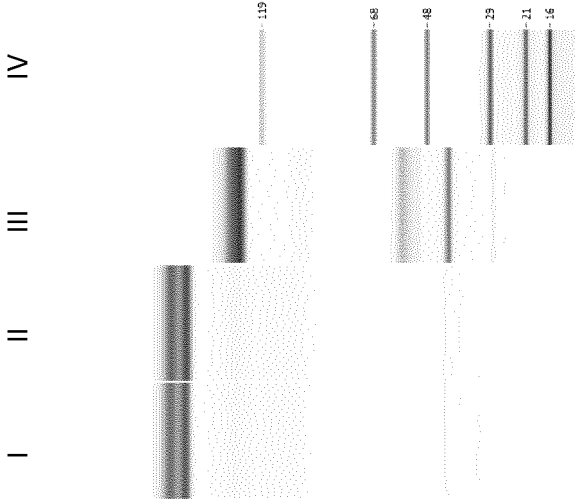


FIG. 3D

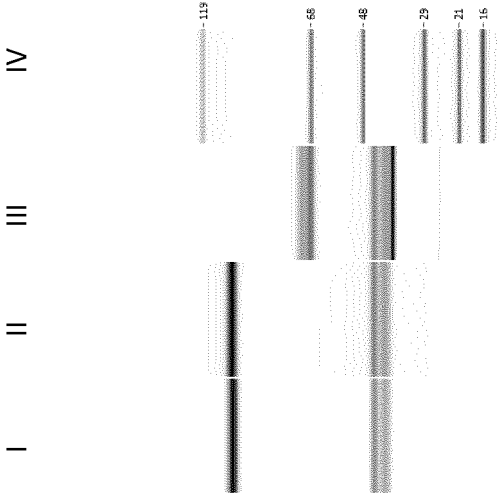


FIG. 3C

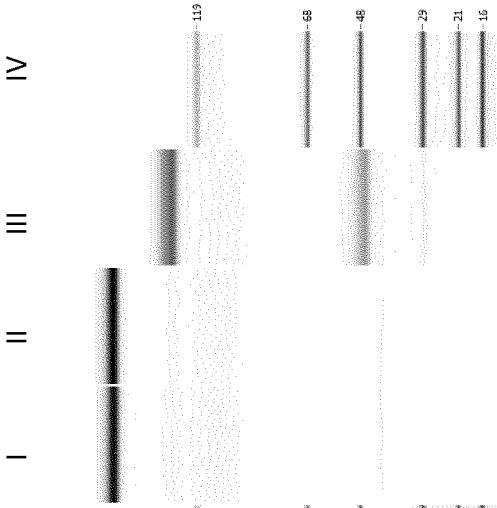


FIG. 4A

- 7859: anti ID CH2527 scFv 4.15.64 CD3 Fc
- 7859: anti ID CH2527 scFv 4.15.64 CD3 Fc_treated
- ▲ 7857: anti ID CH2527 scFv 4.15.64 non cleavable linker CD3 Fc
- ▣ 7861: Monovalent CH2527 IgG
- ▲ 7760: bispecific CH1A1A 98/99-CD3

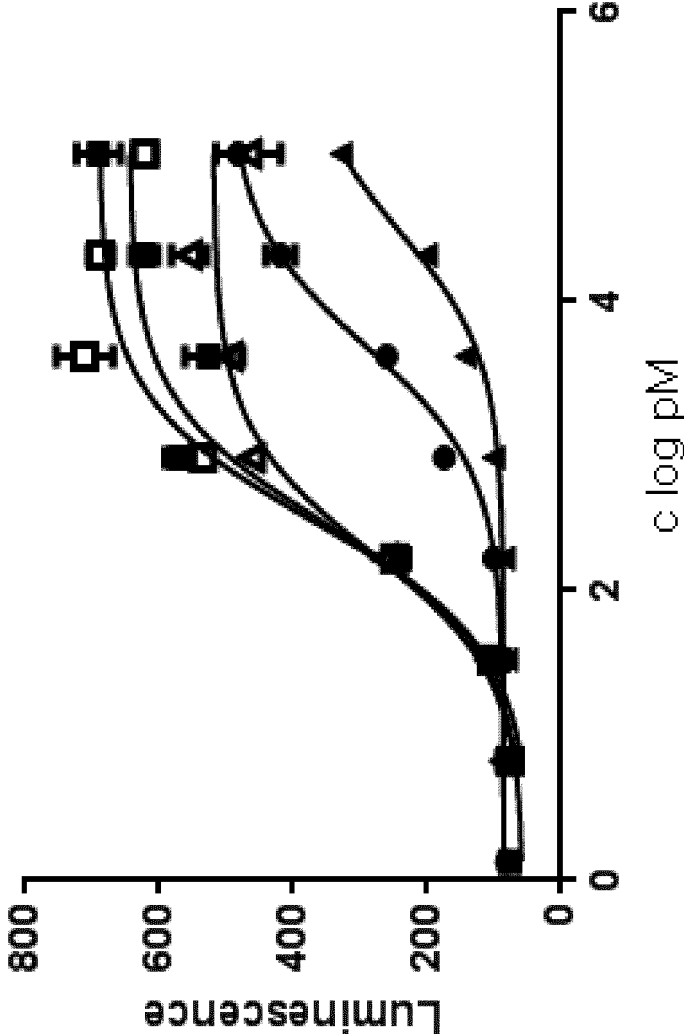


FIG. 4B

- 7860: anti ID CH2527 scFv 4:32.63 CD3 Fc
- 7860: anti ID CH2527 scFv 4:32.63 CD3 Fc_treated
- 7858: anti ID CH2527 scFv 4:32.63 non cleavable linker CD3 Fc
- 7861: Monovalent CH2527 IgG
- 7760: bispecific CH1A1A 98/99-CD3

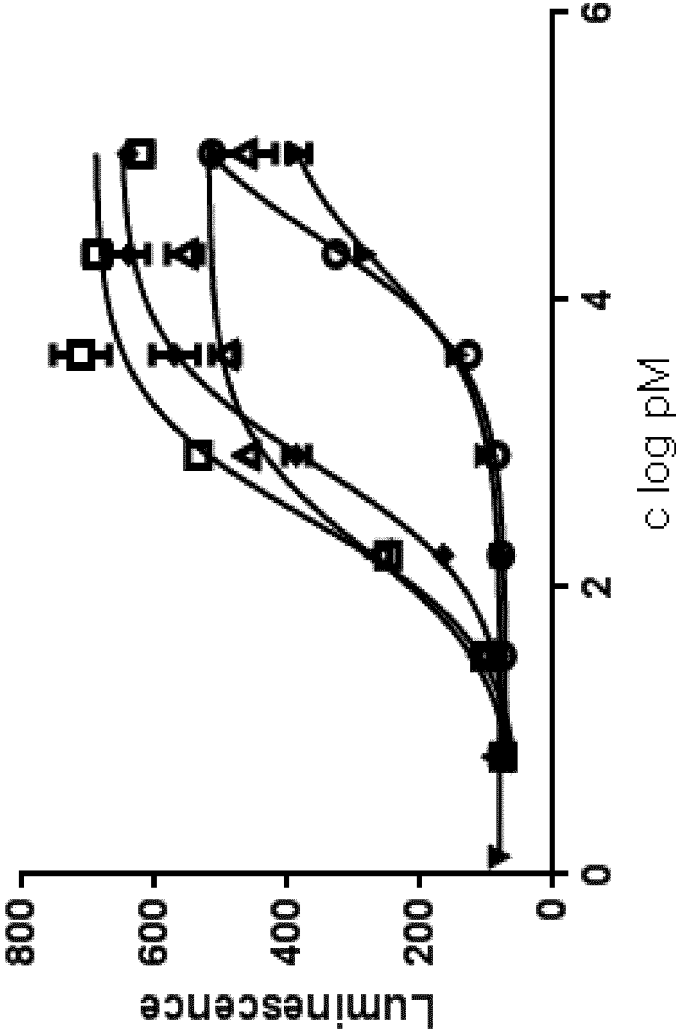


FIG. 4C

EC50			
7859 scFv 4.15.64 MK062 protease site	4710	16 fold more than 7861	
7861	286	16 fold less than 7859	
7860 scFv 4.32.63 MK062 protease site	15538	54 fold more than 7861	
7861	286	54 fold less than 7860	

FIG. 5A

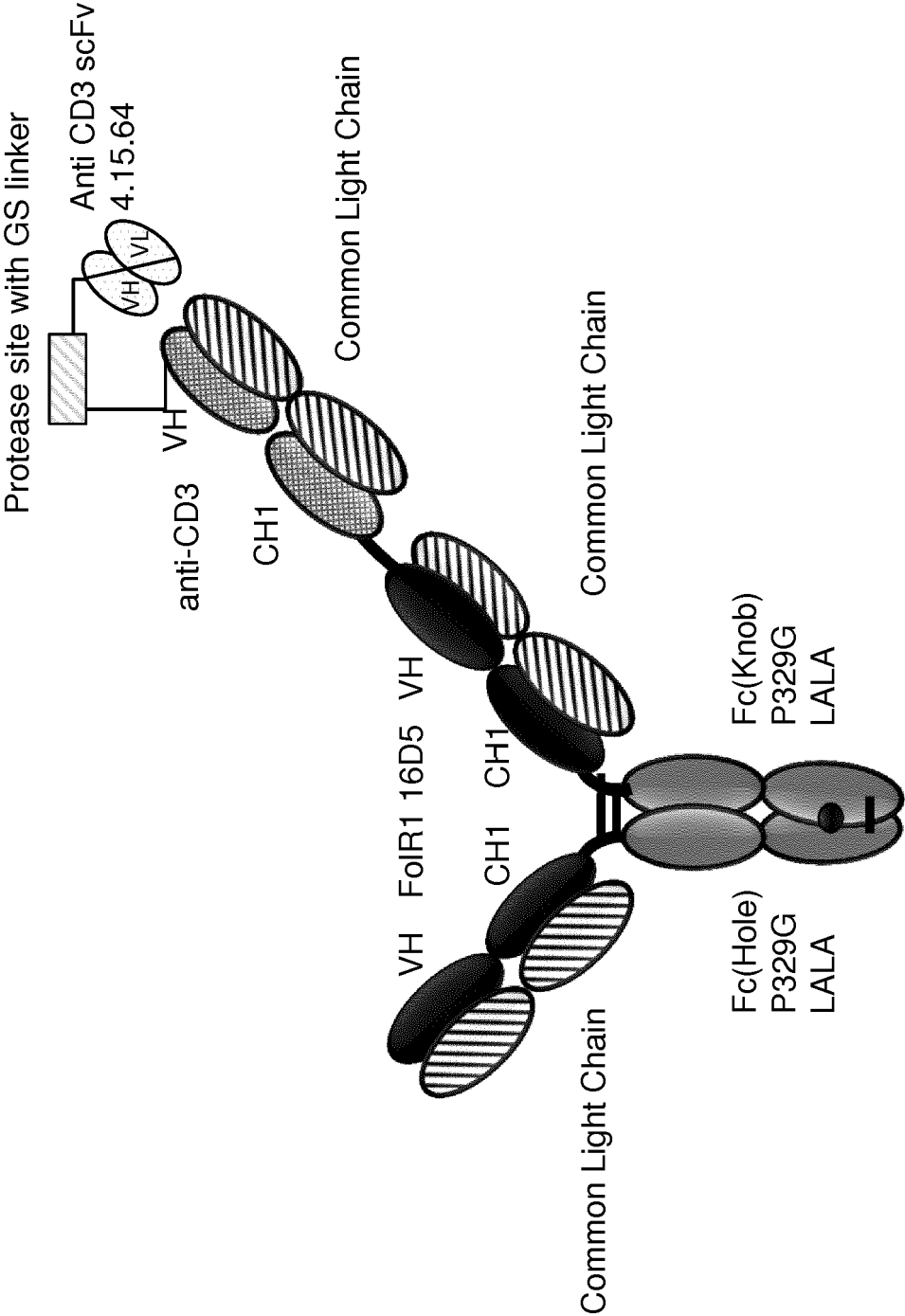


FIG. 5C

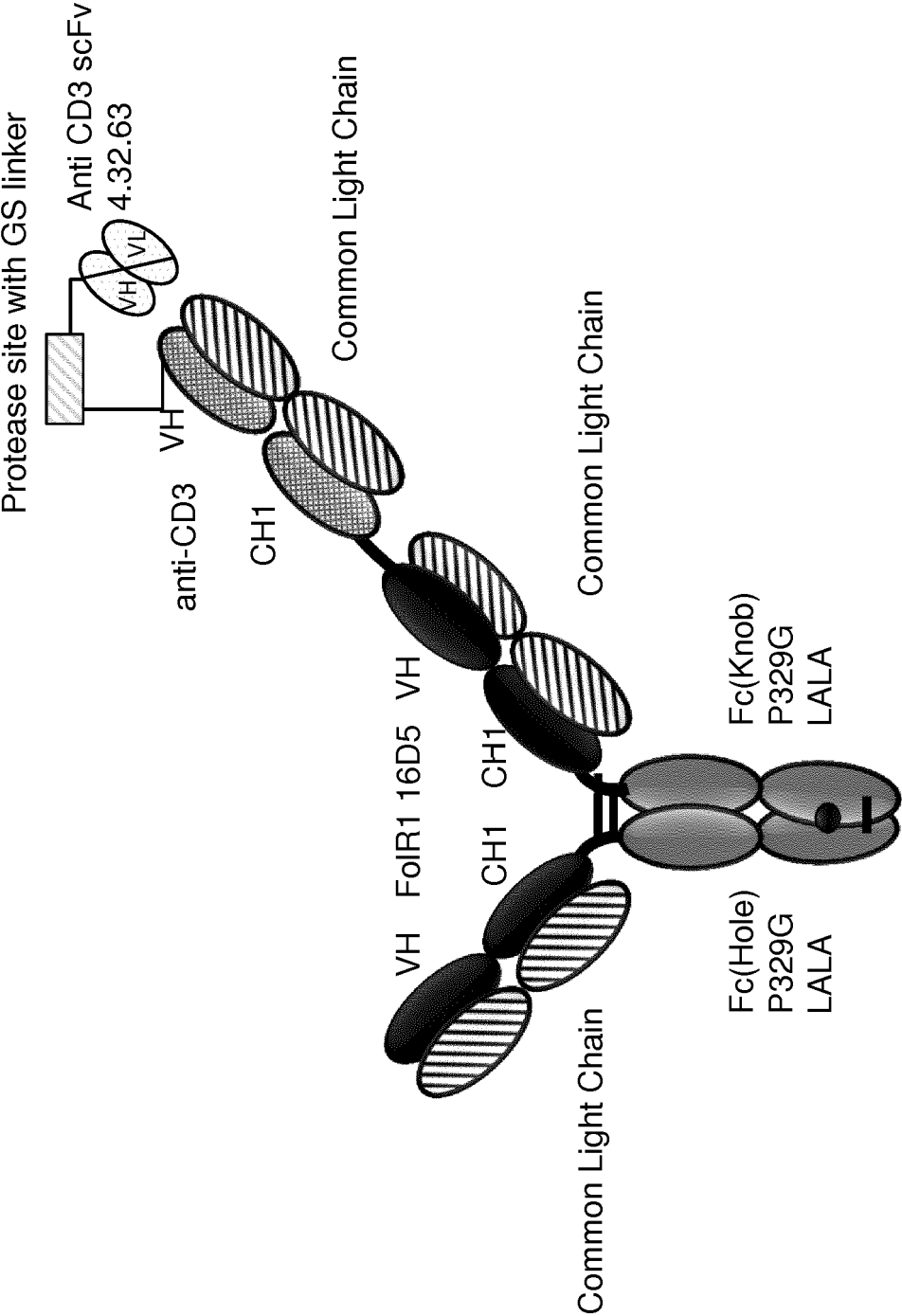
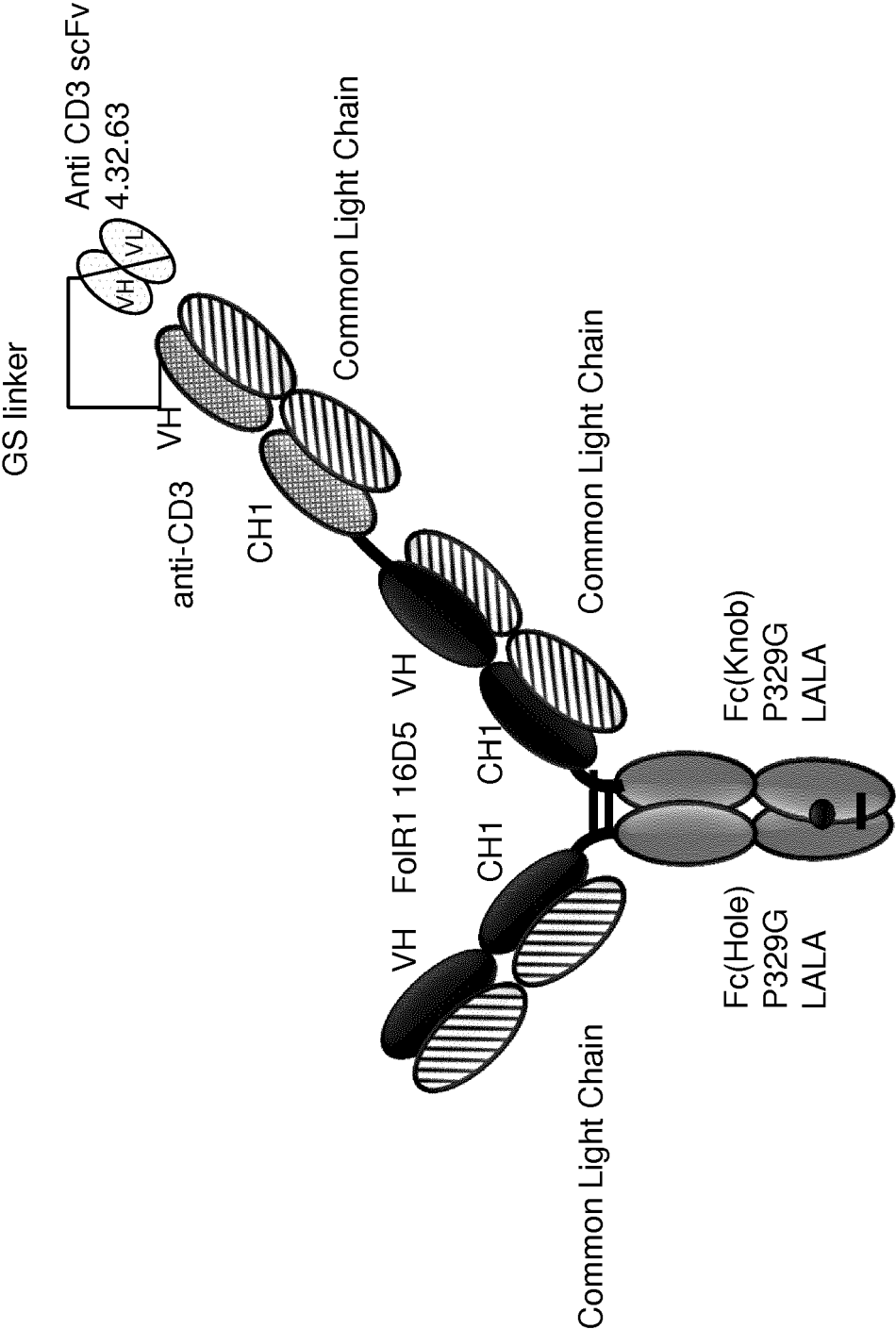
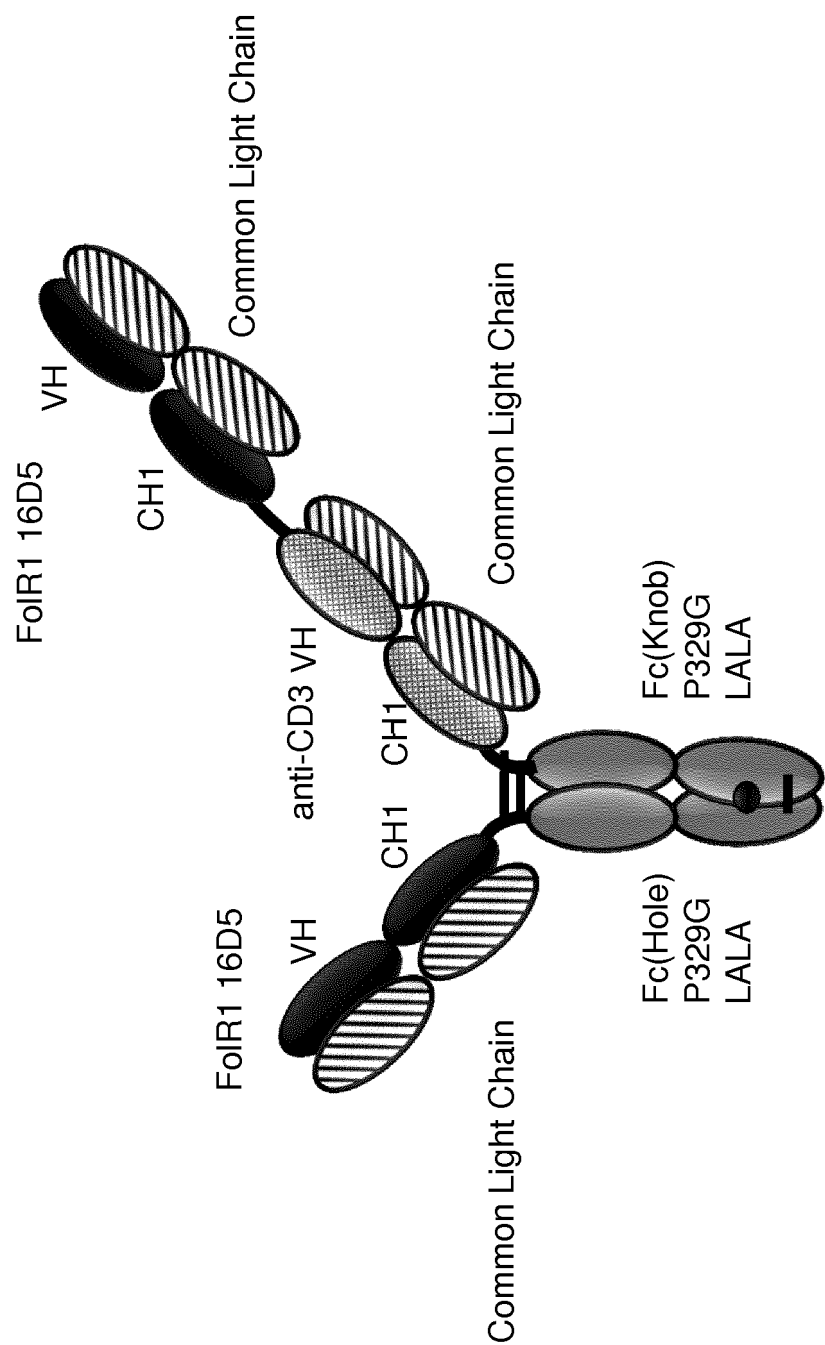


FIG. 5D



7611

FIG. 5F



6100

Anti CD3 Fab 4.15.64 ,
crossed chains

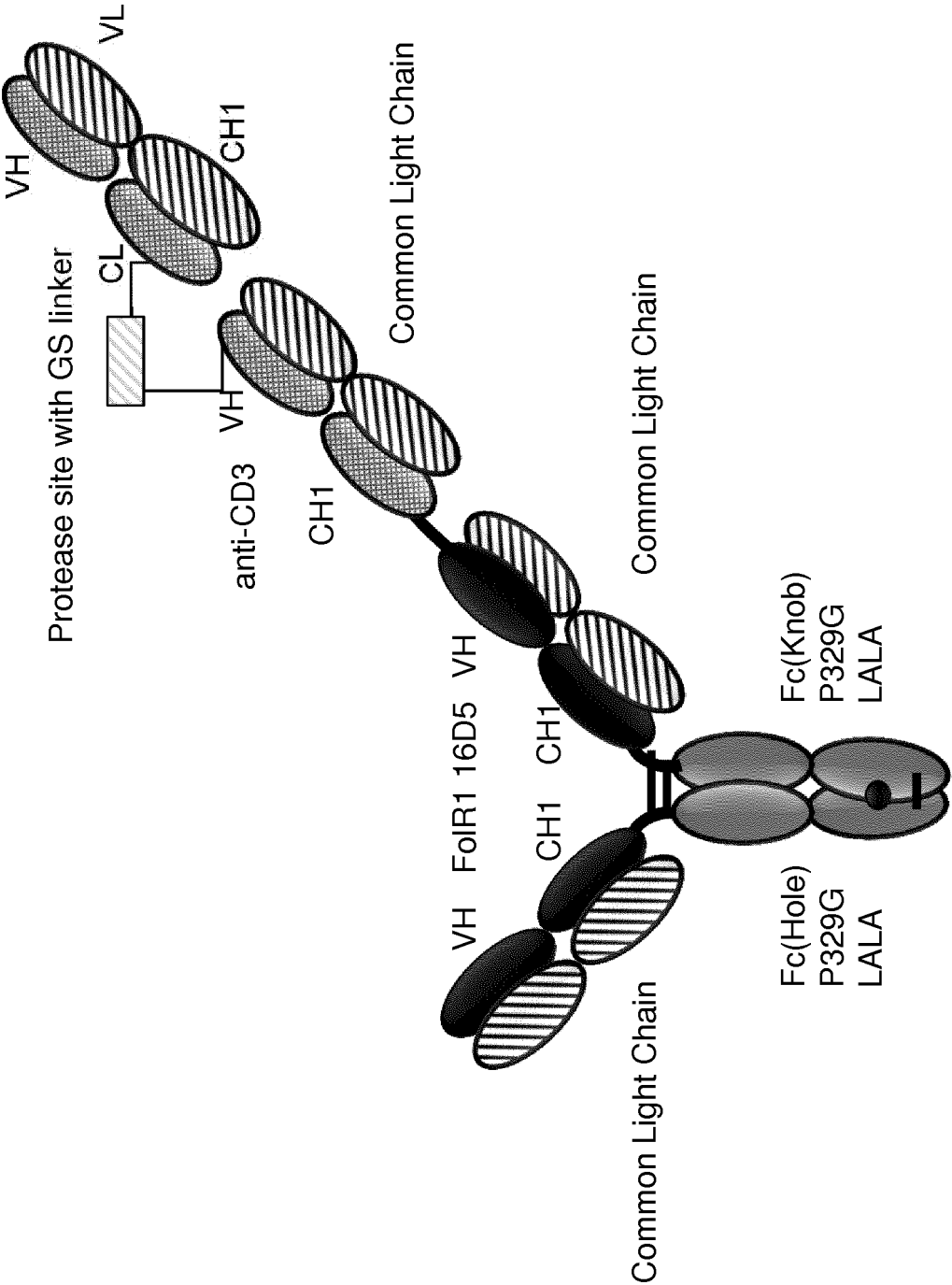


FIG. 5H

FIG. 6

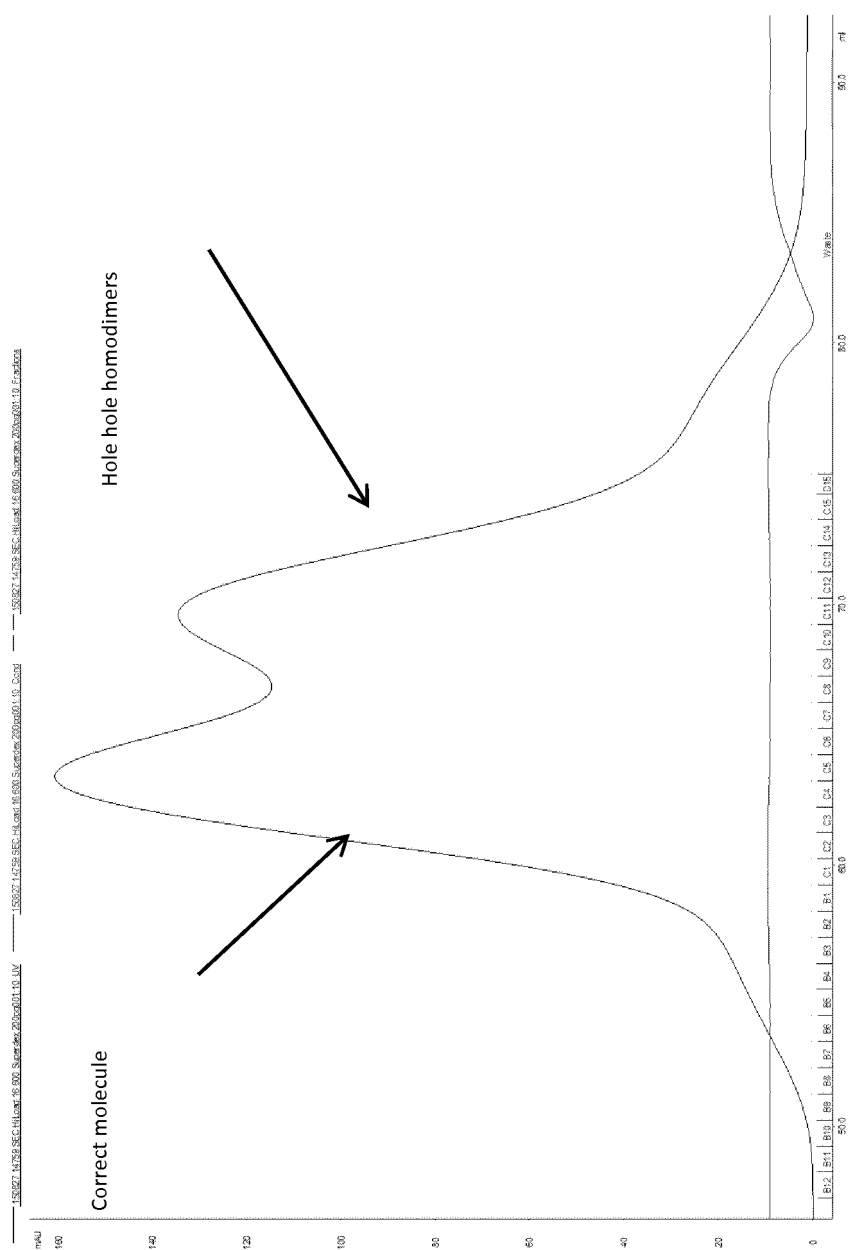


FIG. 7

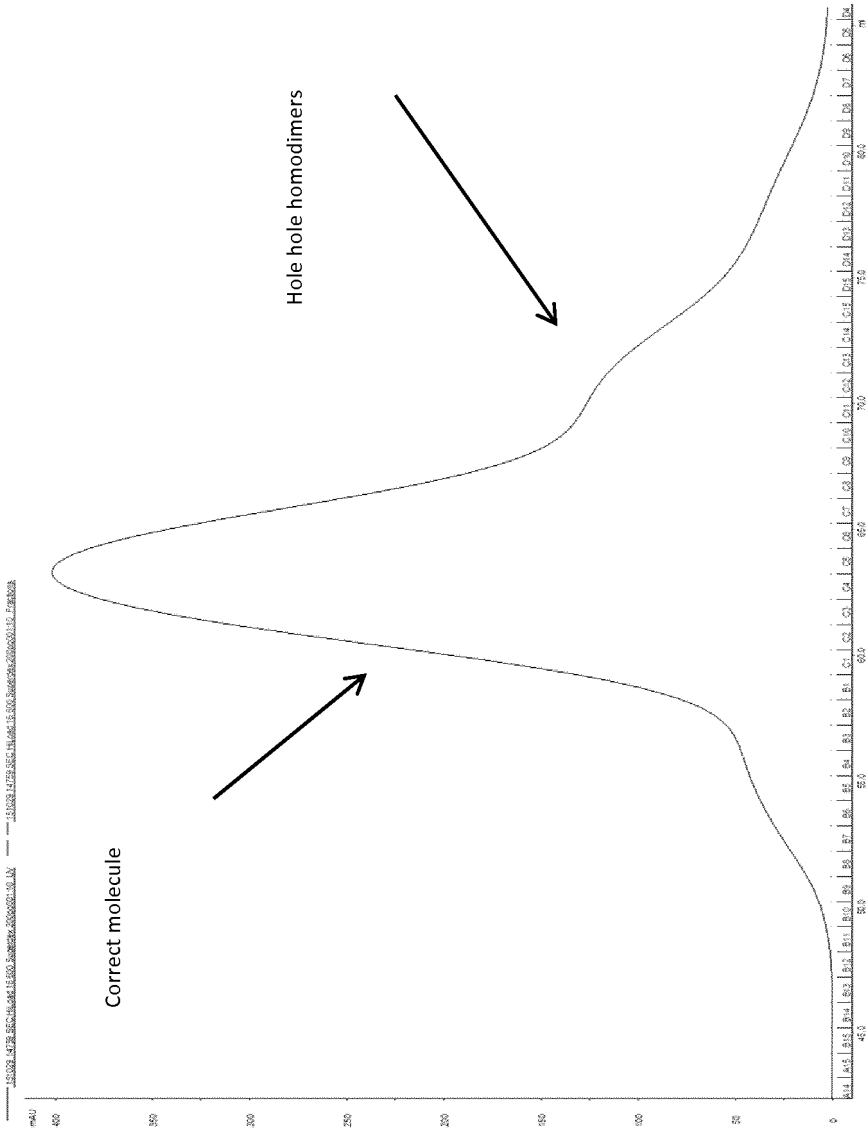


FIG. 8

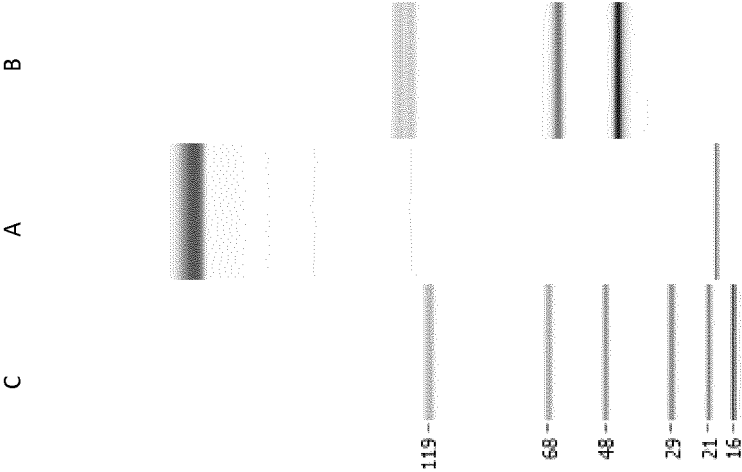


FIG. 9

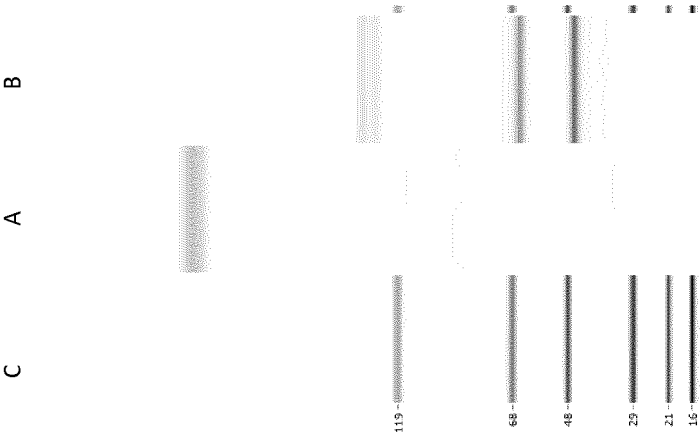


FIG. 10

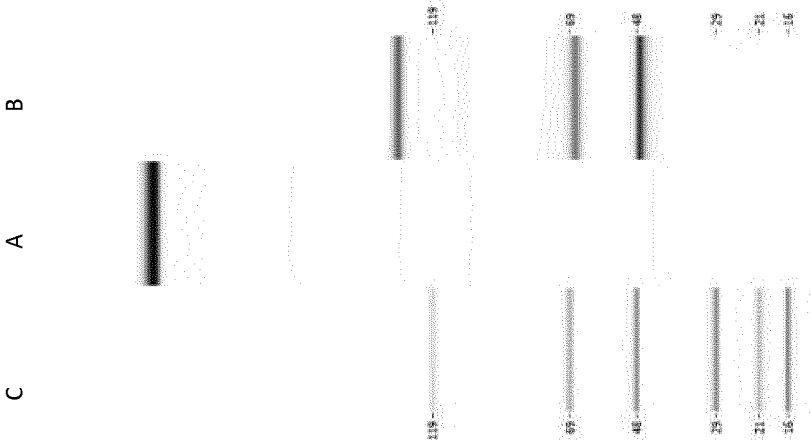


FIG. 11

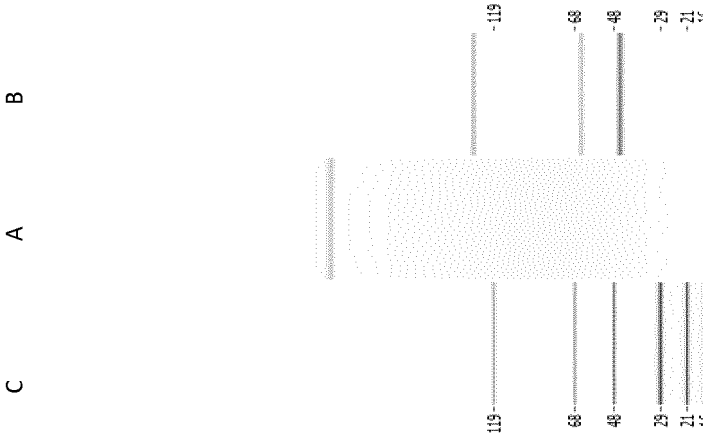


FIG. 12A

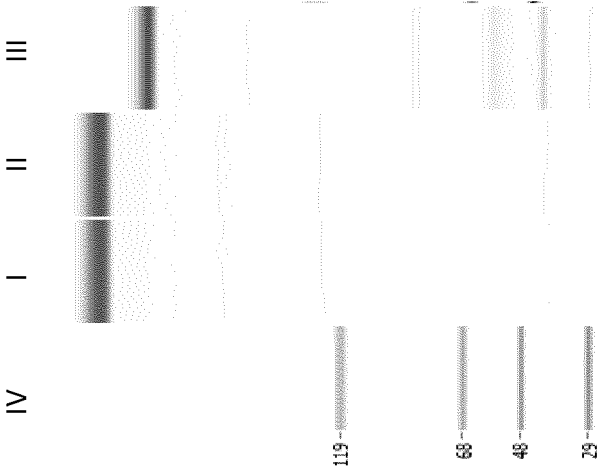


FIG. 12B

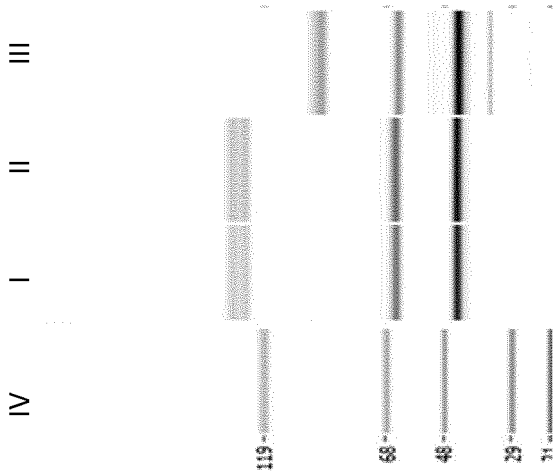


FIG. 12C

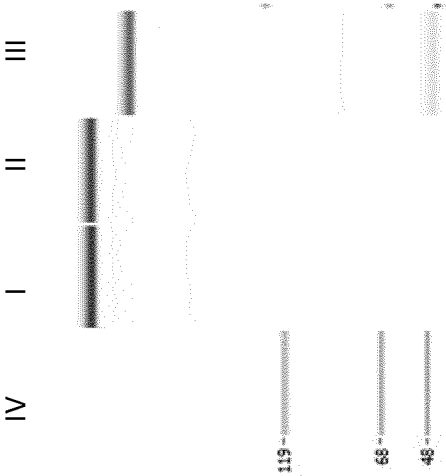


FIG. 12D

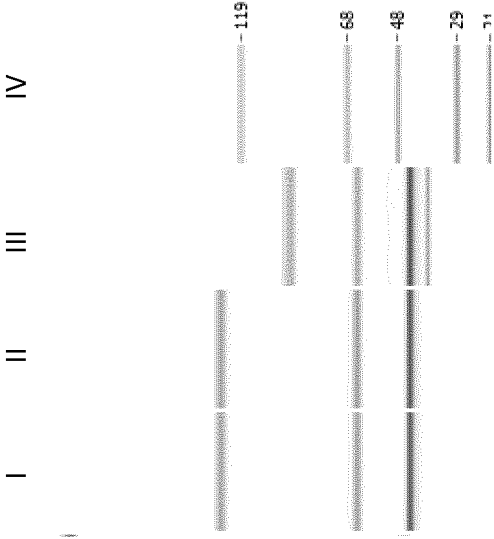


FIG. 13

Human cell lines	FoIR1 density
Hela	2'240'716
Skov3	91'510
HT29	10'135
MKN45	54
Human Renal Cortical Epithelial Cells (HRCepiC)	312

FIG. 14A

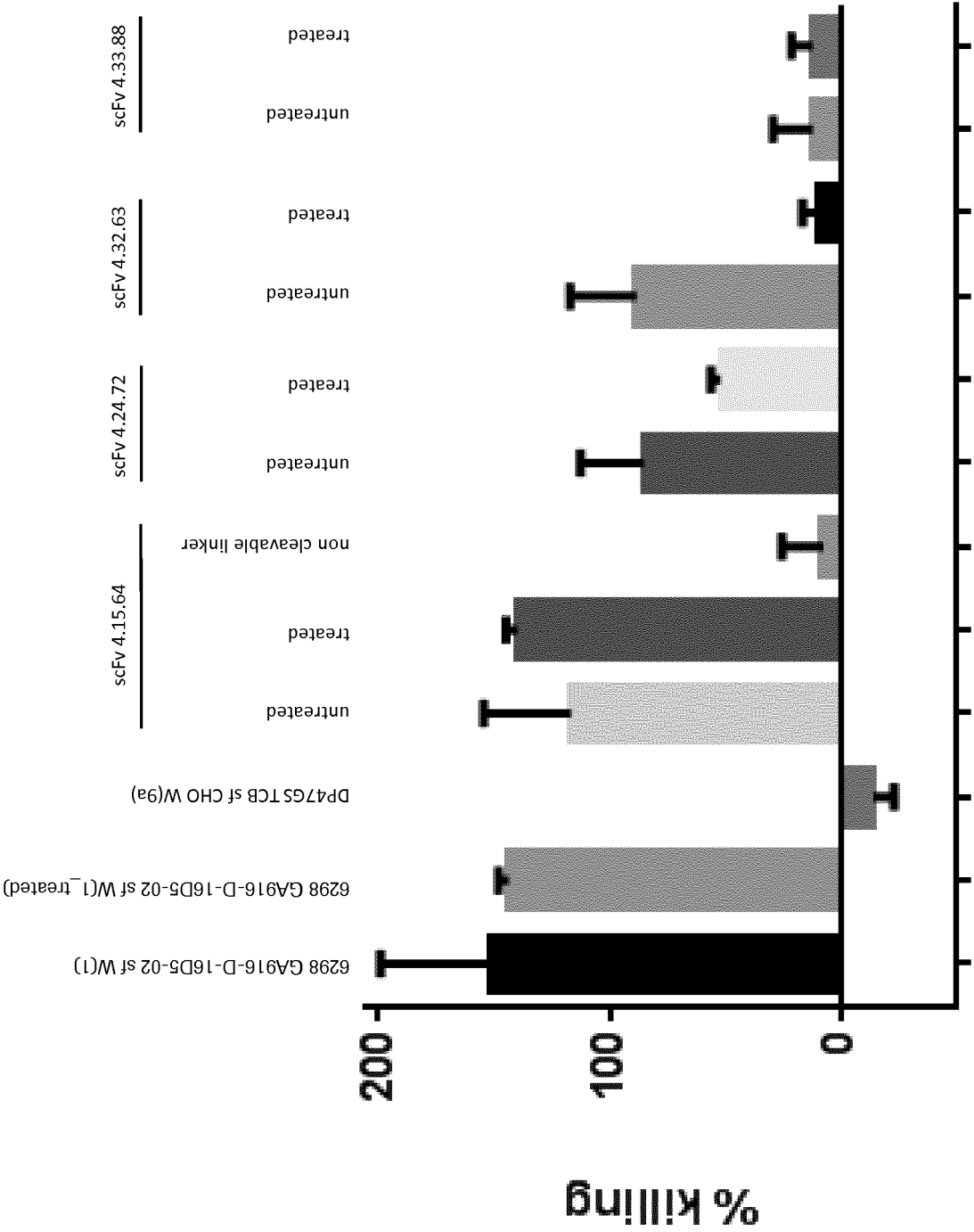
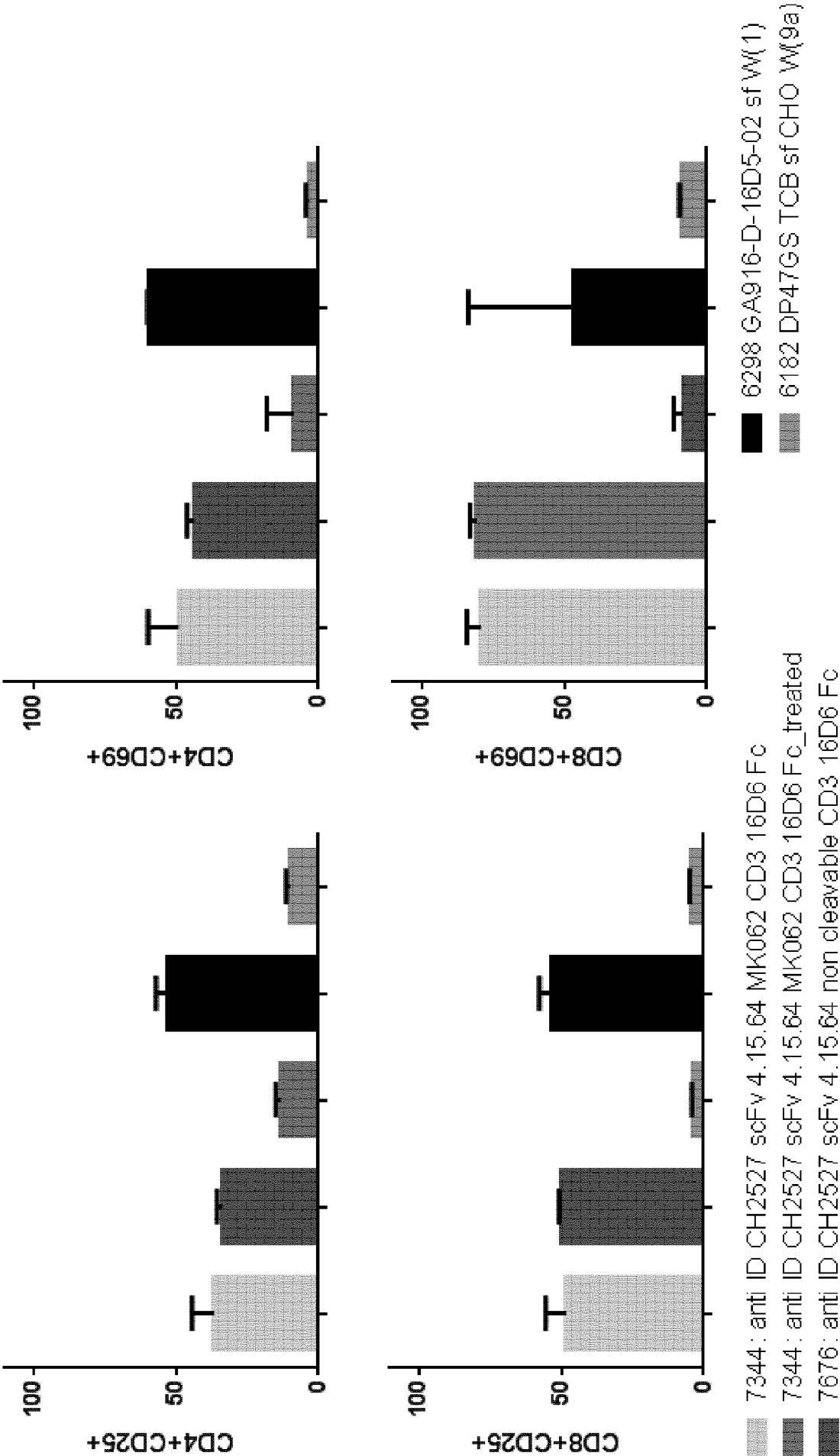


FIG. 14B



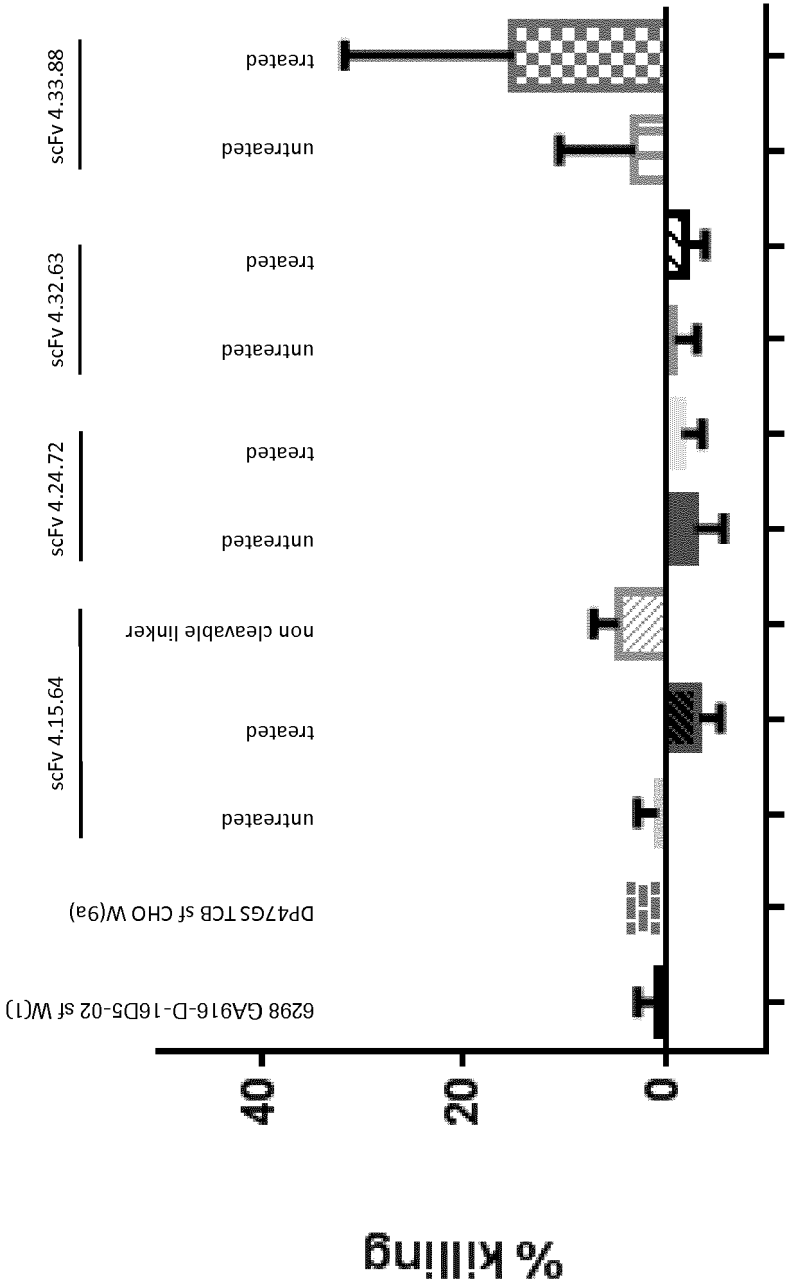


FIG. 15B

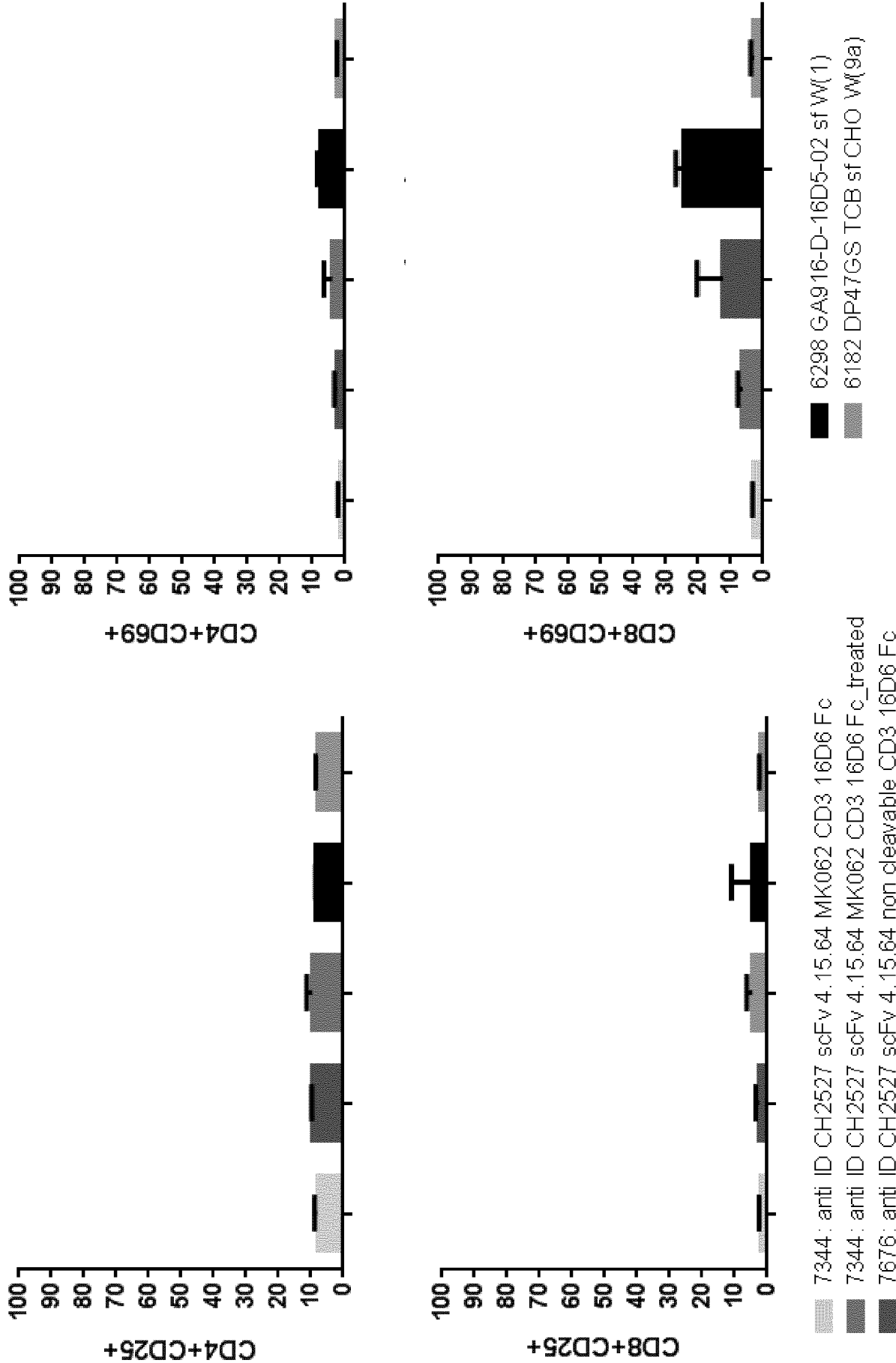


FIG. 16

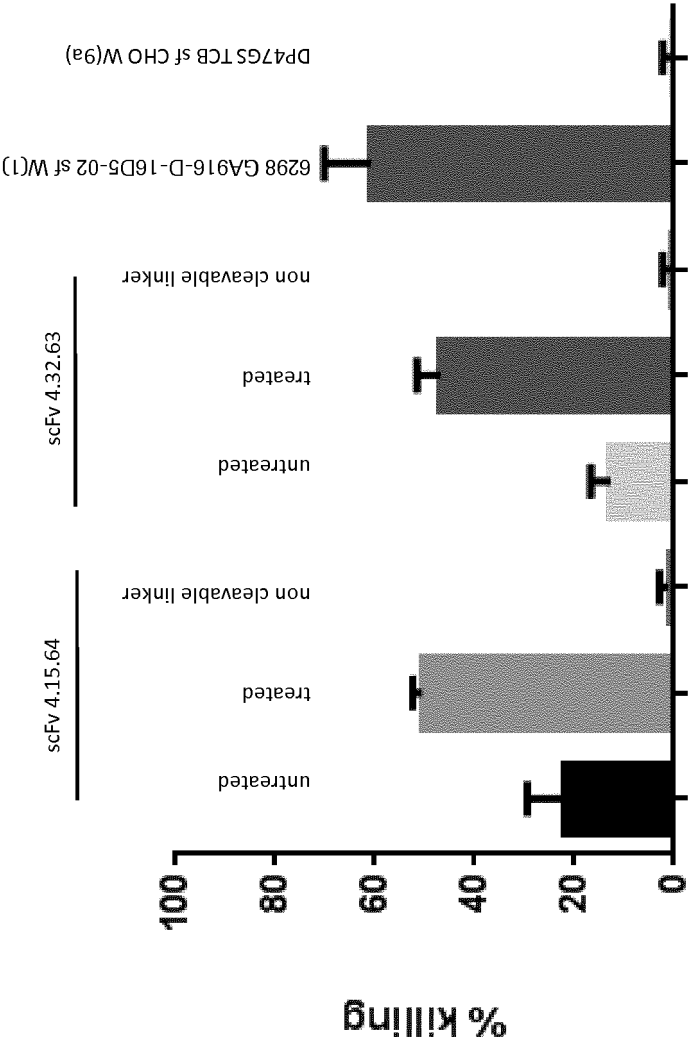
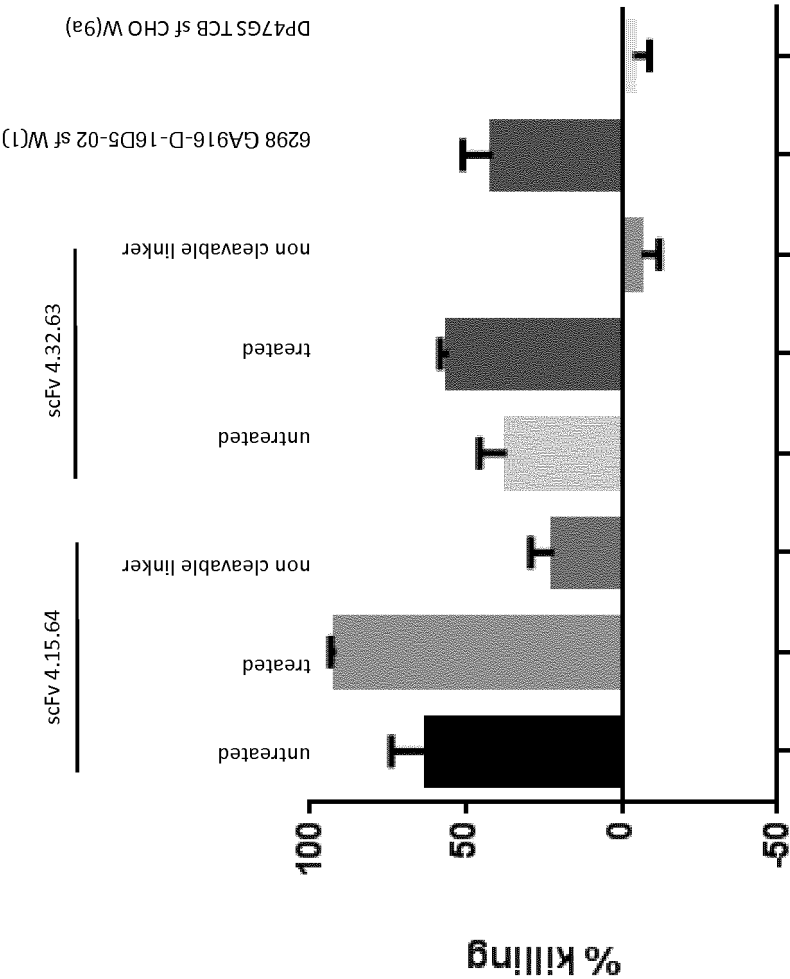


FIG. 17



- 7344: anti ID CH2527 scFv 4.15.64 MK062 CD3 16D6 Fc
- 7344: anti ID CH2527 scFv 4.15.64 MK062 CD3 16D6 Fc_treated
- ▲ 7676: anti ID CH2527 scFv 4.15.64 non cleavable CD3 16D6 Fc
- ▼ 6298 GA916-D-16D5-02 sf W(1)
- ◆ 6182 DP47GS TCB sf CHO W(9a)

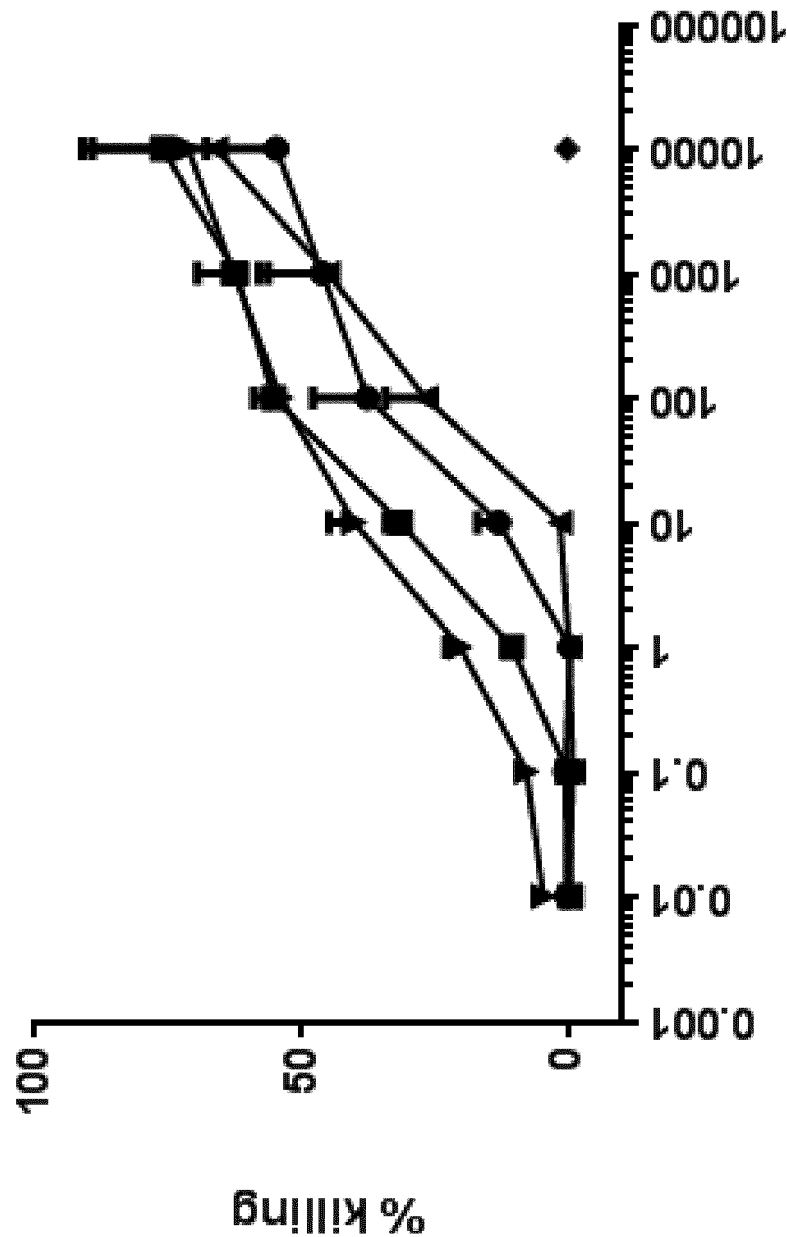
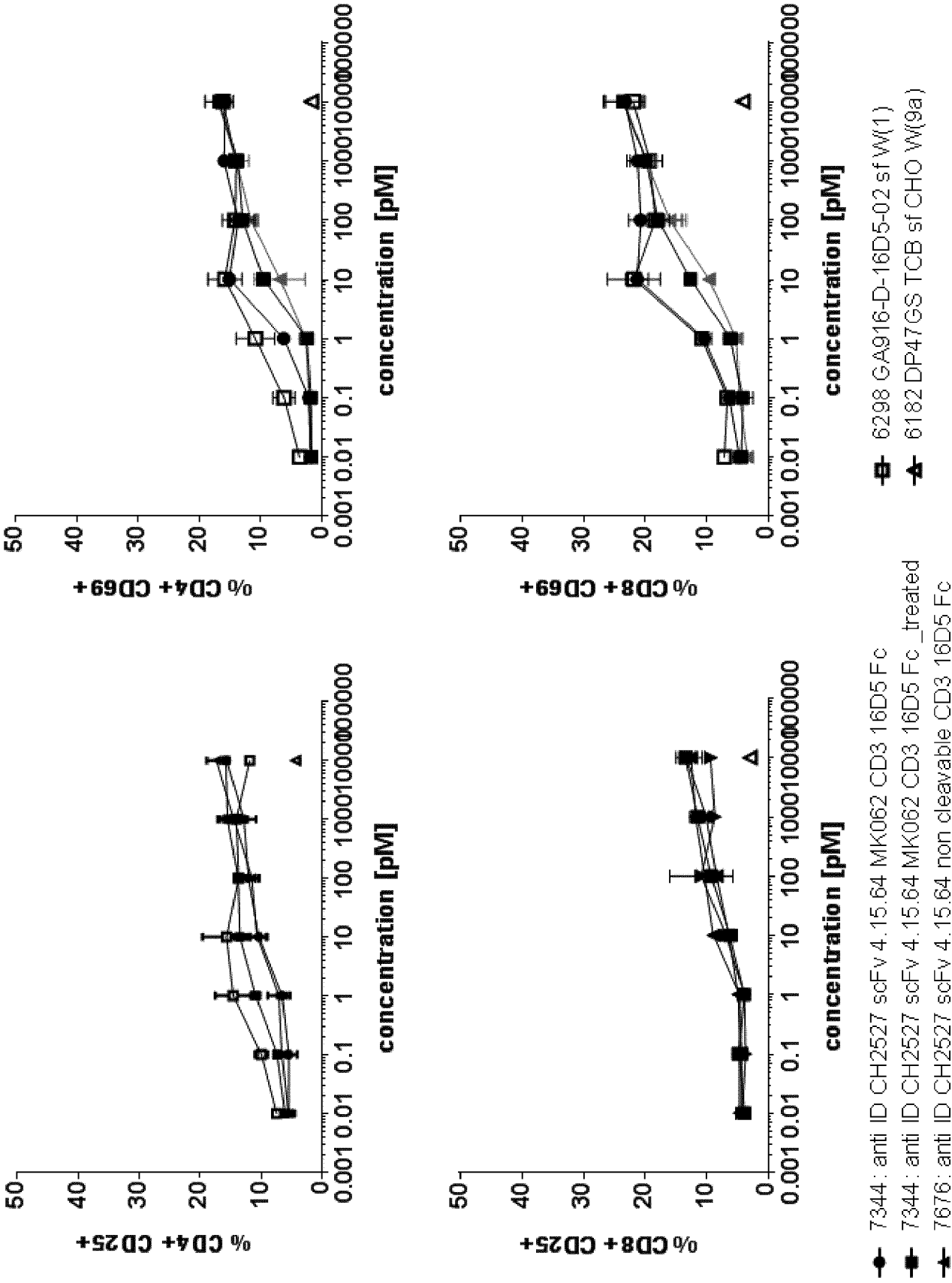


FIG. 18A

FIG. 18B



- 7496: anti ID CH2527 scFv 4.32.63 MK062 CD3 16D6 Fc
- 7496: anti ID CH2527 scFv 4.32.63 MK062 CD3 16D6 Fc treated
- 7611: anti ID CH2527 scFv 4.32.63 non cleavable linker CD3 16D6 Fc
- 6298 GA916-D-16D5-02 sf V α (1)
- 6182 DP47GS TCB sf CHO V α (9a)

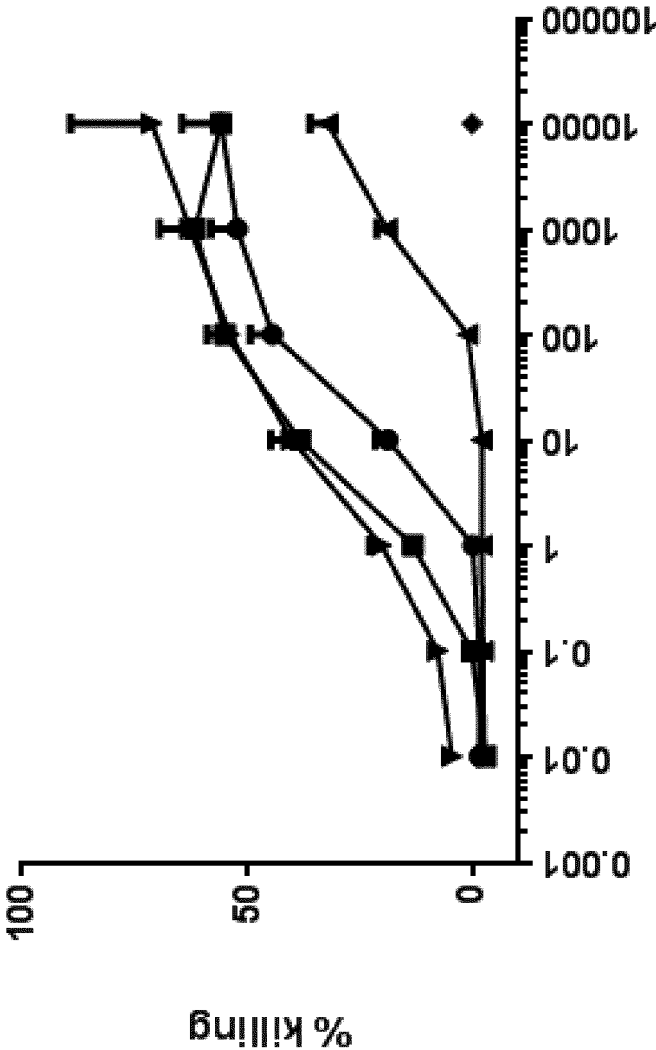
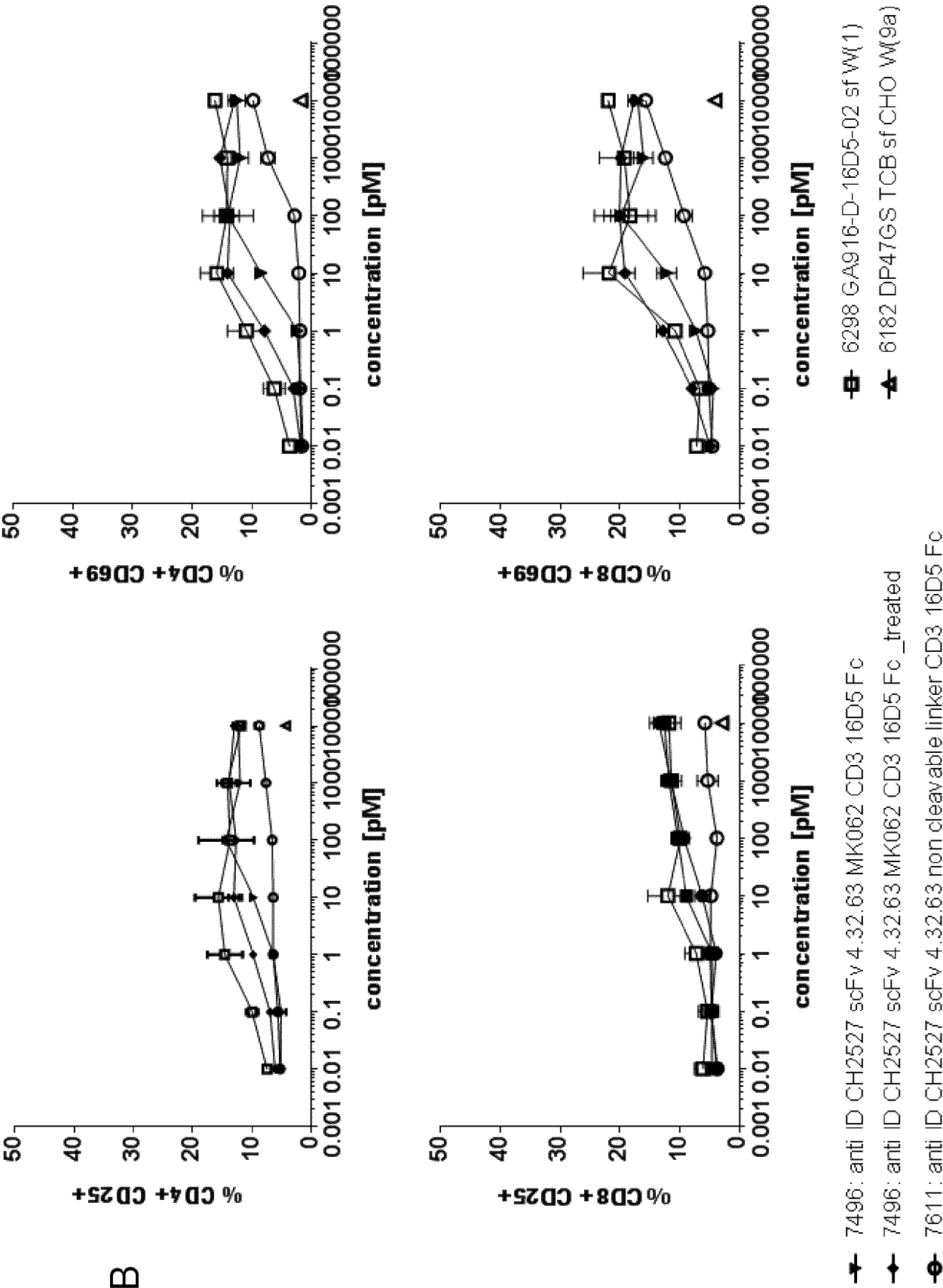


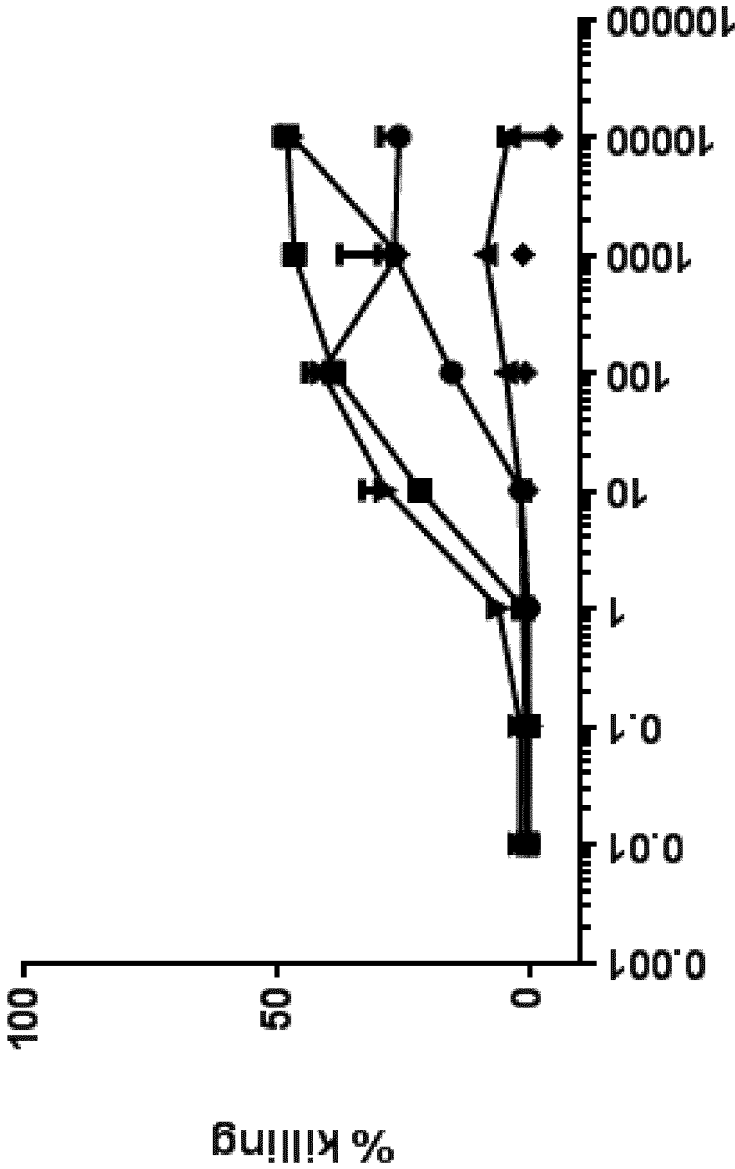
FIG. 19A

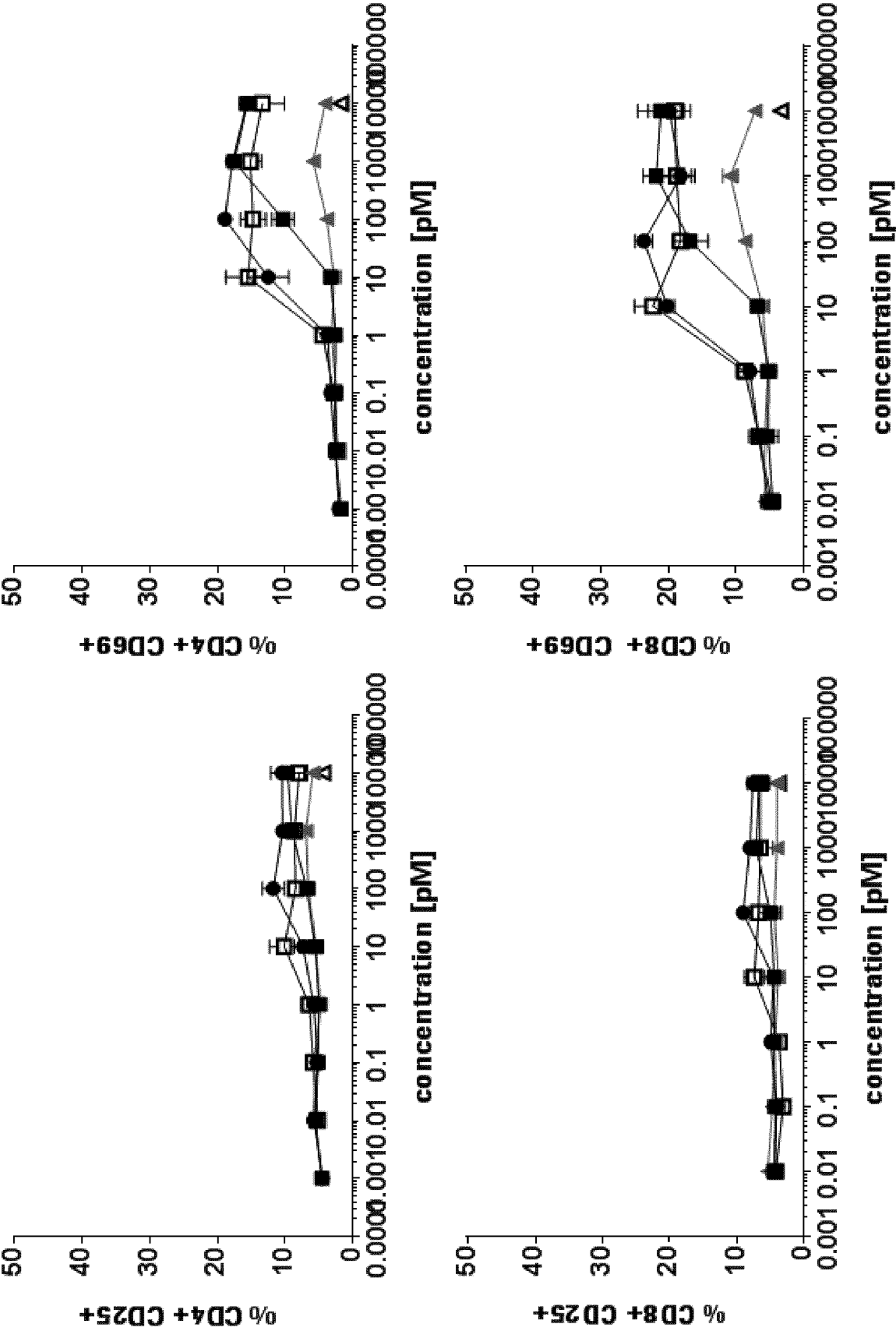
FIG. 19B



- 7344: anti ID CH2527 scFv 4.15.64 MK062 CD3 16D6 Fc
- 7344: anti ID CH2527 scFv 4.15.64 MK062 CD3 16D6 Fc_treated
- 7676: anti ID CH2527 scFv 4.15.64 non cleavable CD3 16D6 Fc
- 6298 GA916-D-16D5-02 sf vW(1)
- 6182 DP47GS TCB sf CHO vW(9a)

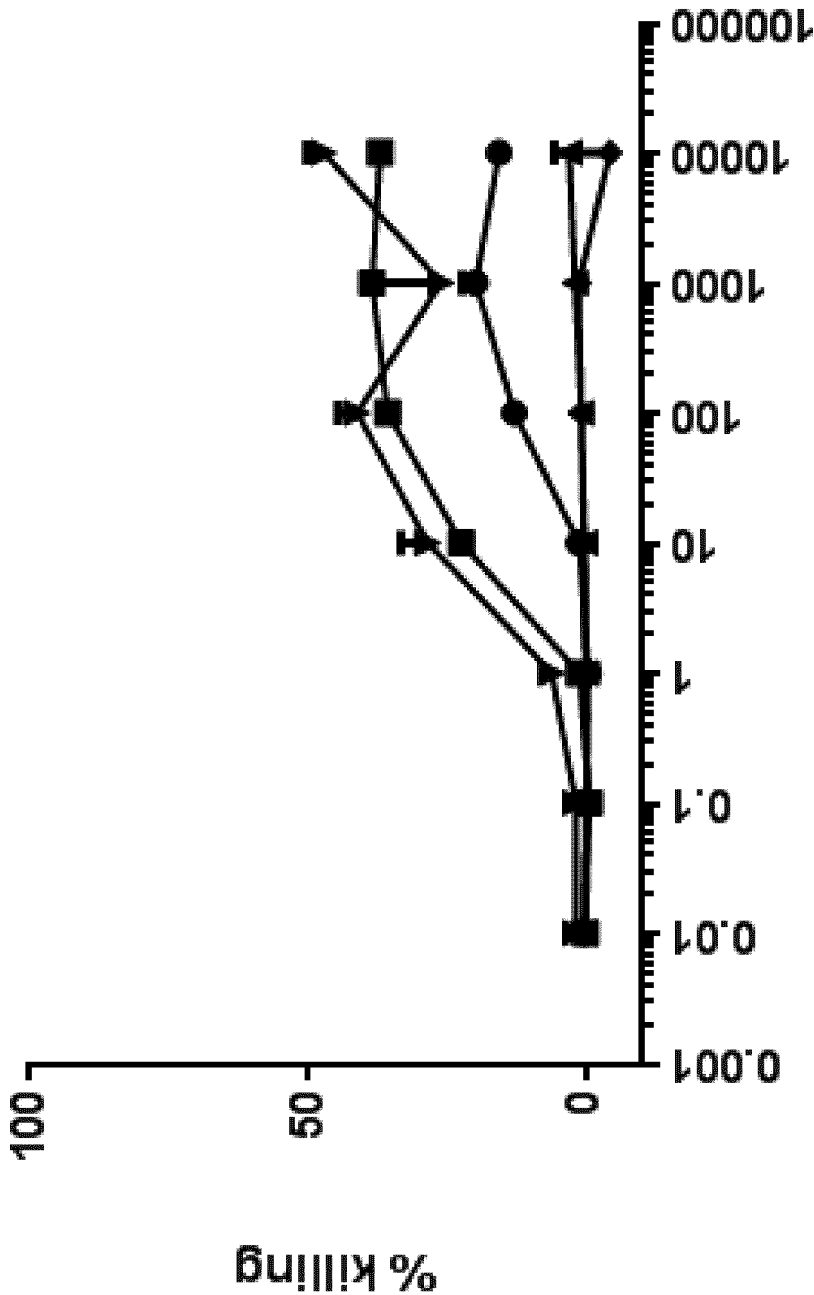
FIG. 20A





- 7496: anti ID CH2527 scFv 4.32.63 MK062 CD3 16D6 Fc
- 7496: anti ID CH2527 scFv 4.32.63 MK062 CD3 16D6 Fc treated
- ▲ 7611: anti ID CH2527 scFv 4.32.63 non cleavable linker CD3 16D6 Fc
- ▼ 6298 GA916-D-16D5-02 sf VV(1)
- ◆ 6182 DP47GS TCB sf CHO VV(9a)

FIG. 21A



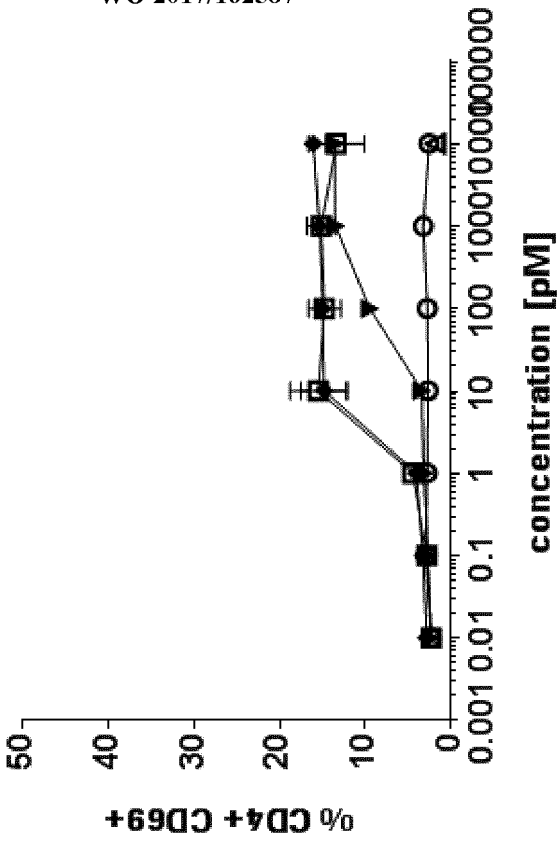
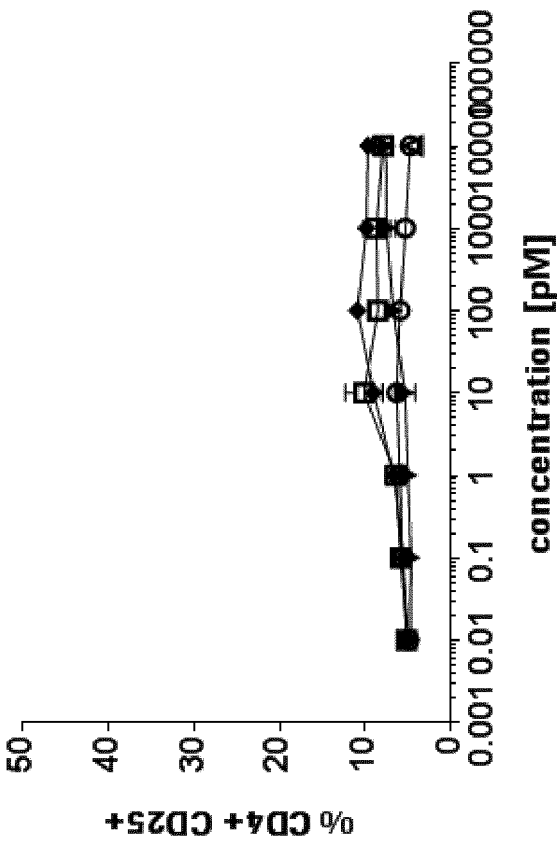
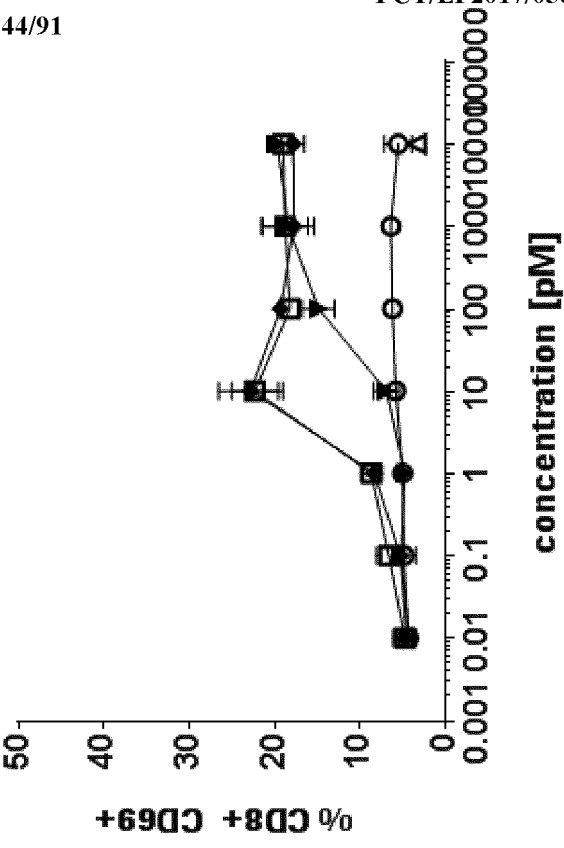
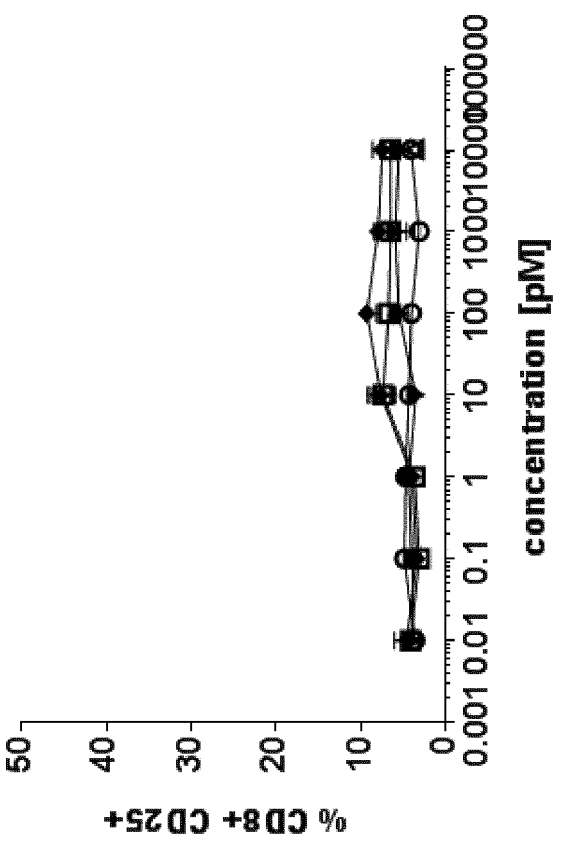


FIG. 21B



6298 GA916-D-16D5-02 sfW(1)
6182 DP47GS TCB sf CHO W(9a)

7496: anti ID CH2527 scFv 4:32.63 MK062 CD3 16D5 Fc
7496: anti ID CH2527 scFv 4:32.63 MK062 CD3 16D5 Fc_treated
7611: anti ID CH2527 scFv 4:32.63 non cleavable linker CD3 16D5 Fc

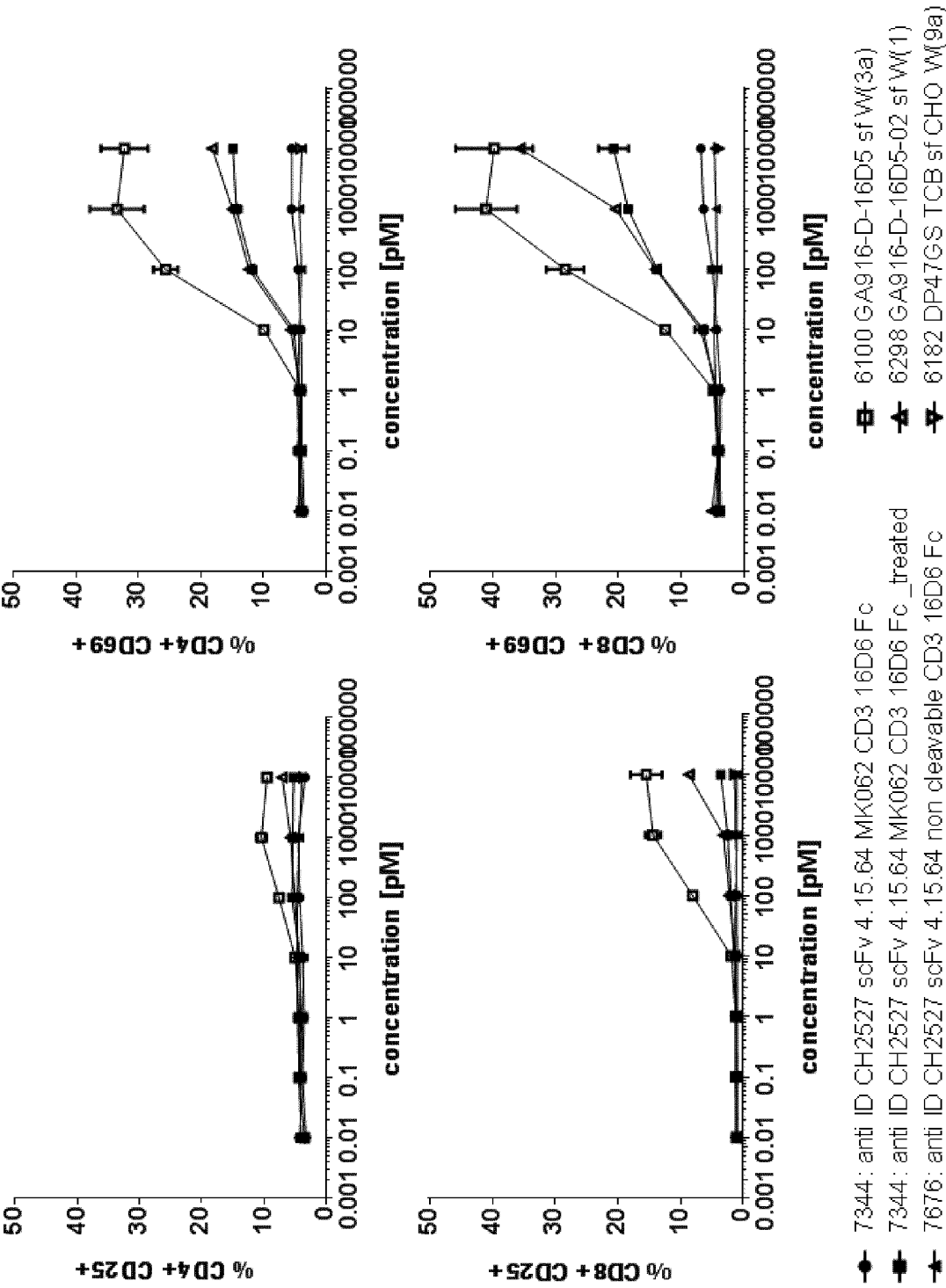
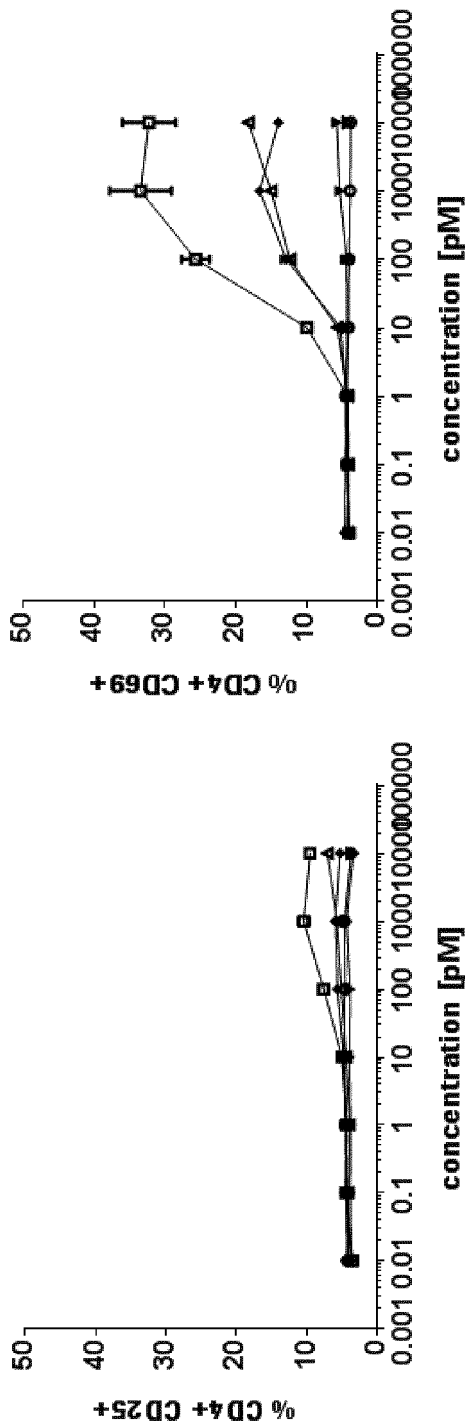
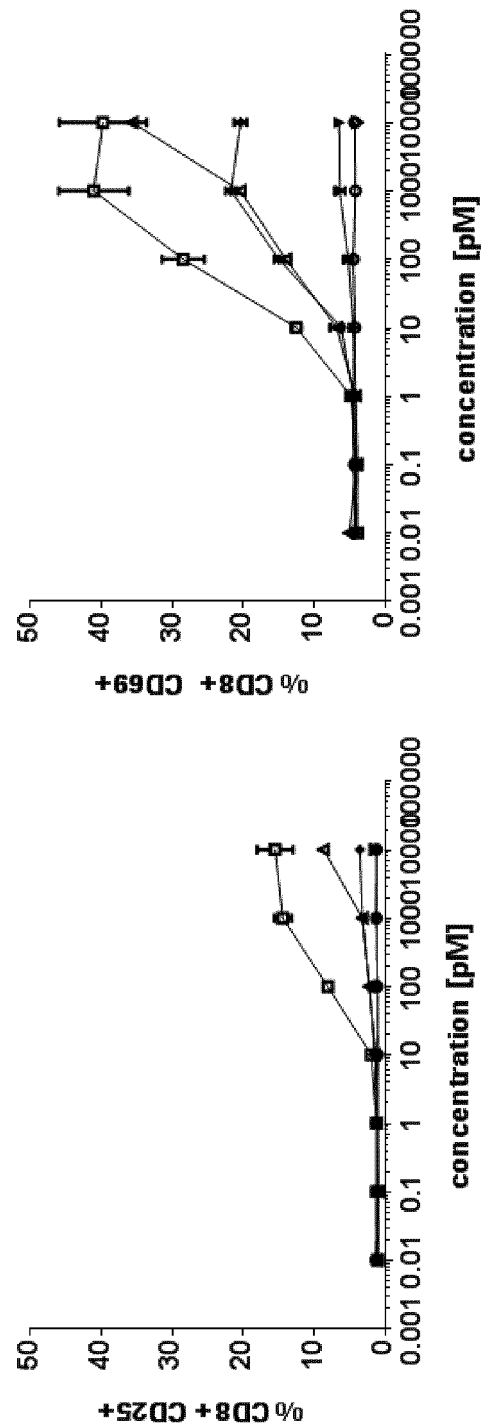


FIG. 22B



Antibody	Antigen	Accession	Accession	Accession
7496: anti ID CH2527 scFv 4.32.63 MK062 CD3 16D6 Fc	6100	G A916-D-16D5 sf W(3a)		
7496: anti ID CH2527 scFv 4.32.63 MK062 CD3 16D6 Fc_treated	6298	G A916-D-16D5-02 sf W(1)		
7611: anti ID CH2527 scFv 4.32.63 non cleavable linker CD3 16D6 Fc	6182	DP47GS TCB sf CHO W(9a)		

FIG. 23

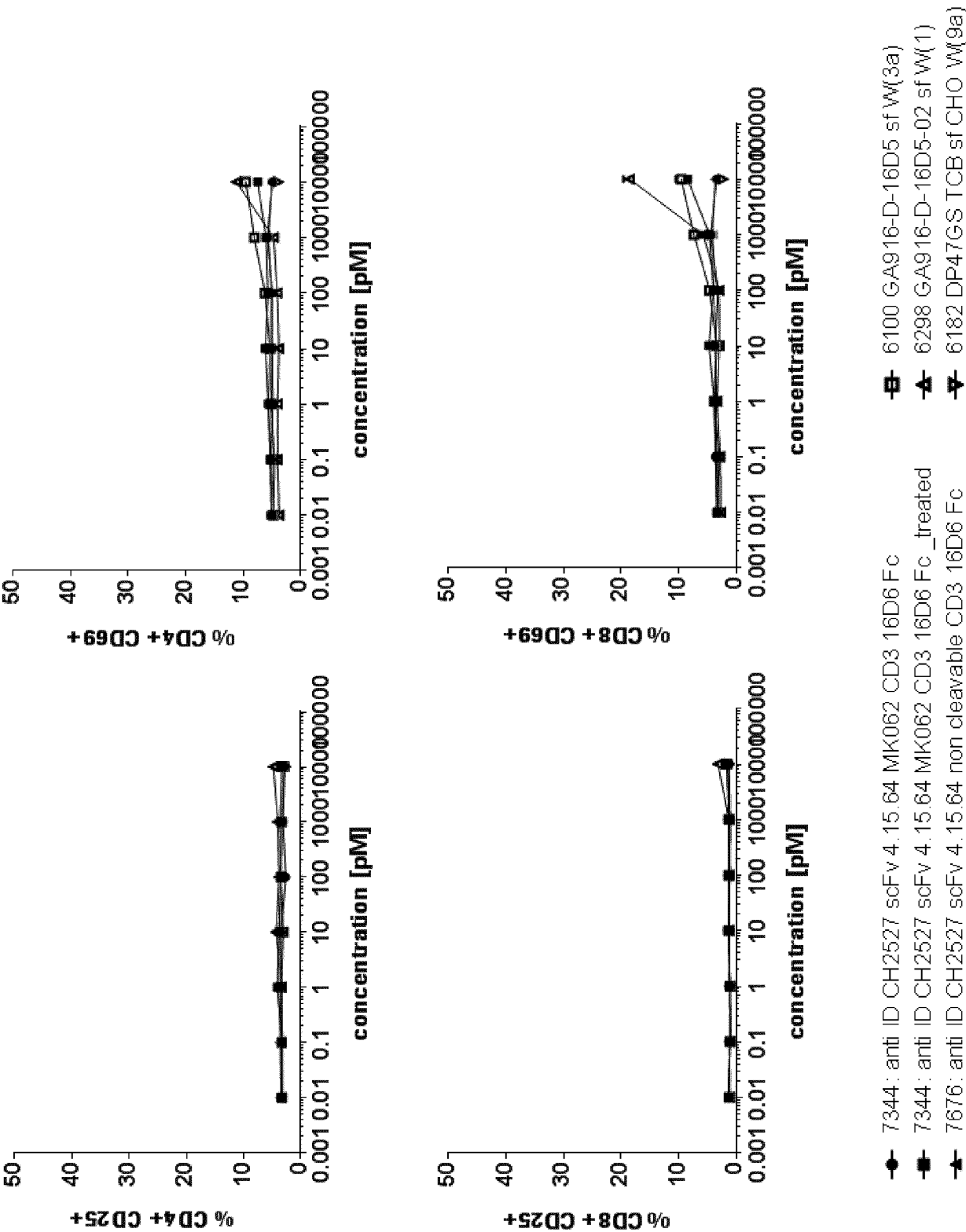


FIG. 24

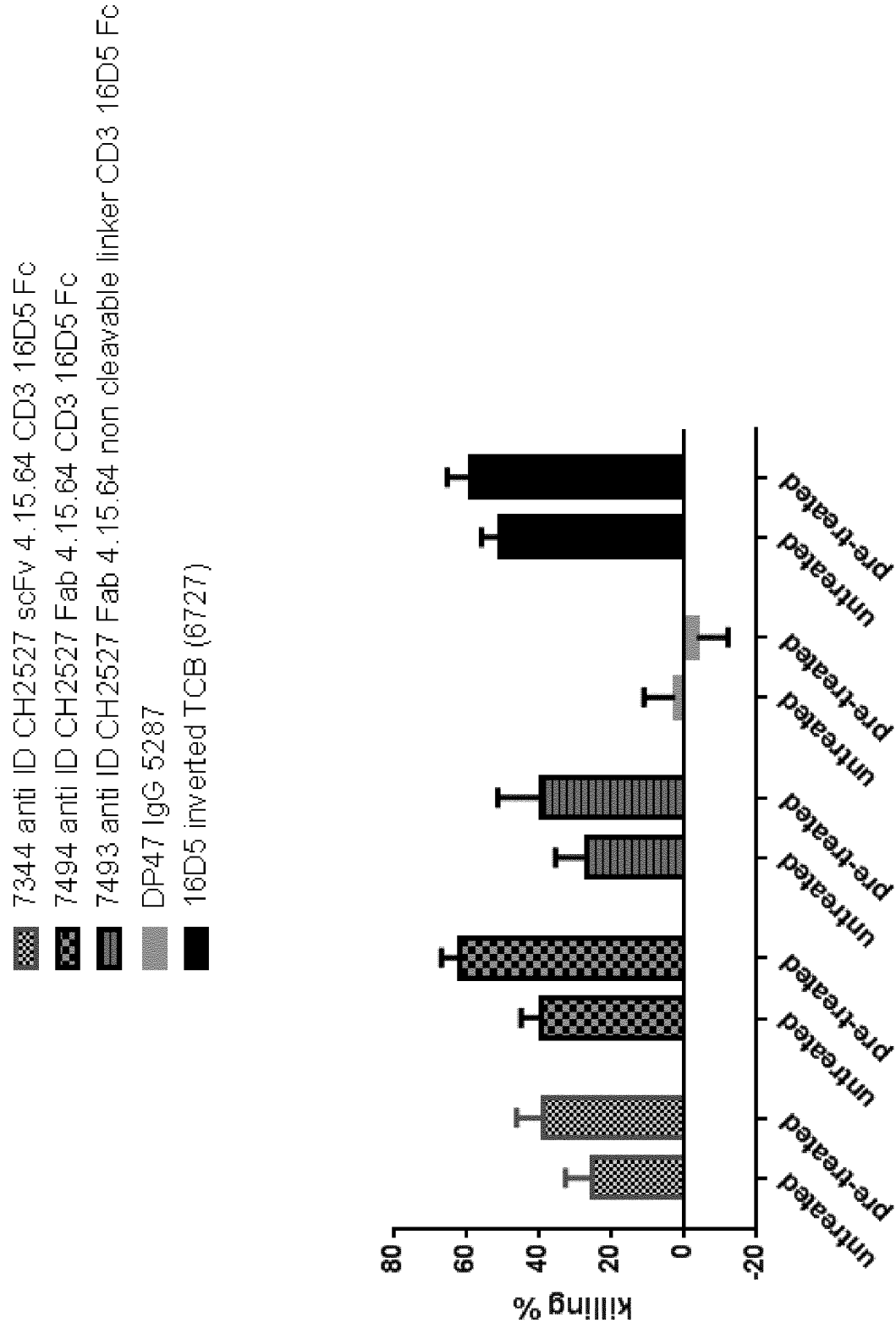
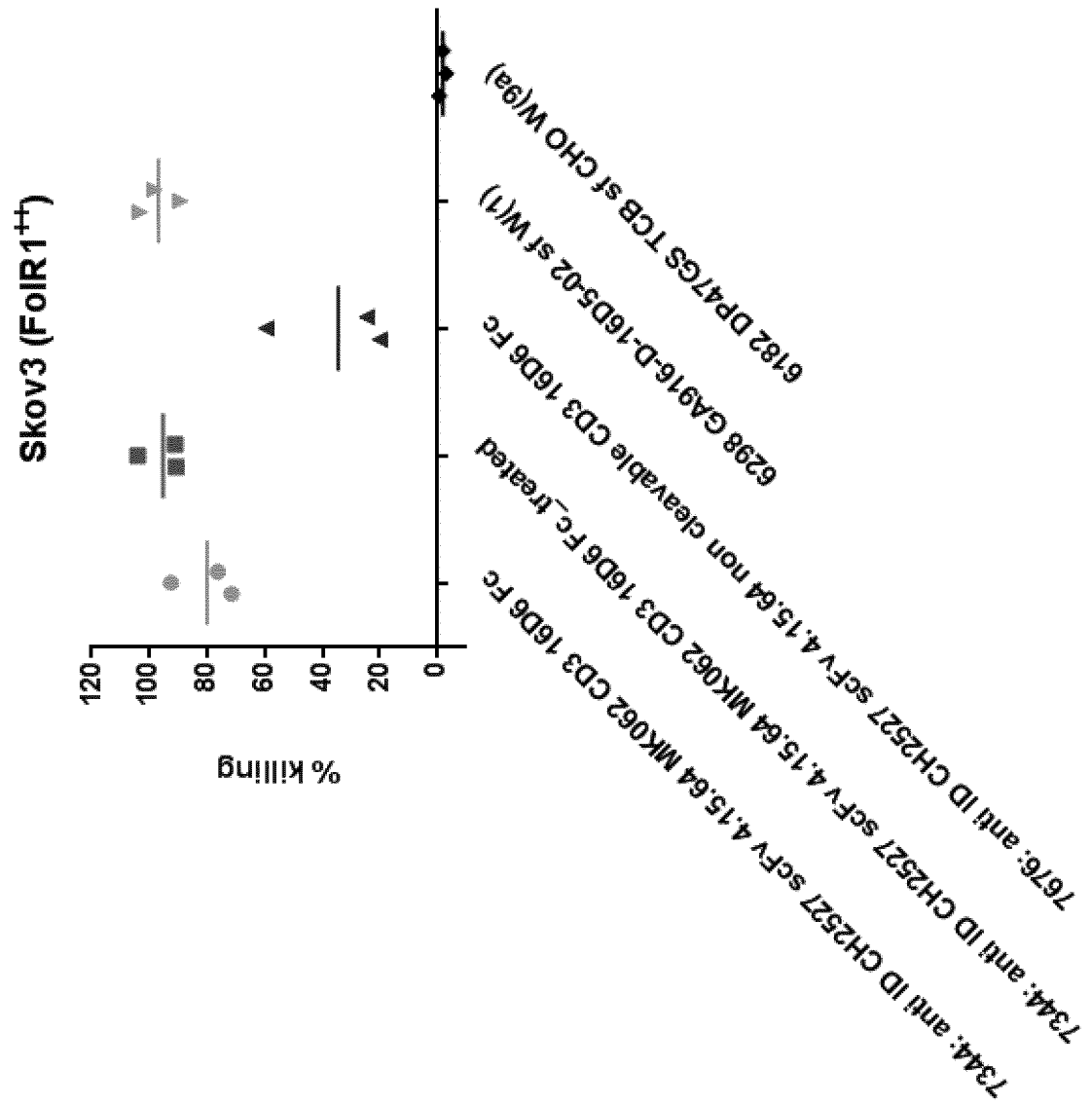


FIG. 25



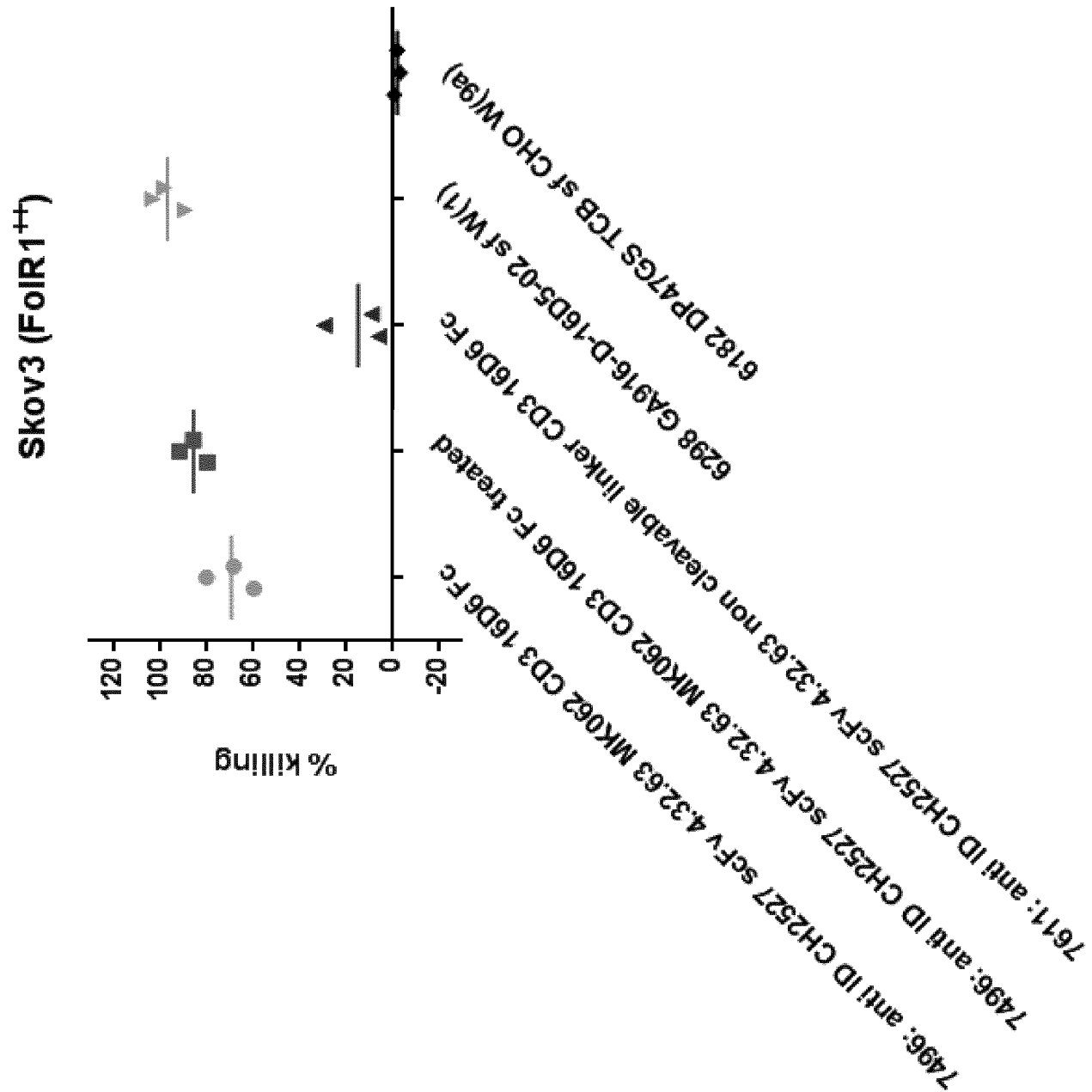


FIG. 26

FIG. 27

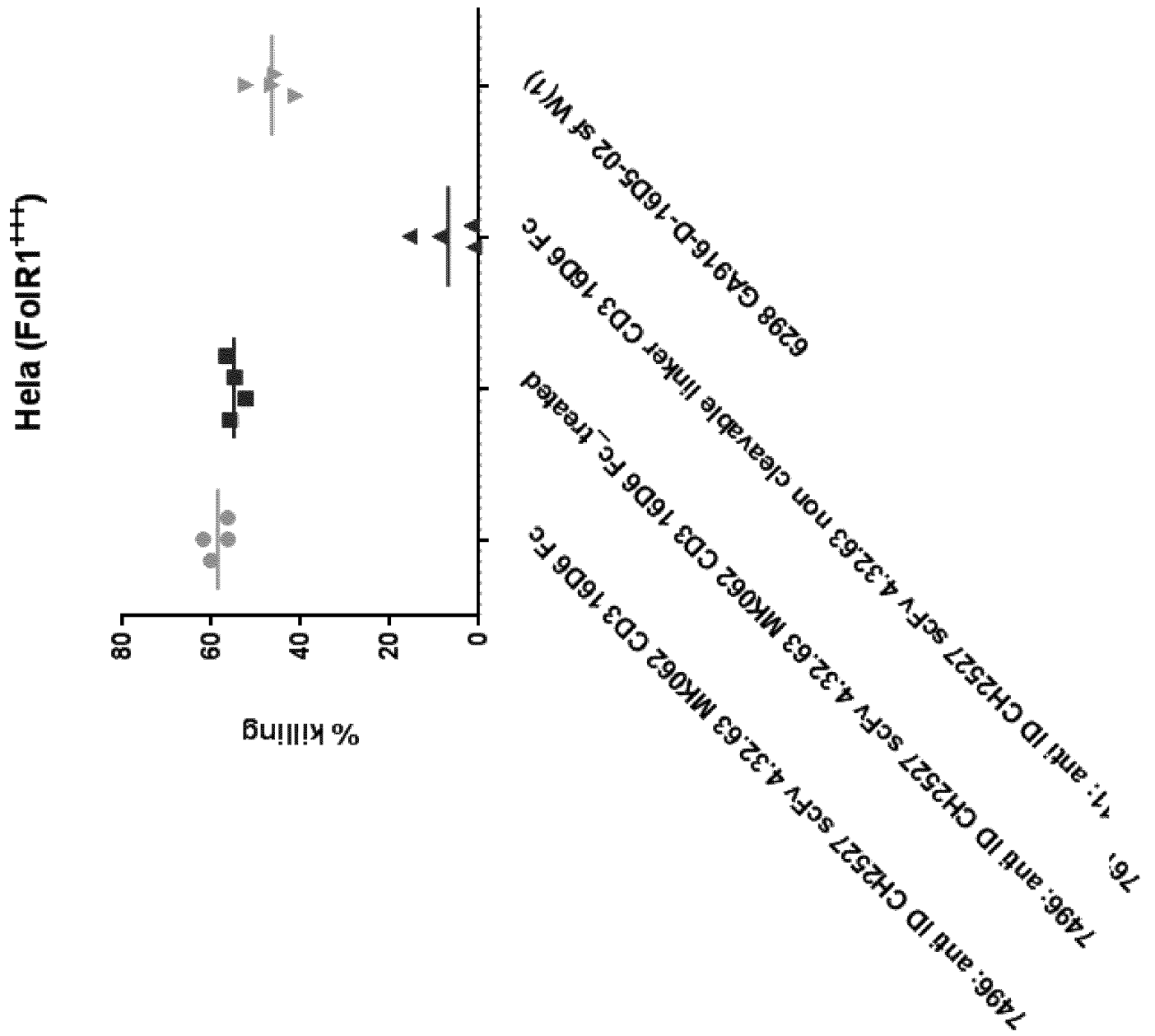


FIG. 28

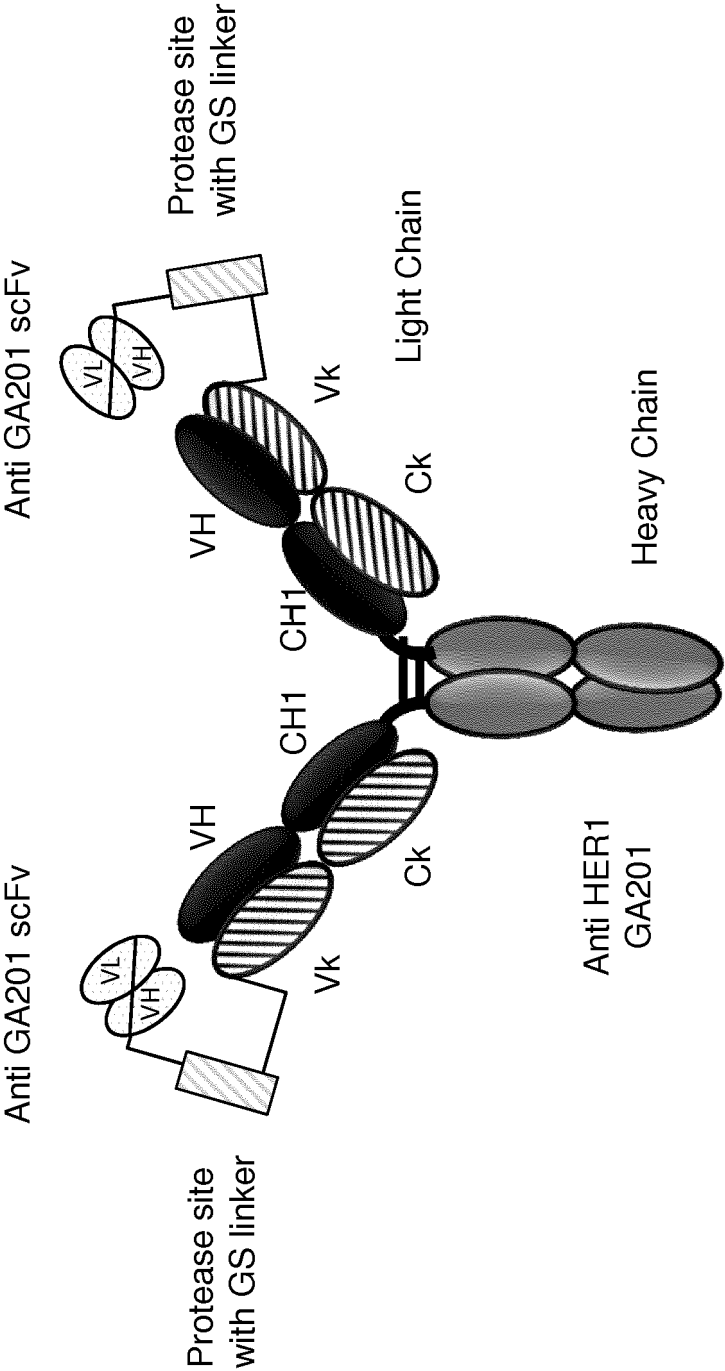


FIG. 29

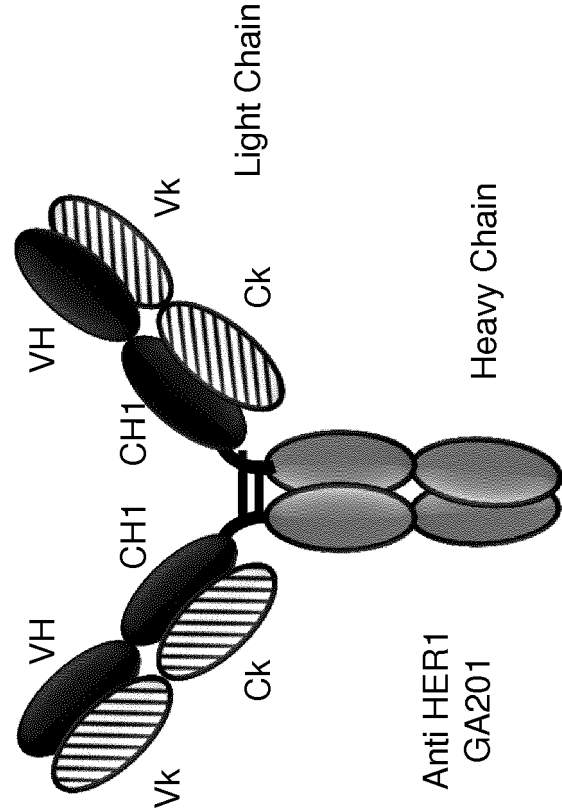


FIG. 30A

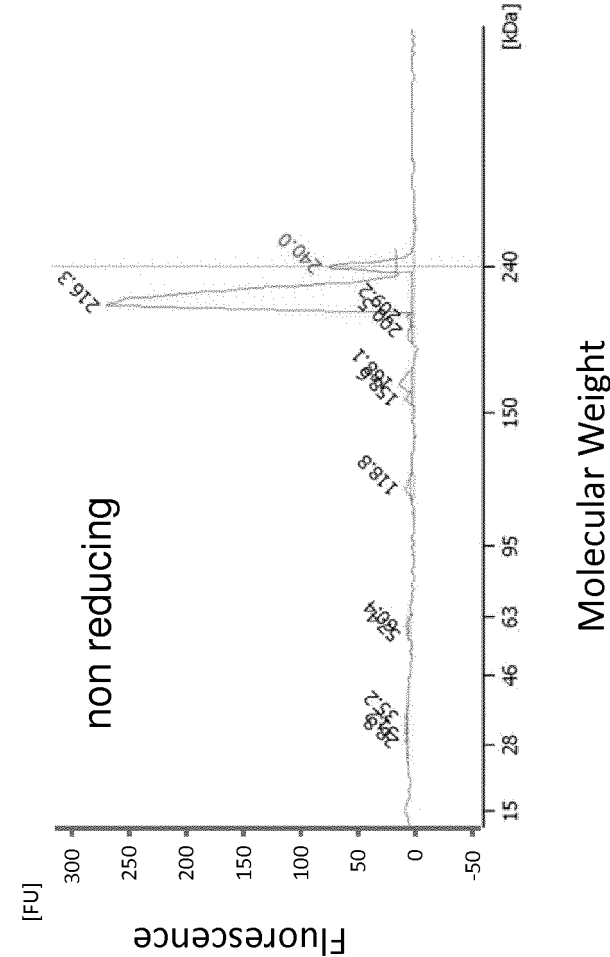


FIG. 30B

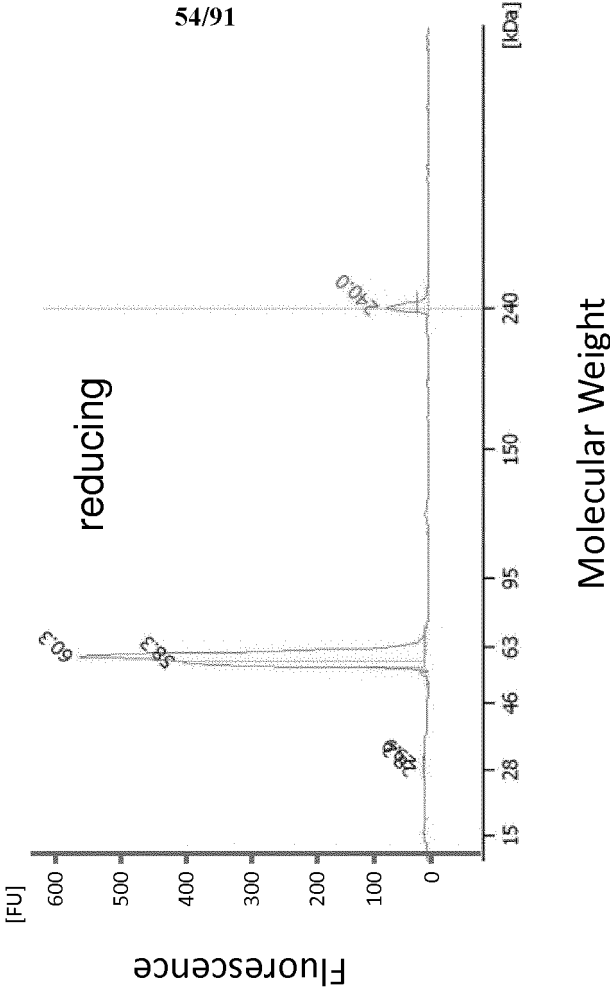


FIG. 31

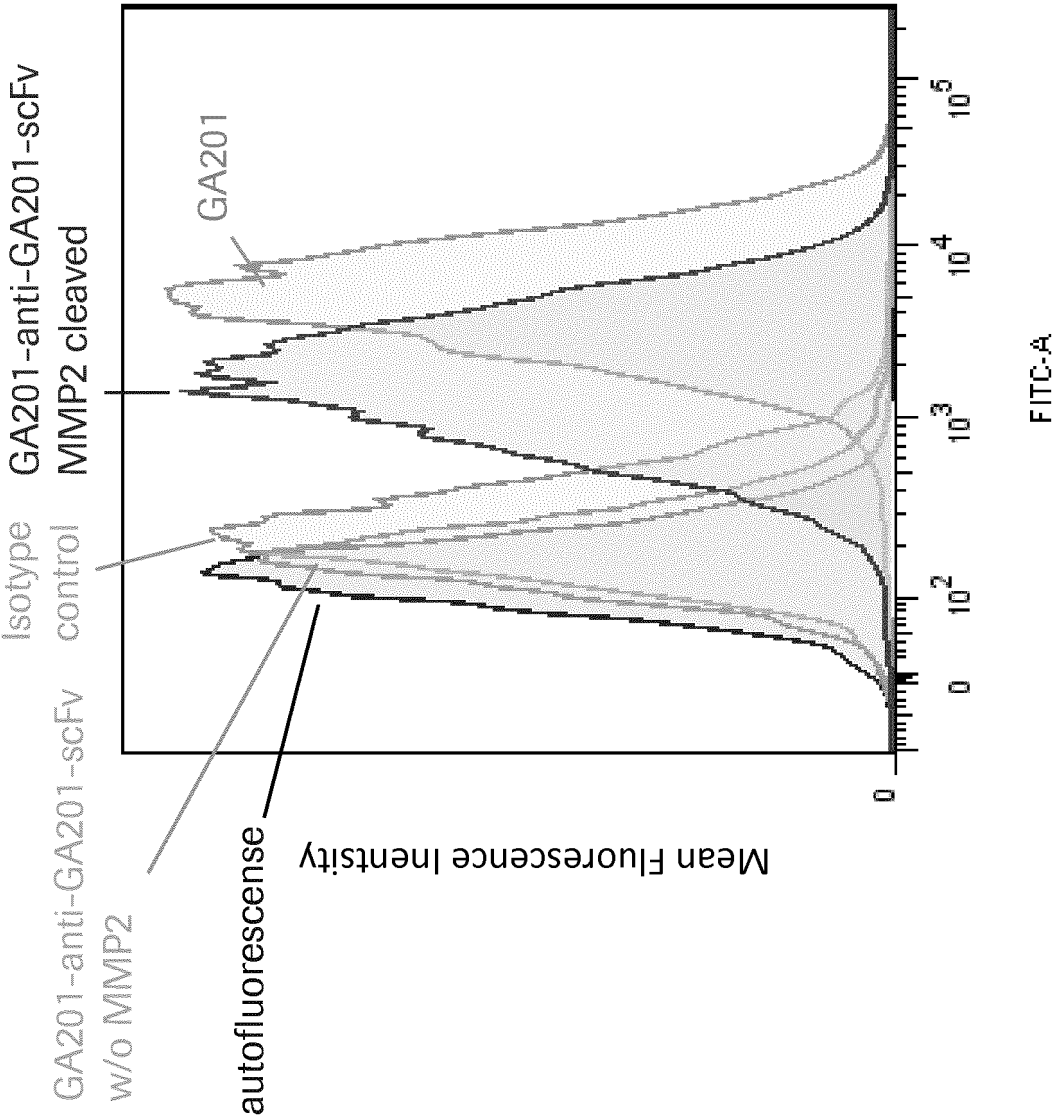
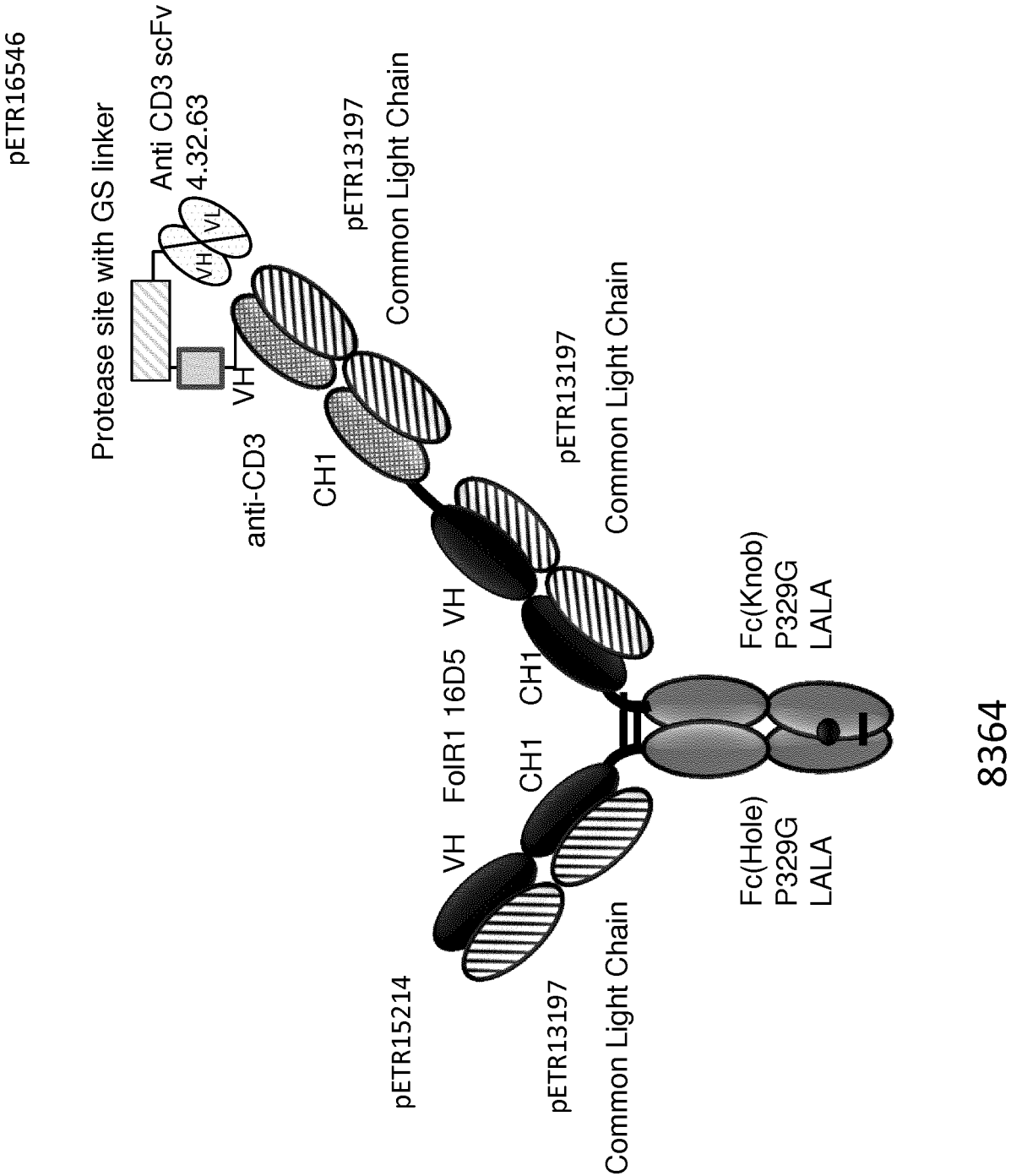


FIG. 32

Molecule	Isotype	Temp.	k_a (1/Ms)	k_d (1/s)	K_D (nM)
GA201	IgG1, kappa	37 °C	1.68E+05	1.20E-04	1
GA201-anti-GA201-scFv MIMP2 cleaved	IgG1, kappa	37°C	1.03E+05	1.63E-04	2
GA201-anti-GA201-scFv without MIMP2	IgG1, kappa	37°C	-	-	-



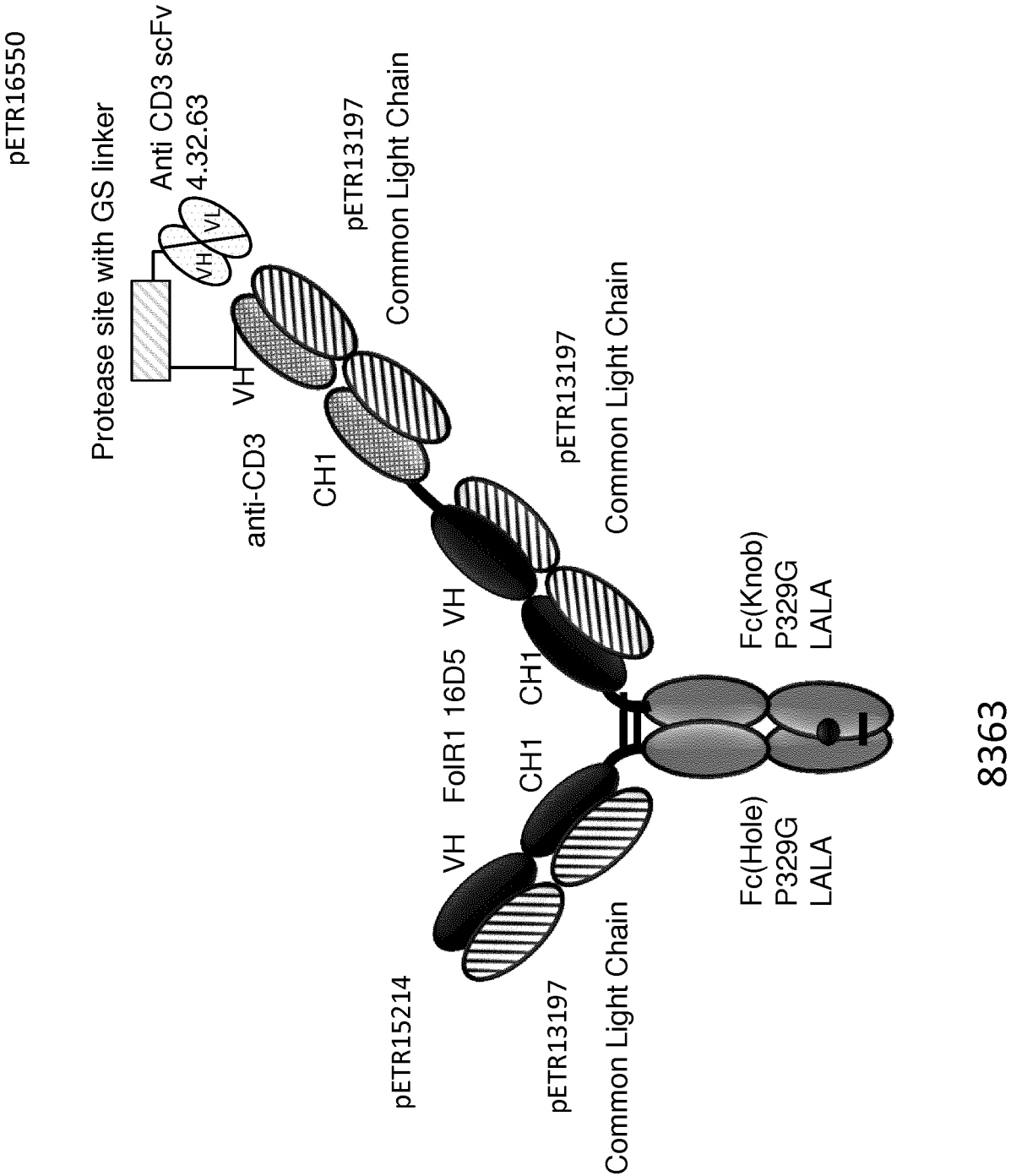


FIG. 33C

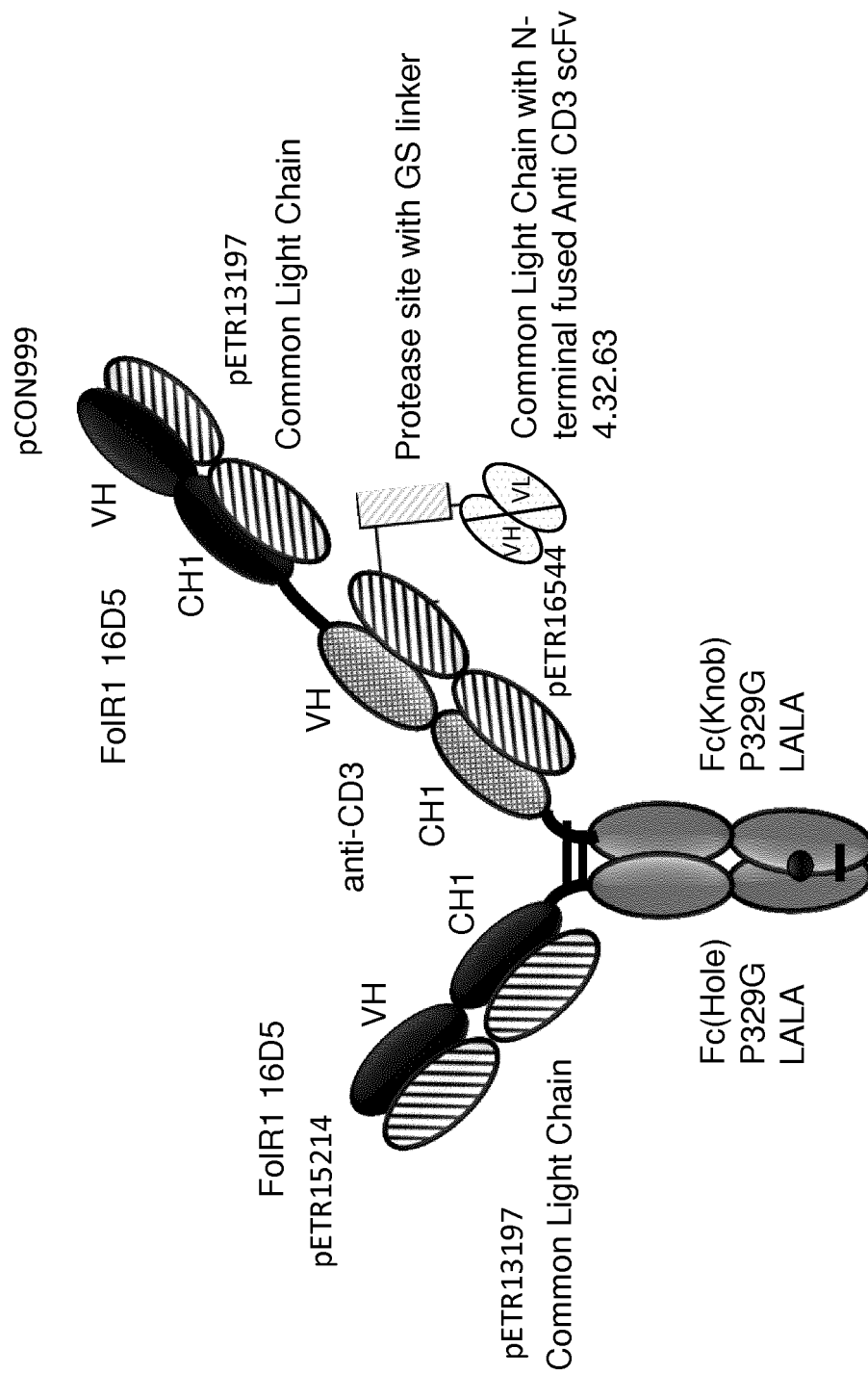
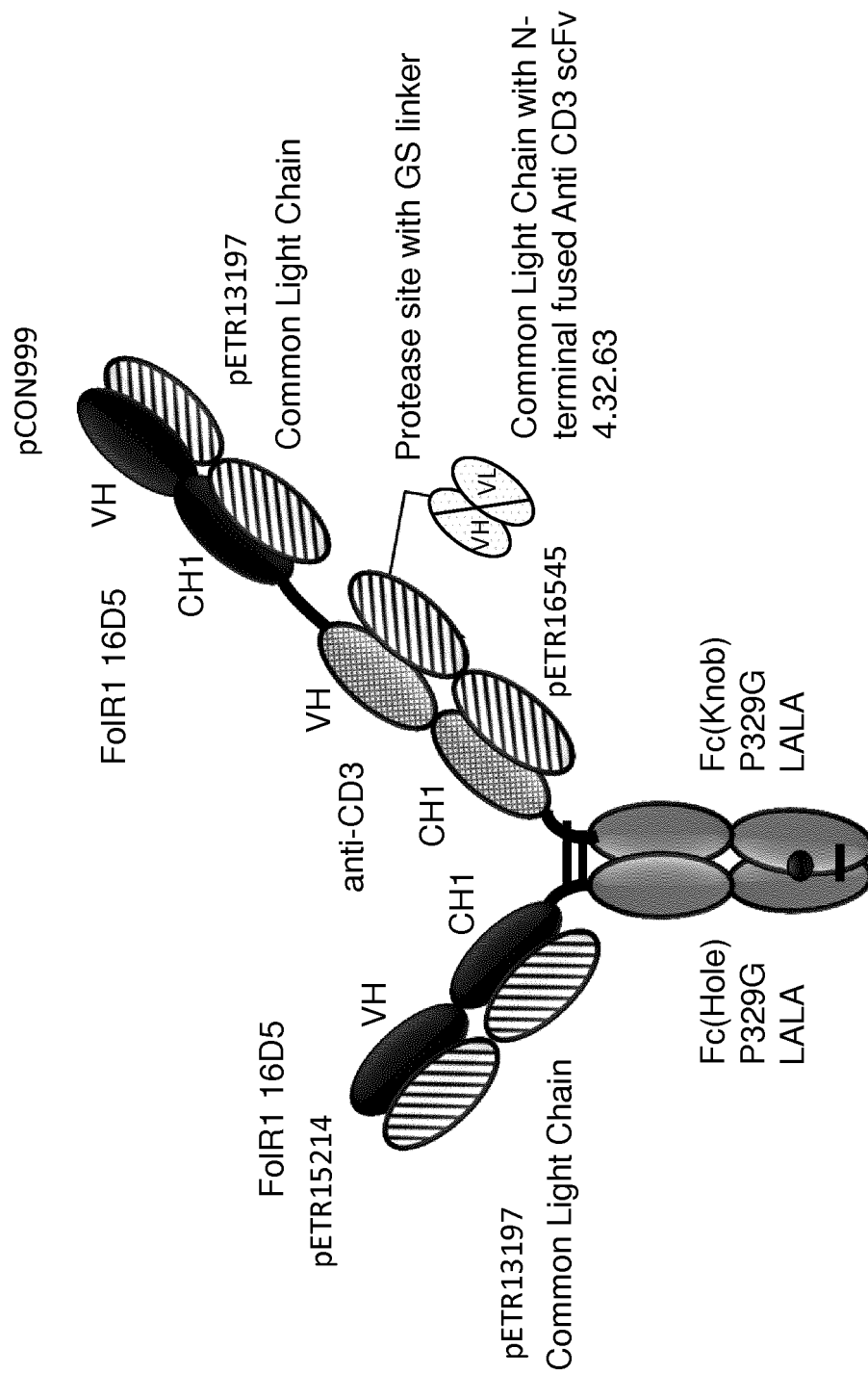
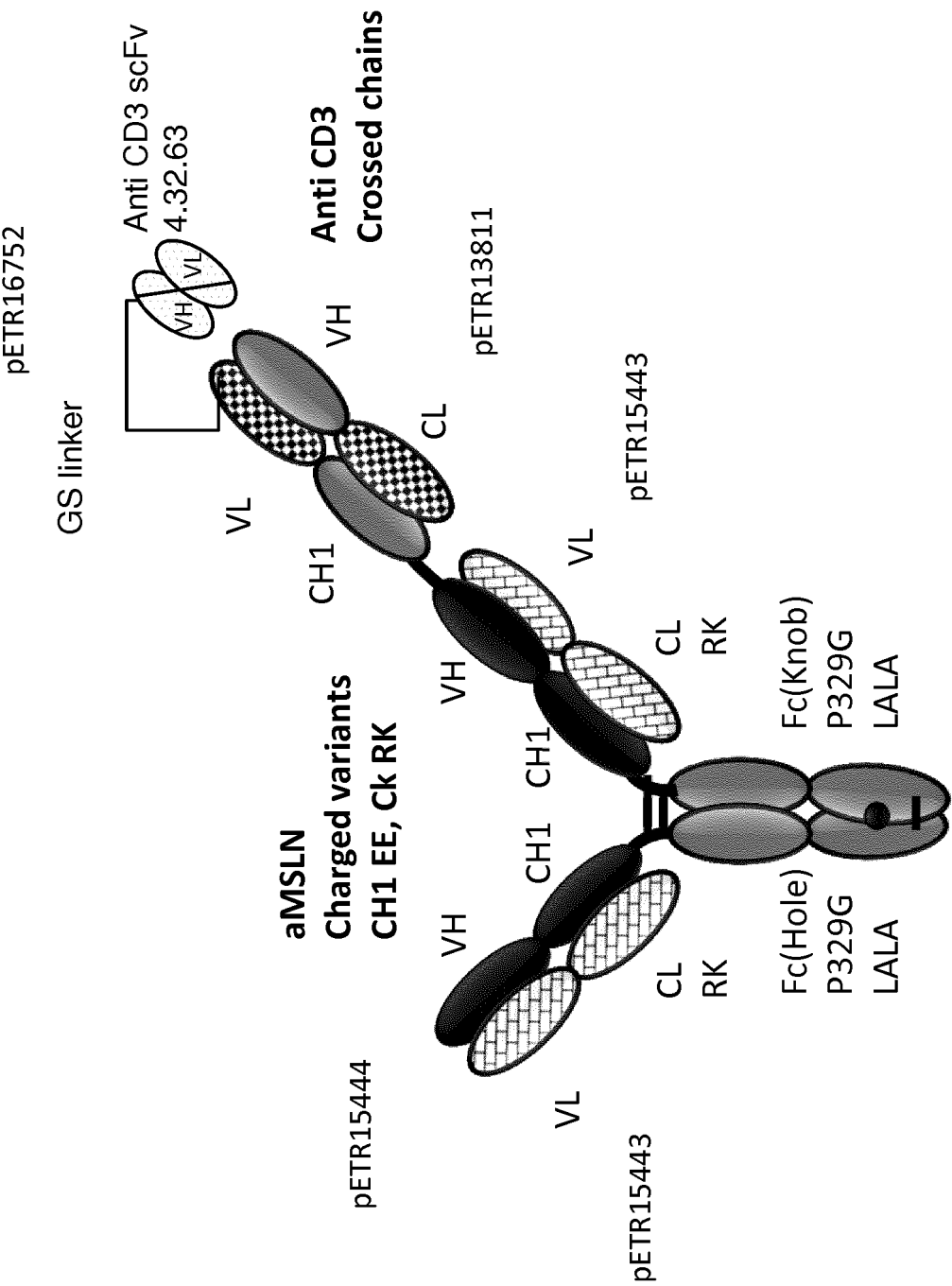


FIG. 33D

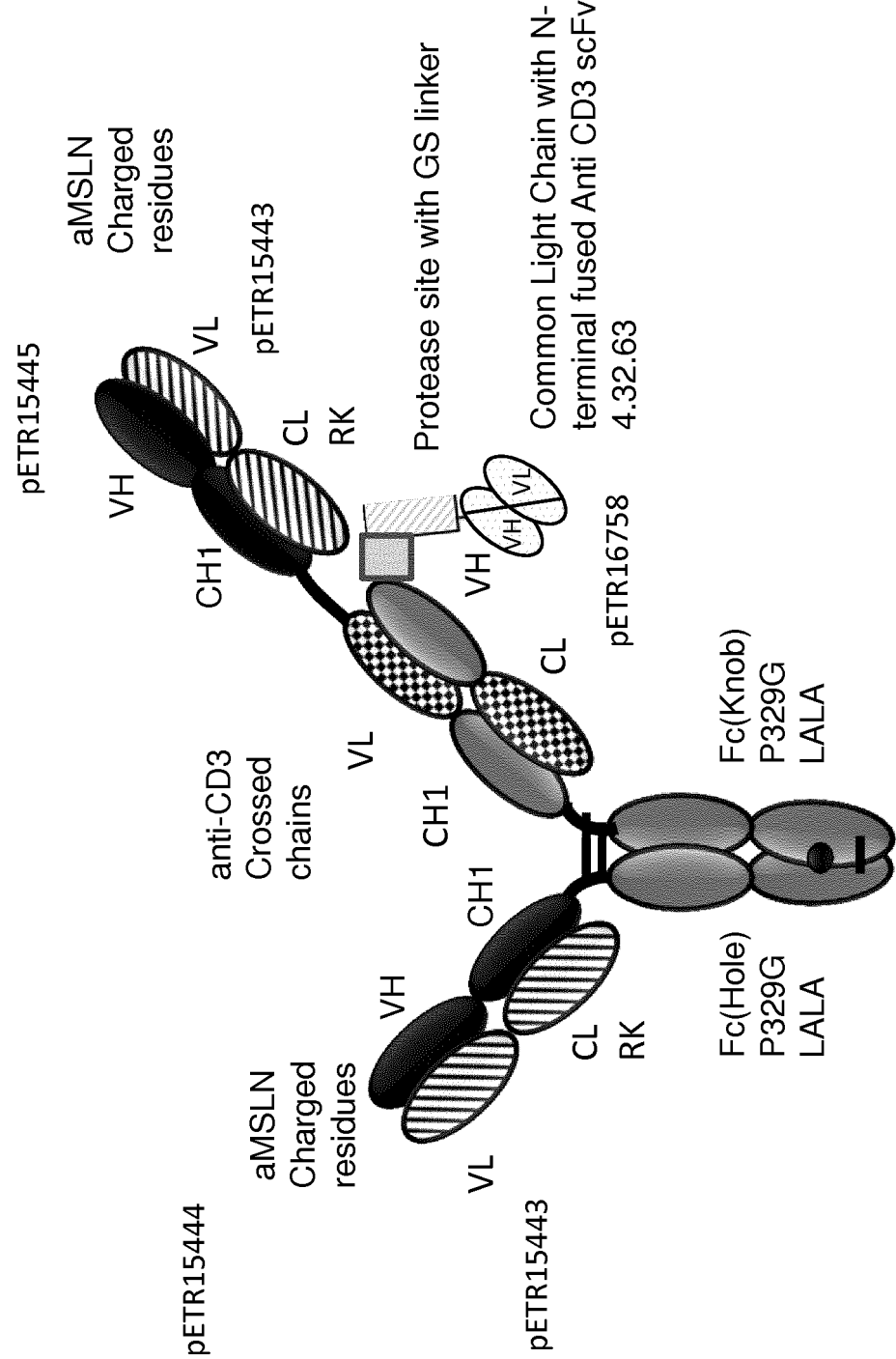




8673

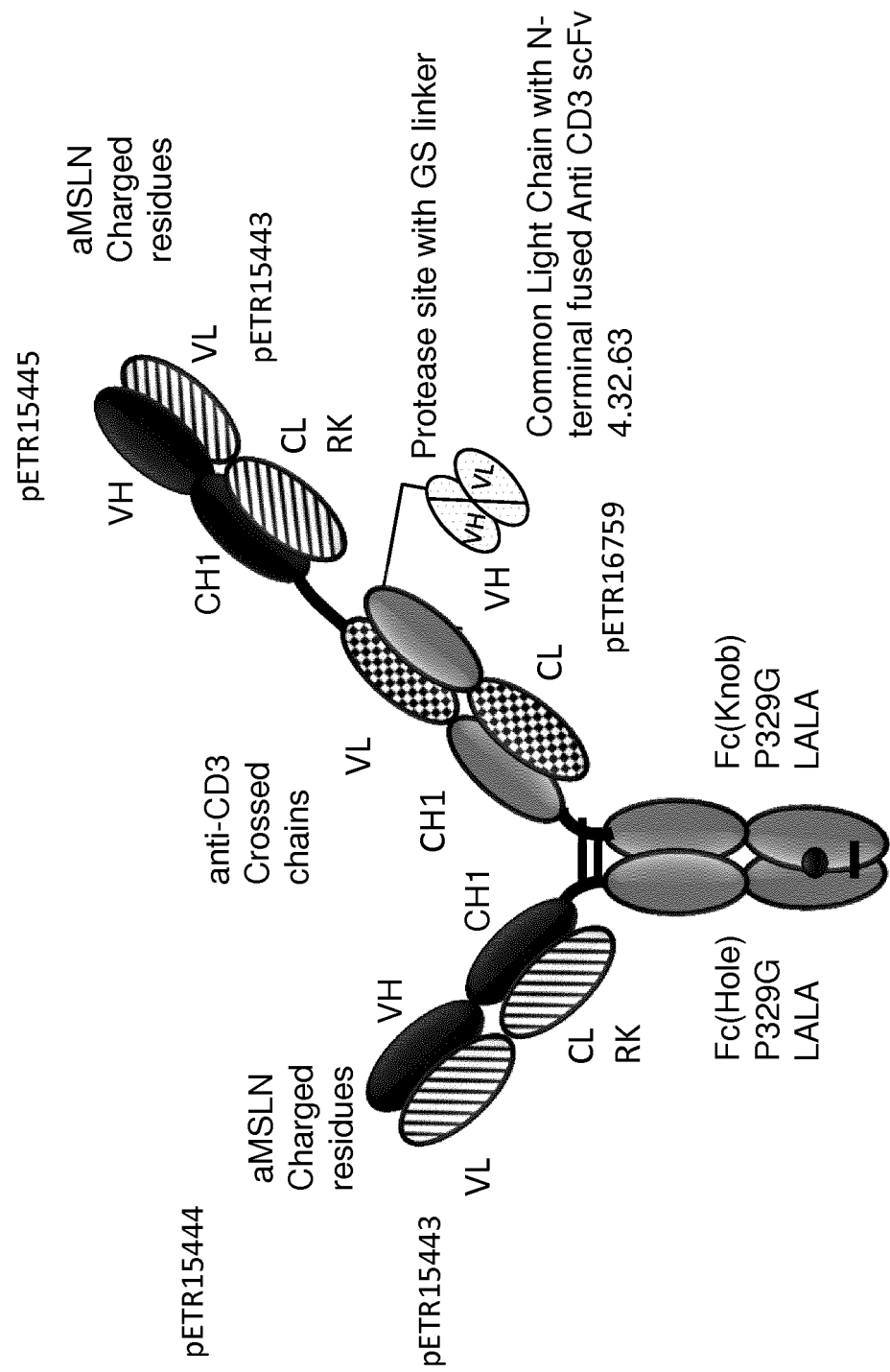
FIG. 33F

FIG. 33G



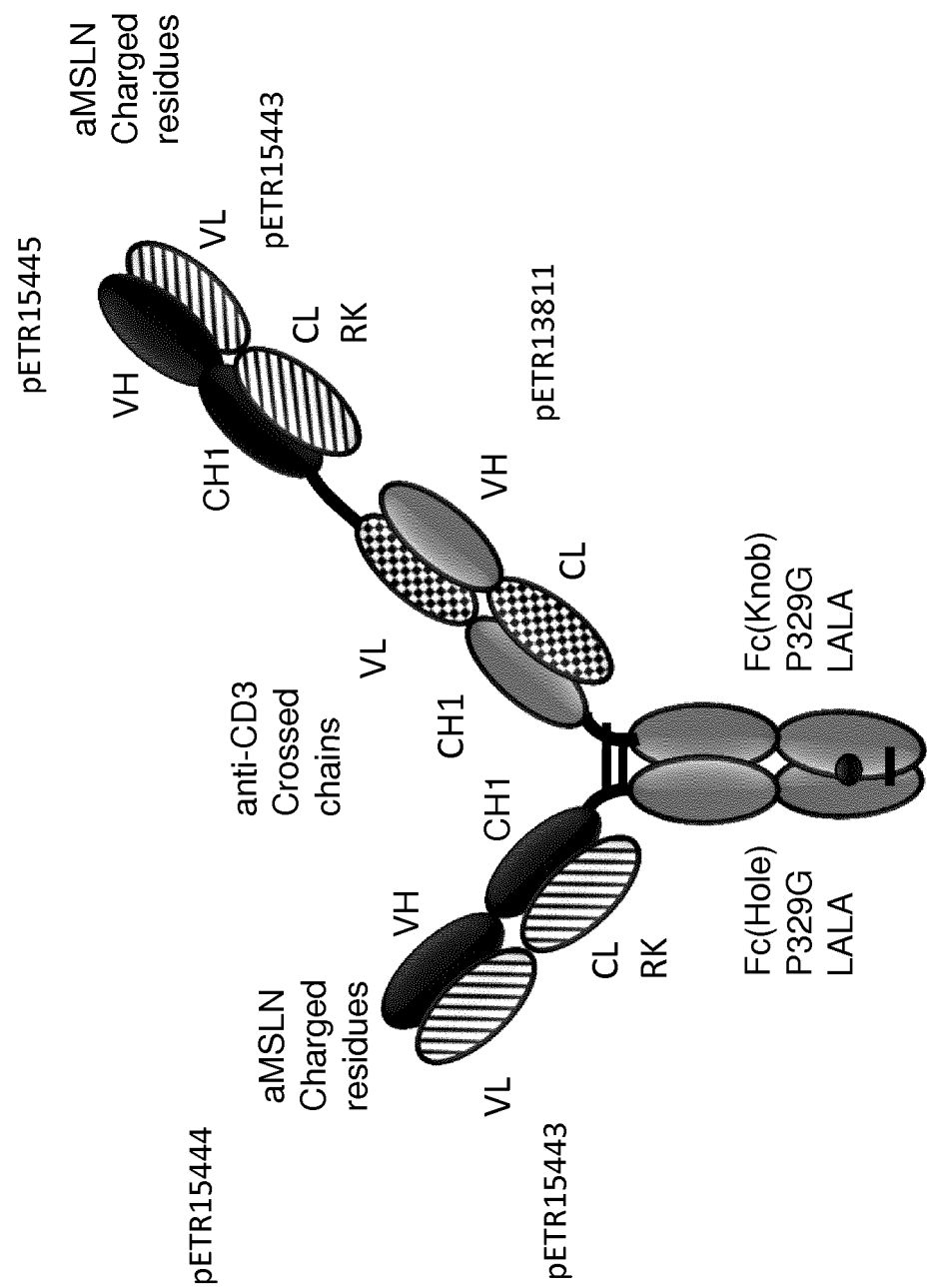
8674

FIG. 33H



8675

FIG. 33I



8505

FIG. 33J

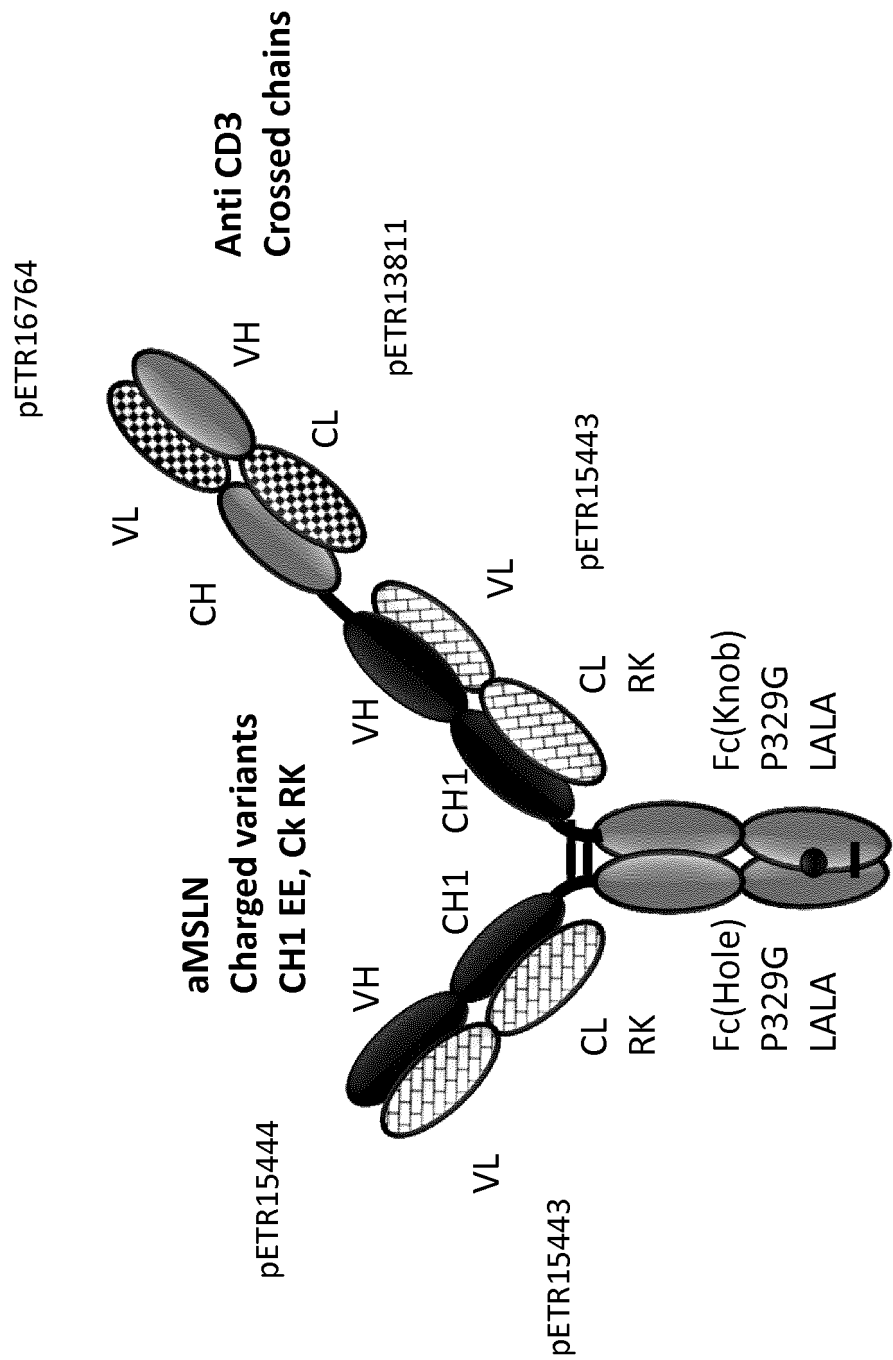


FIG. 34

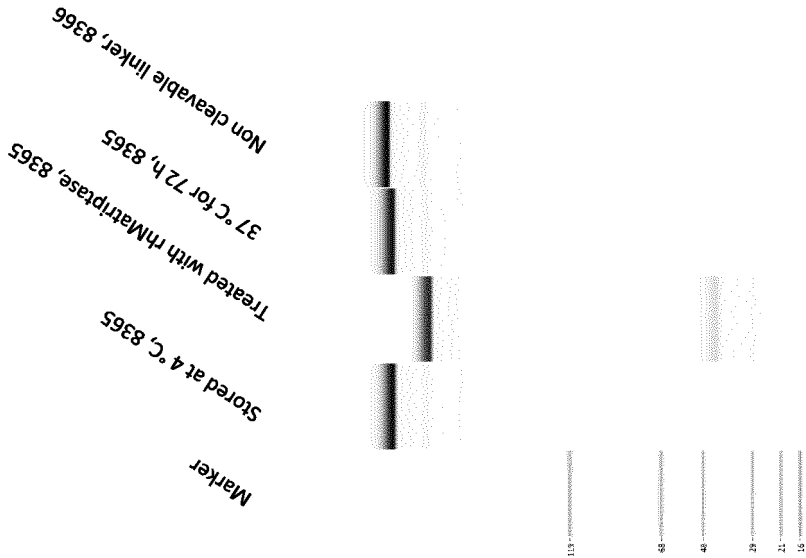


FIG. 35A

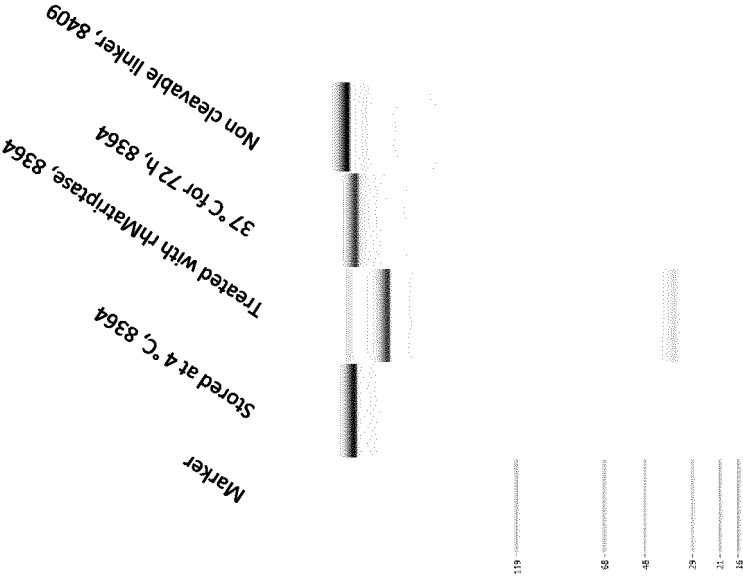


FIG. 35B

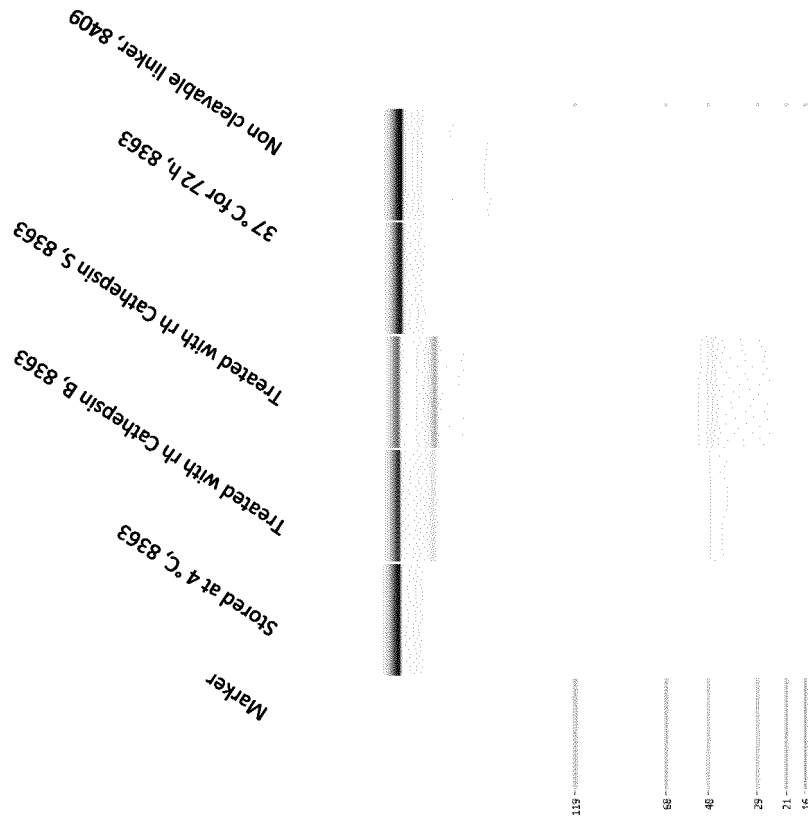


FIG. 36A

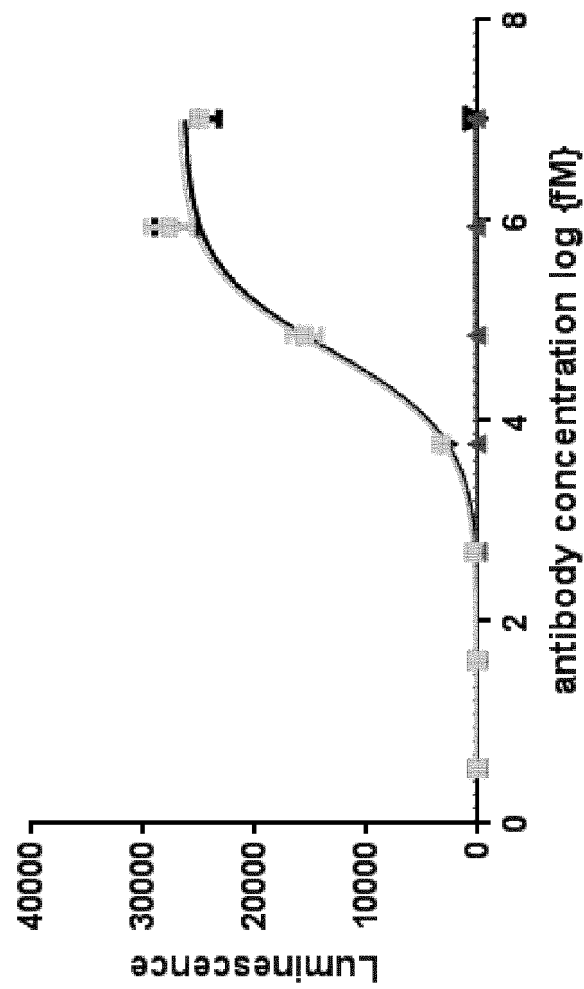
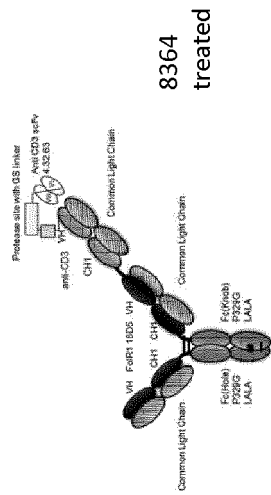
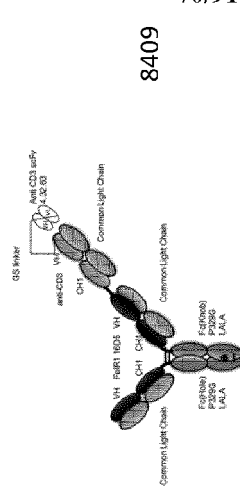
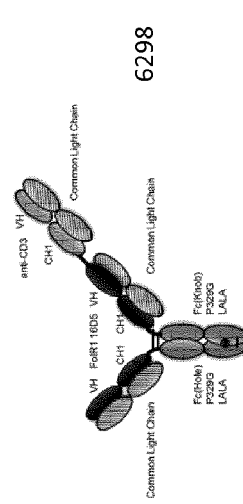
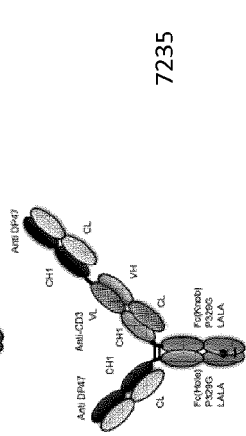


FIG. 36B

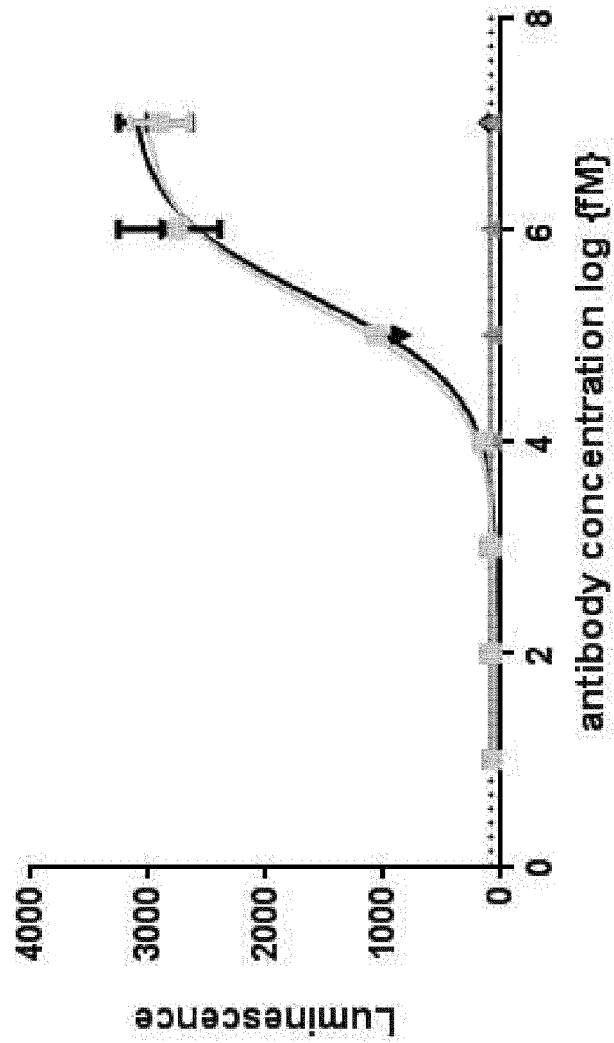
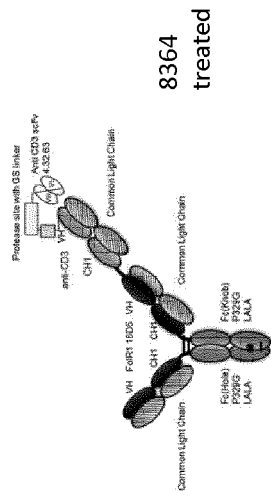
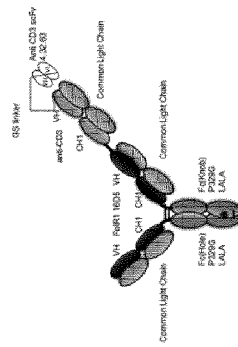
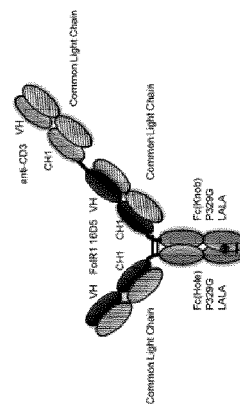
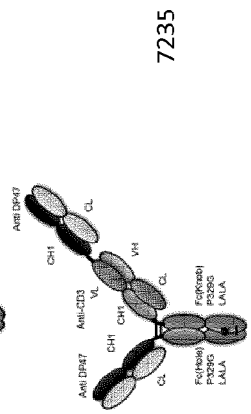
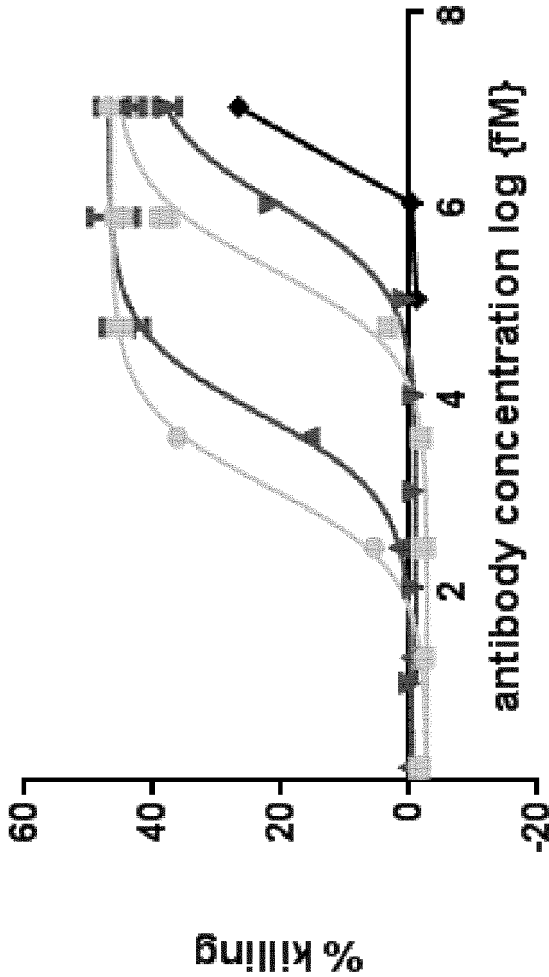
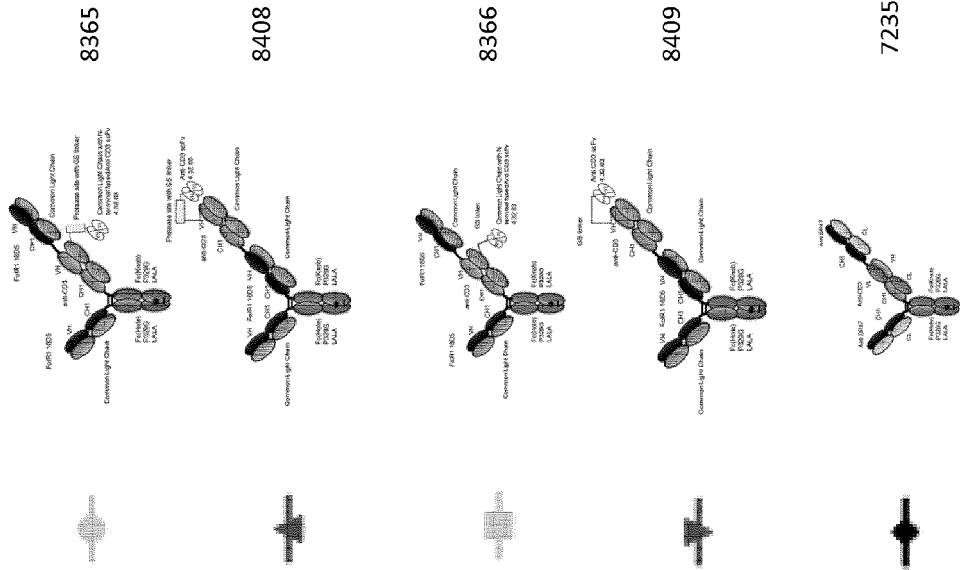


FIG. 37A



8365

8408

8366

73/91

8409

7235

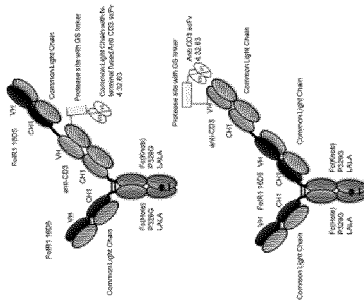
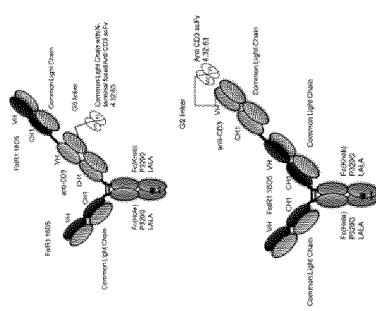
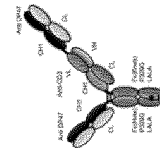


FIG. 37B

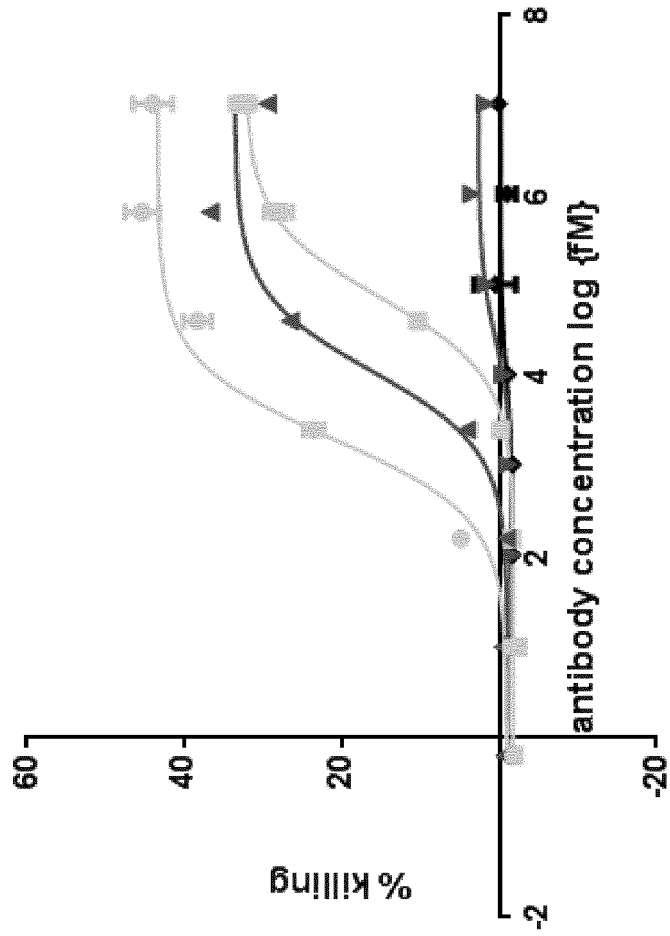


FIG. 37C

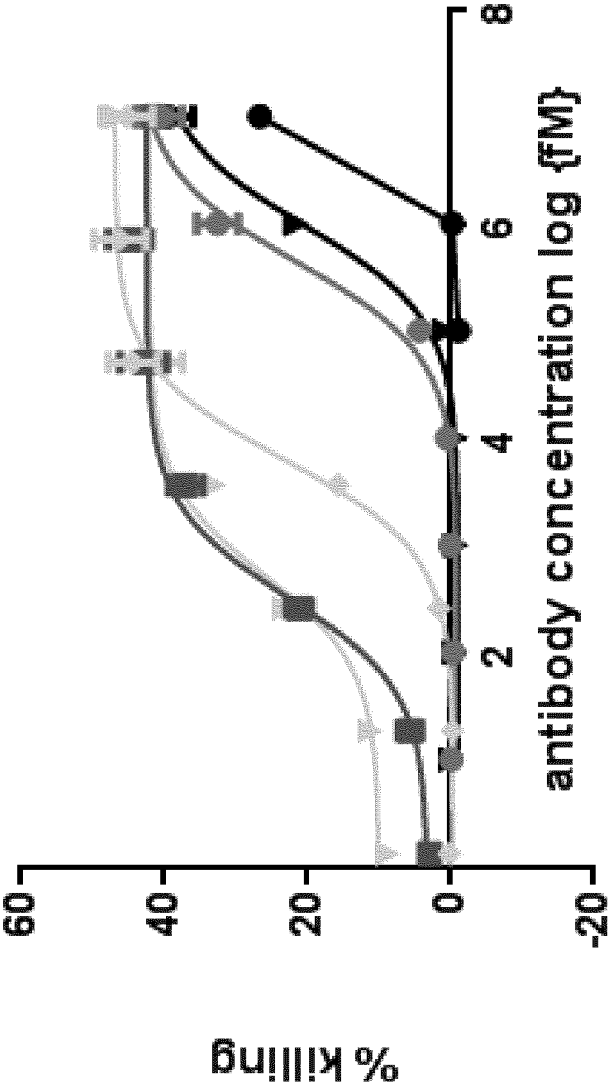
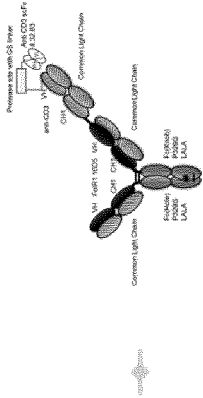
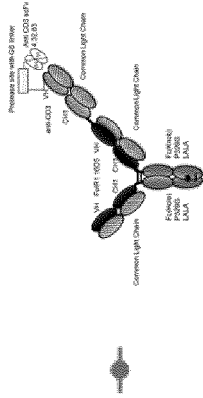
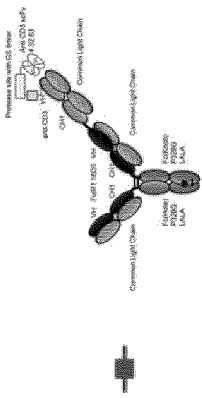
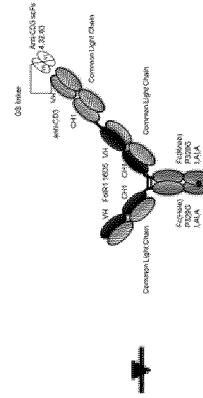
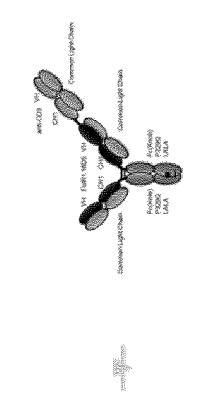
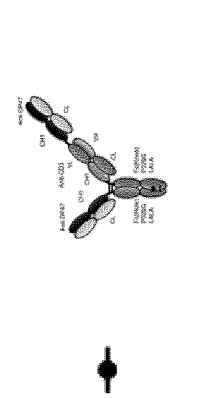


FIG. 37D

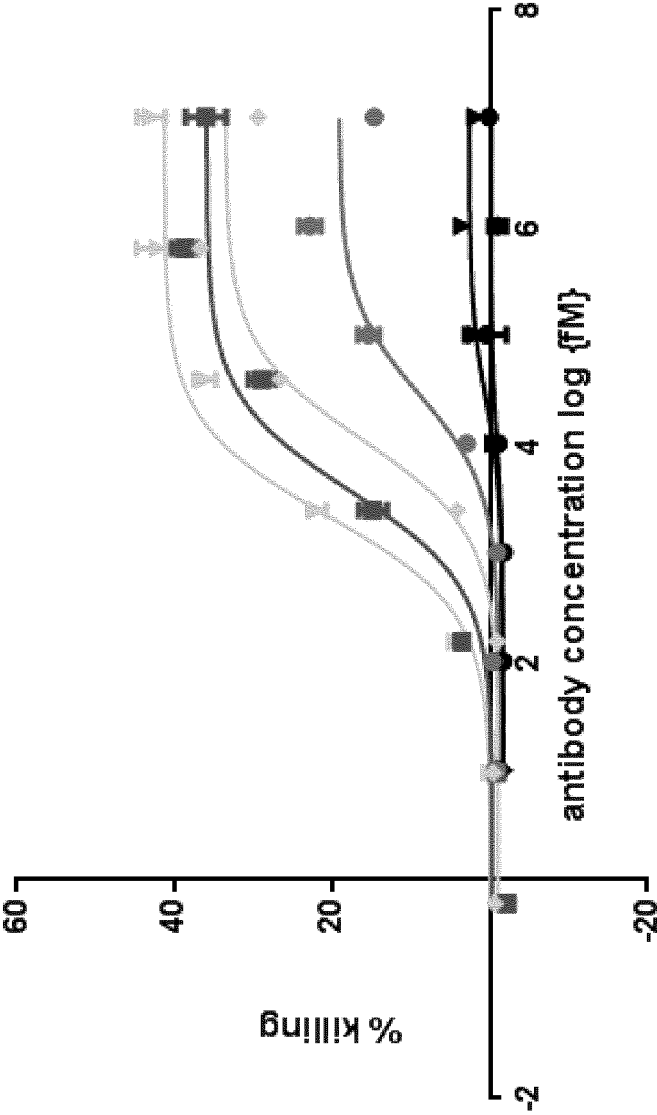
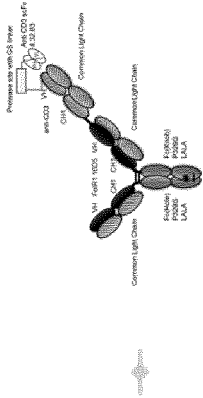
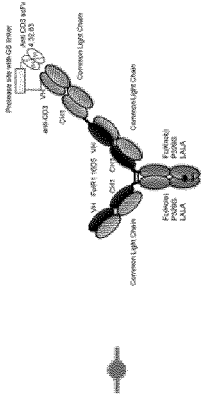
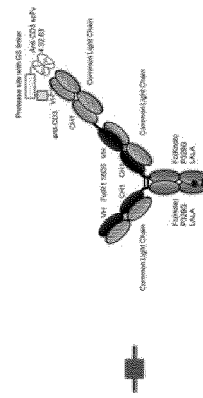
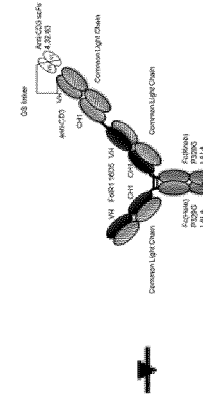
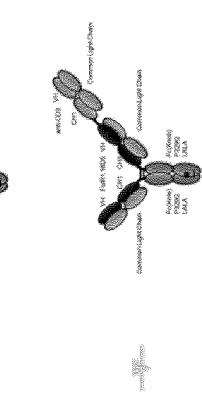
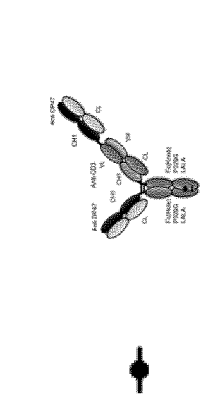
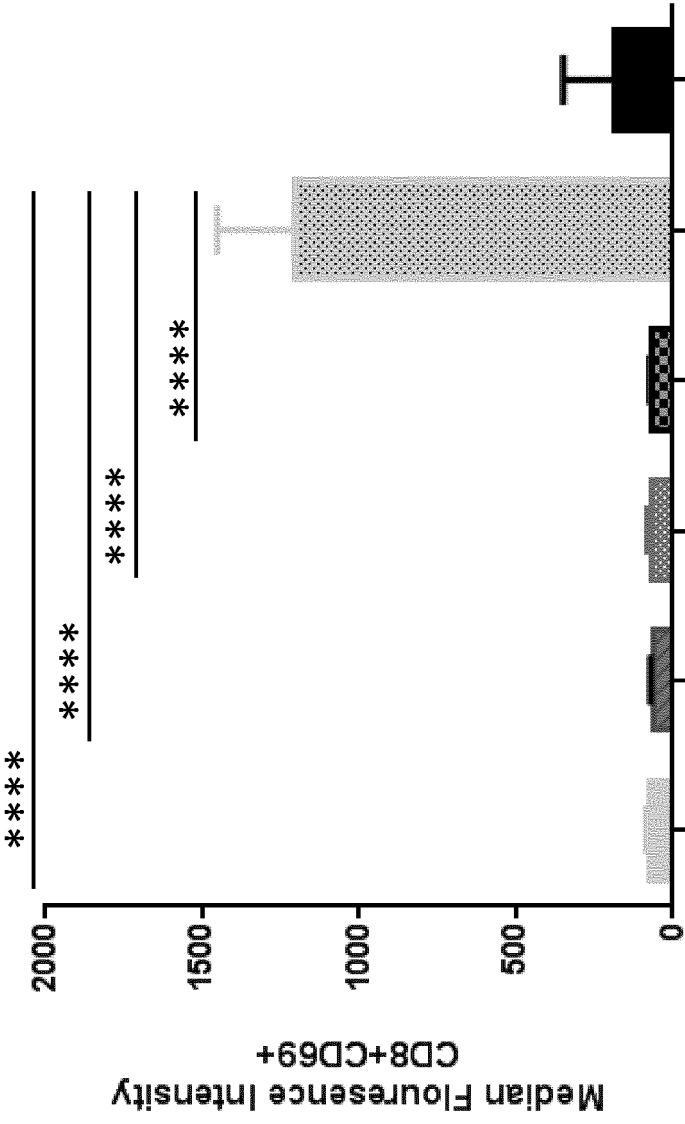
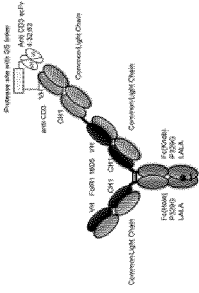
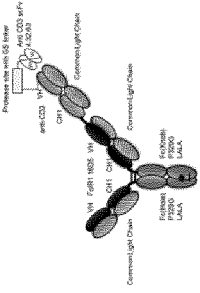
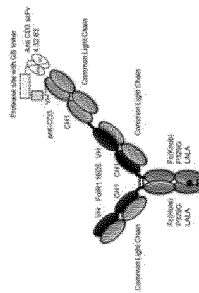
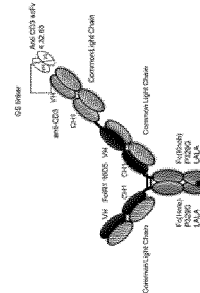
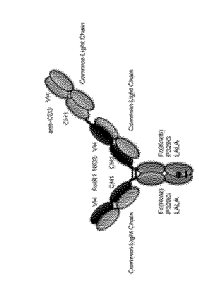
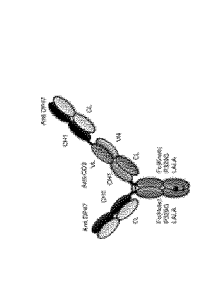
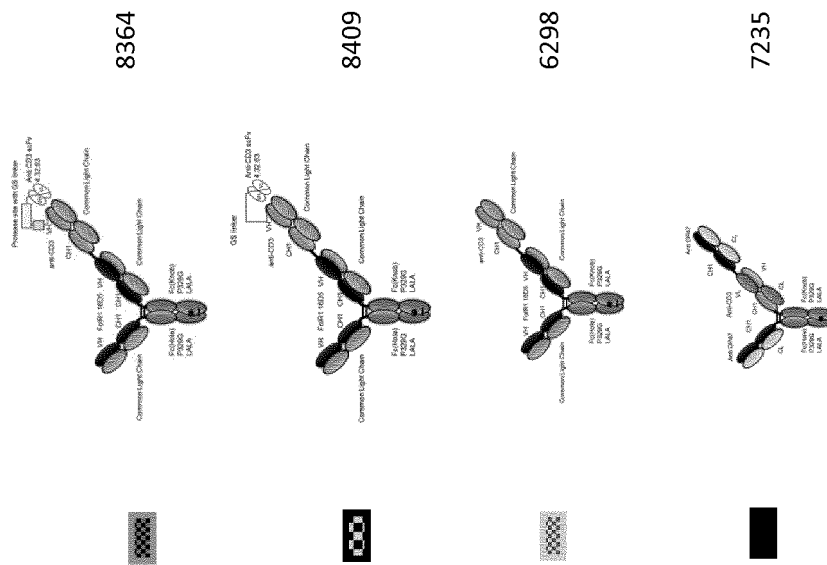
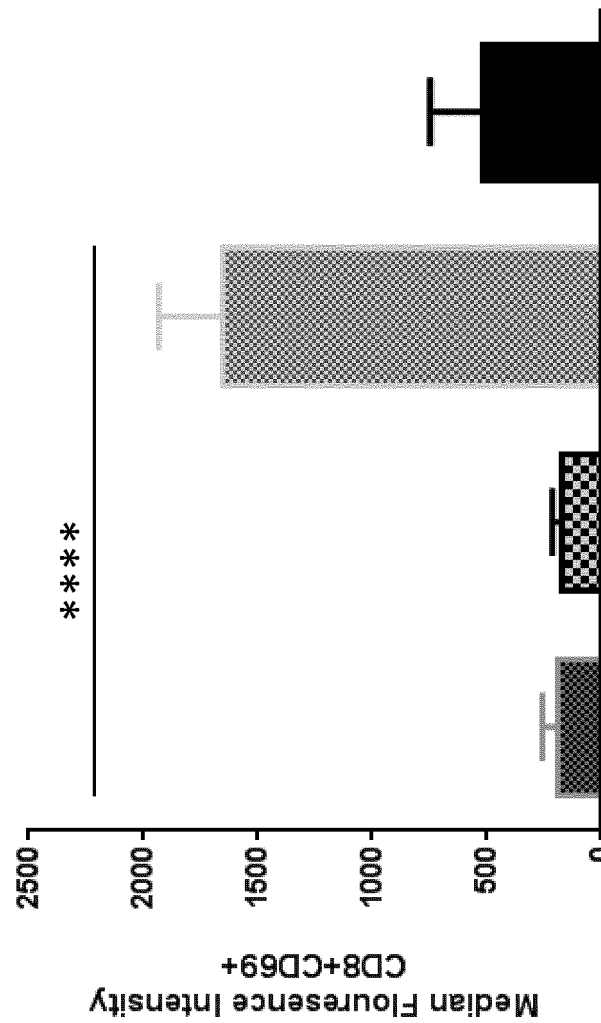


FIG. 38A



P<0.0001 unpaired t test





P<0.0001 unpaired t test

FIG. 38B

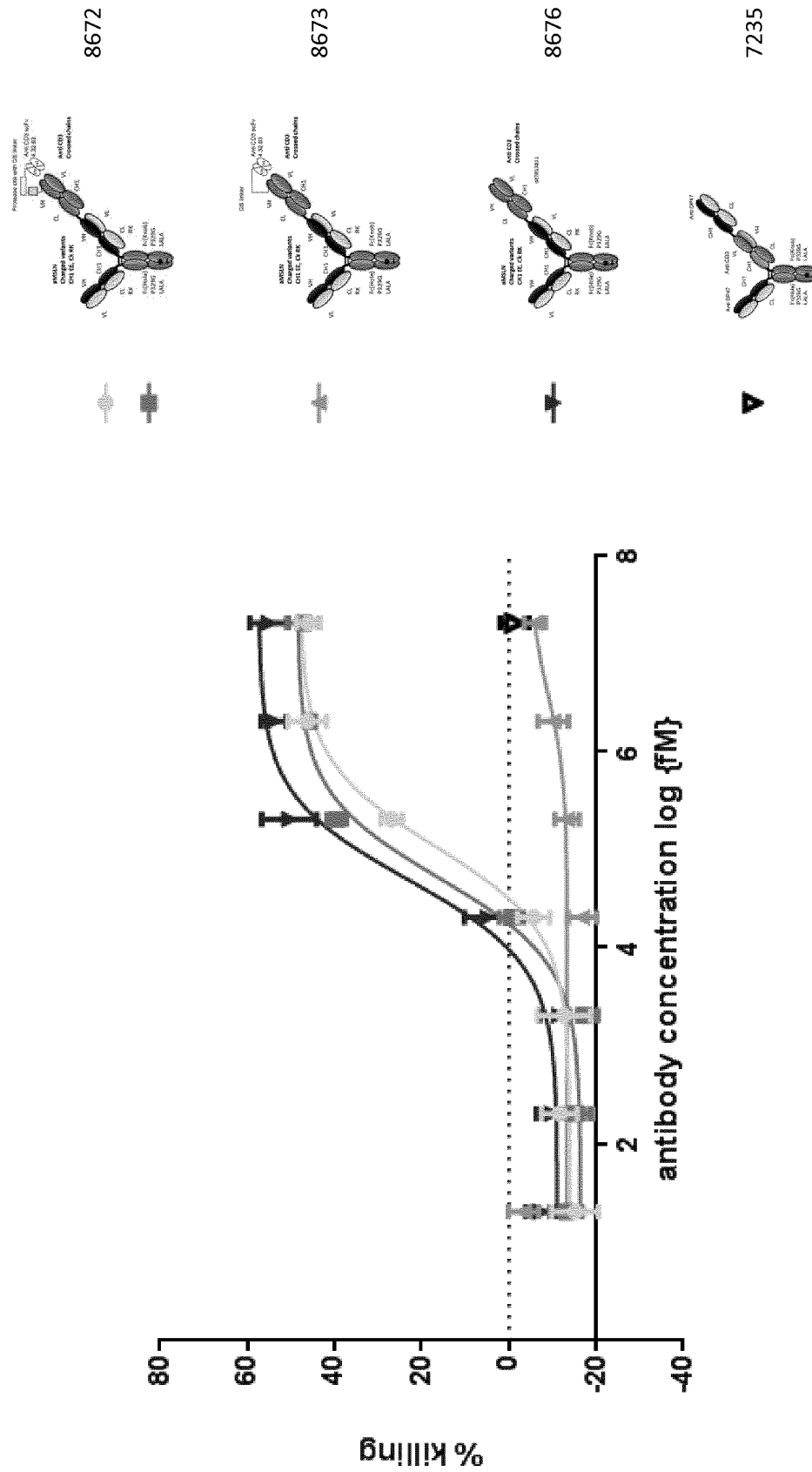
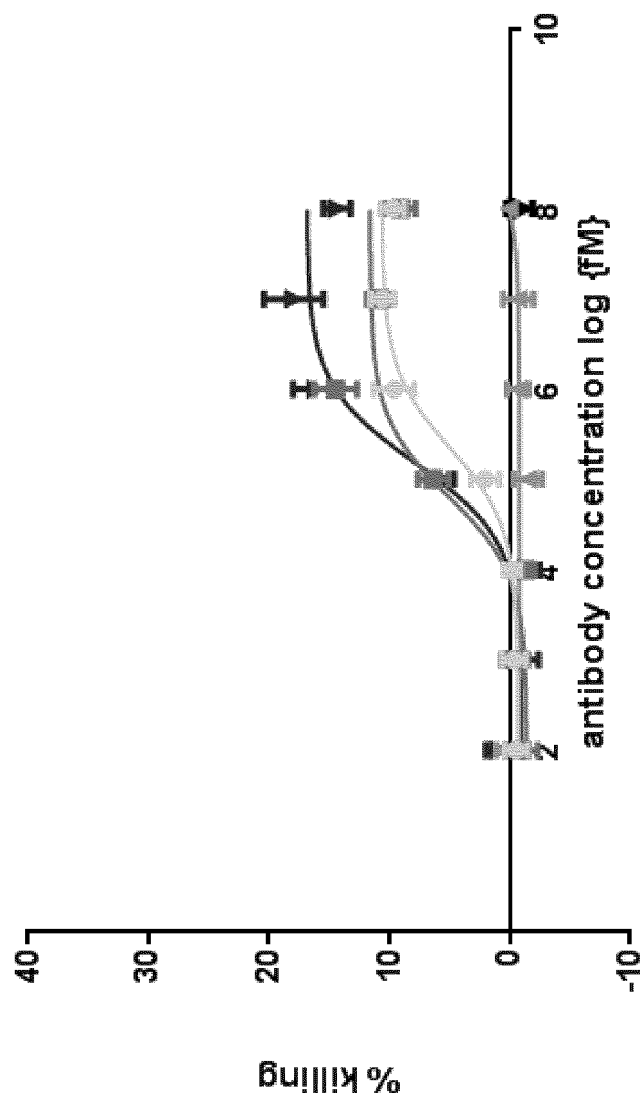
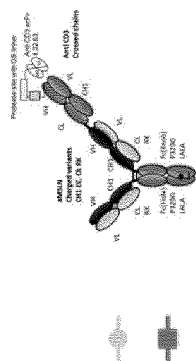
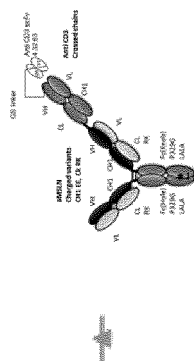
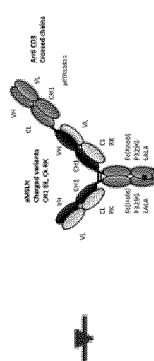
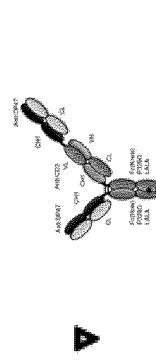


FIG. 39A

FIG. 39B



8408

8363

8364

8409

6298

7235

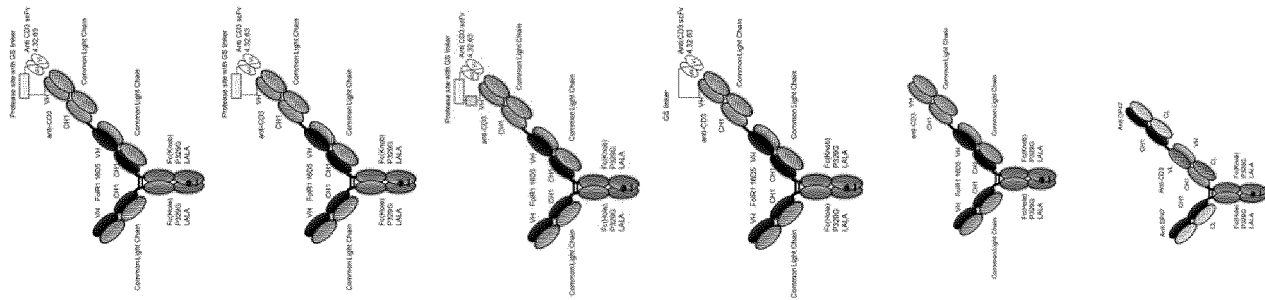


FIG. 40

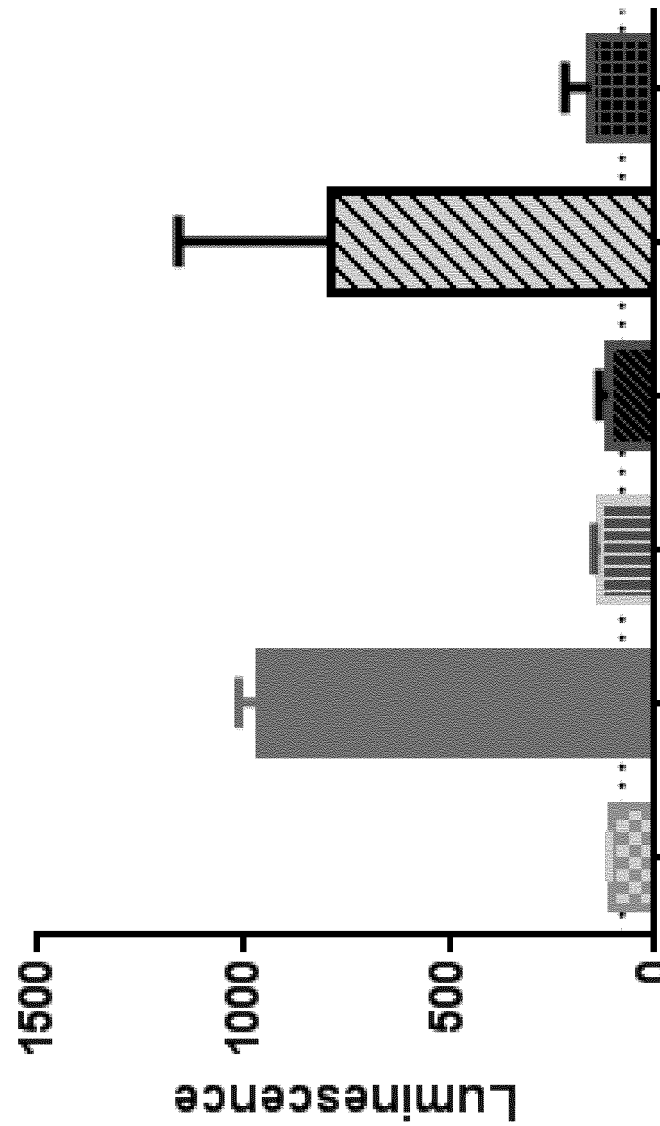


FIG. 41A

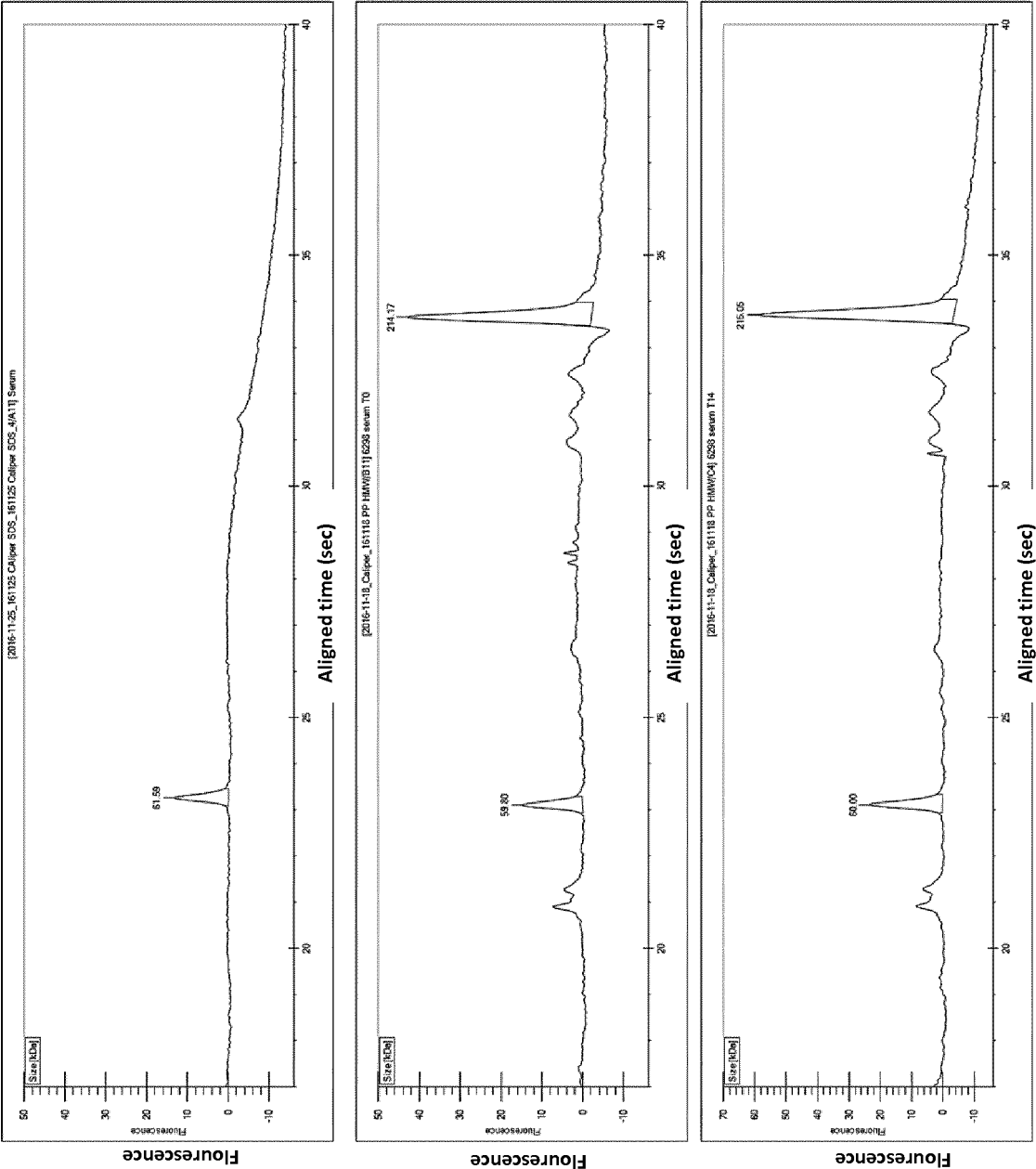


FIG. 41B

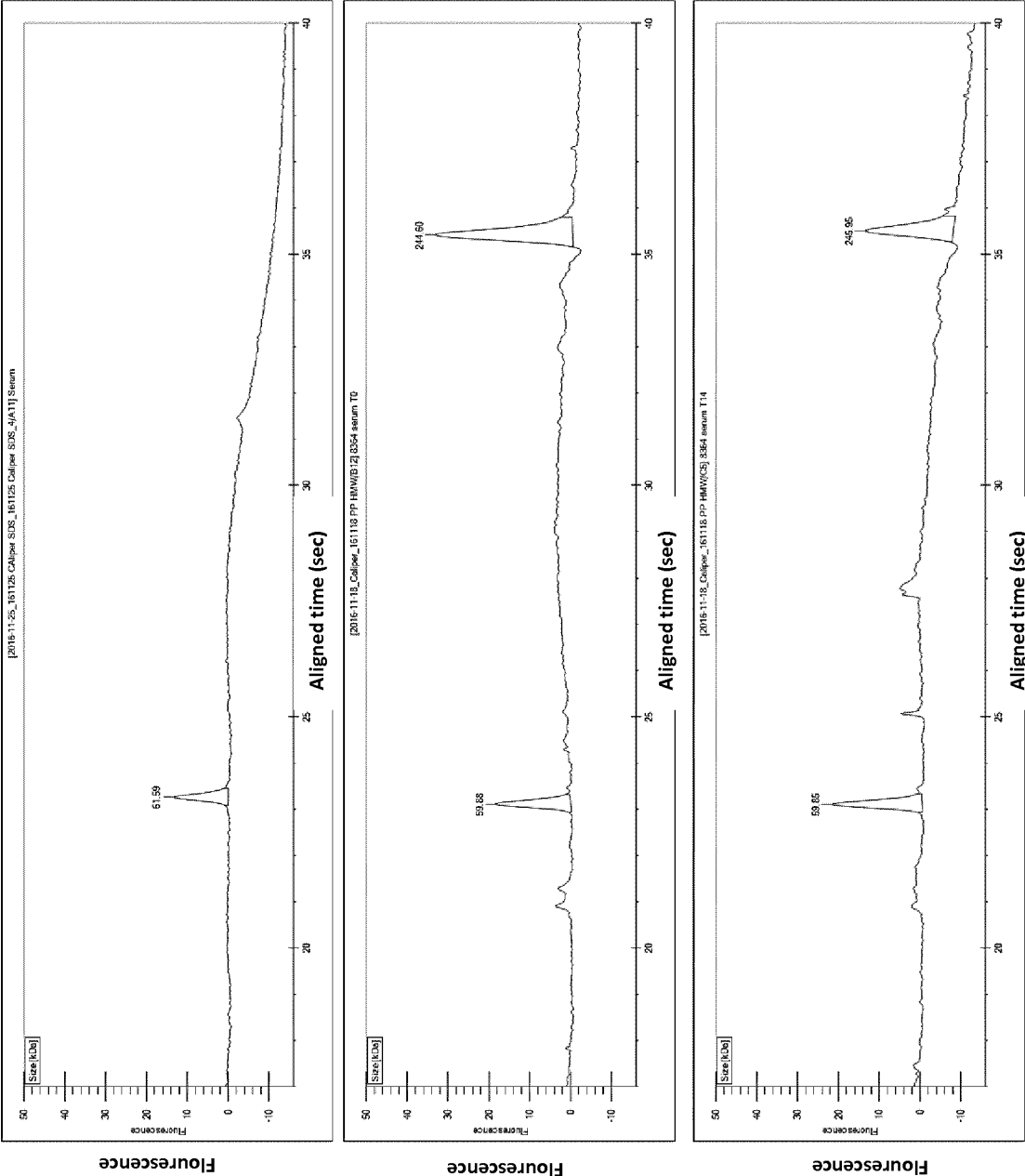
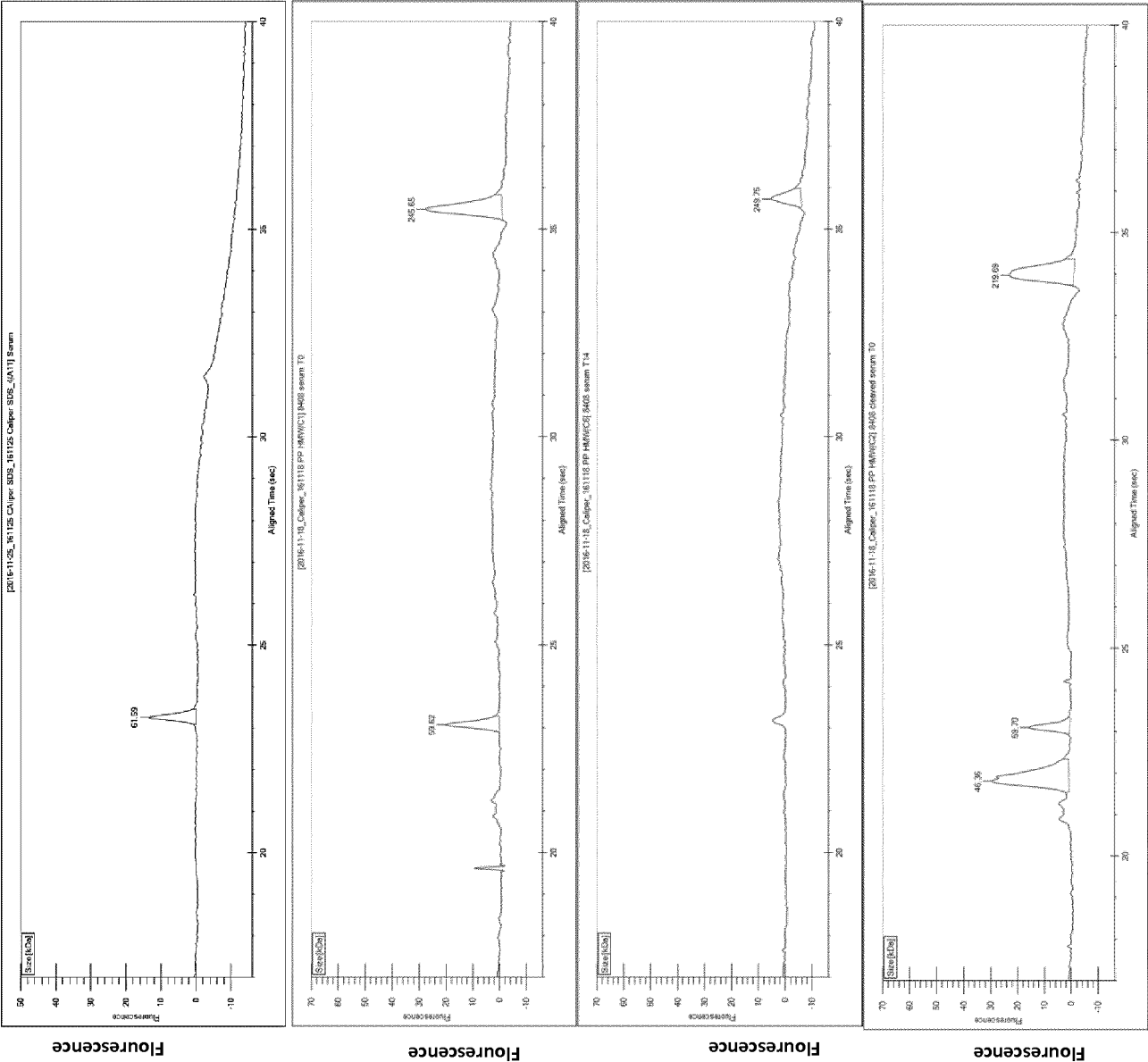


FIG. 41C



Aligned time (sec)

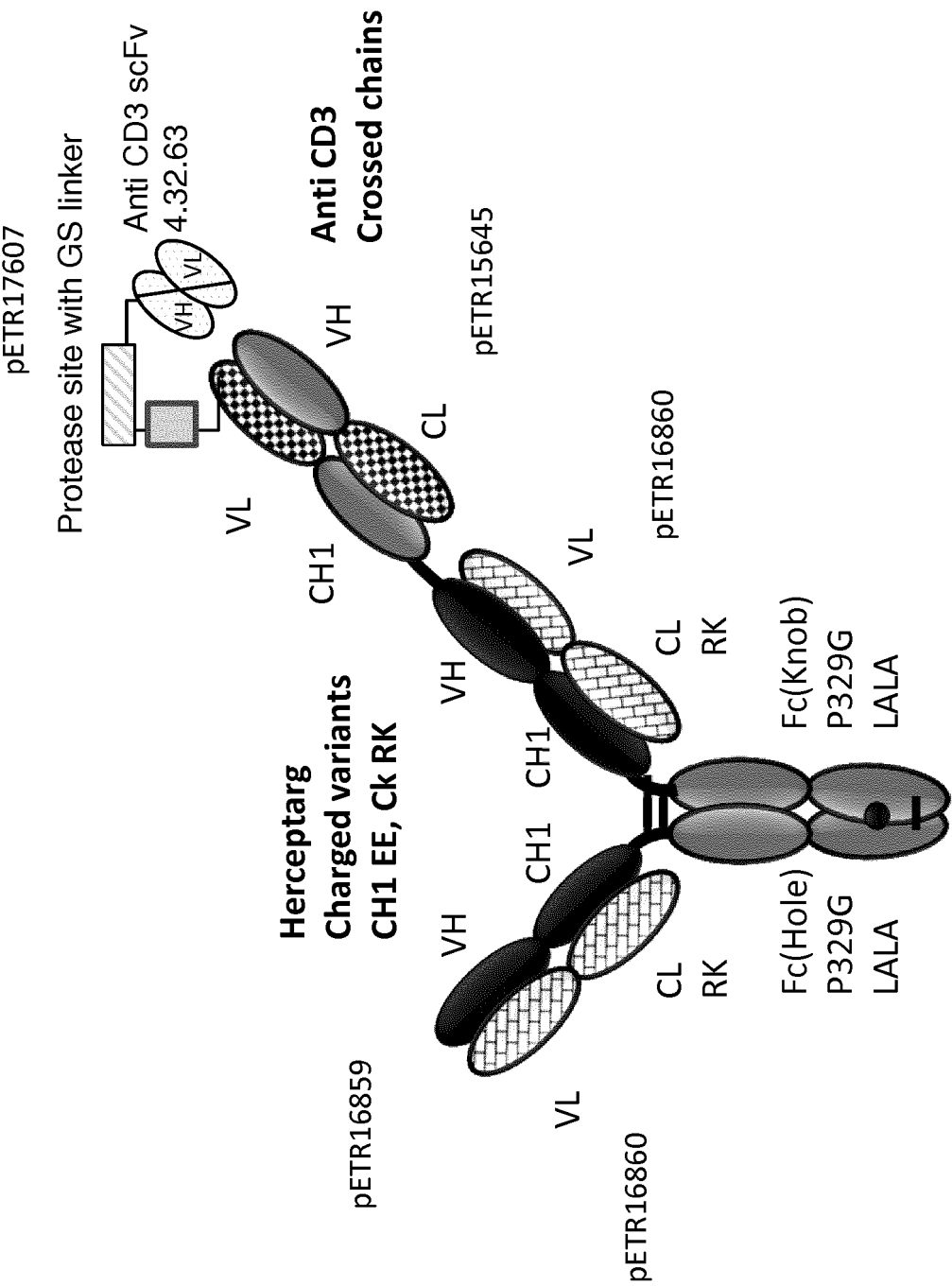
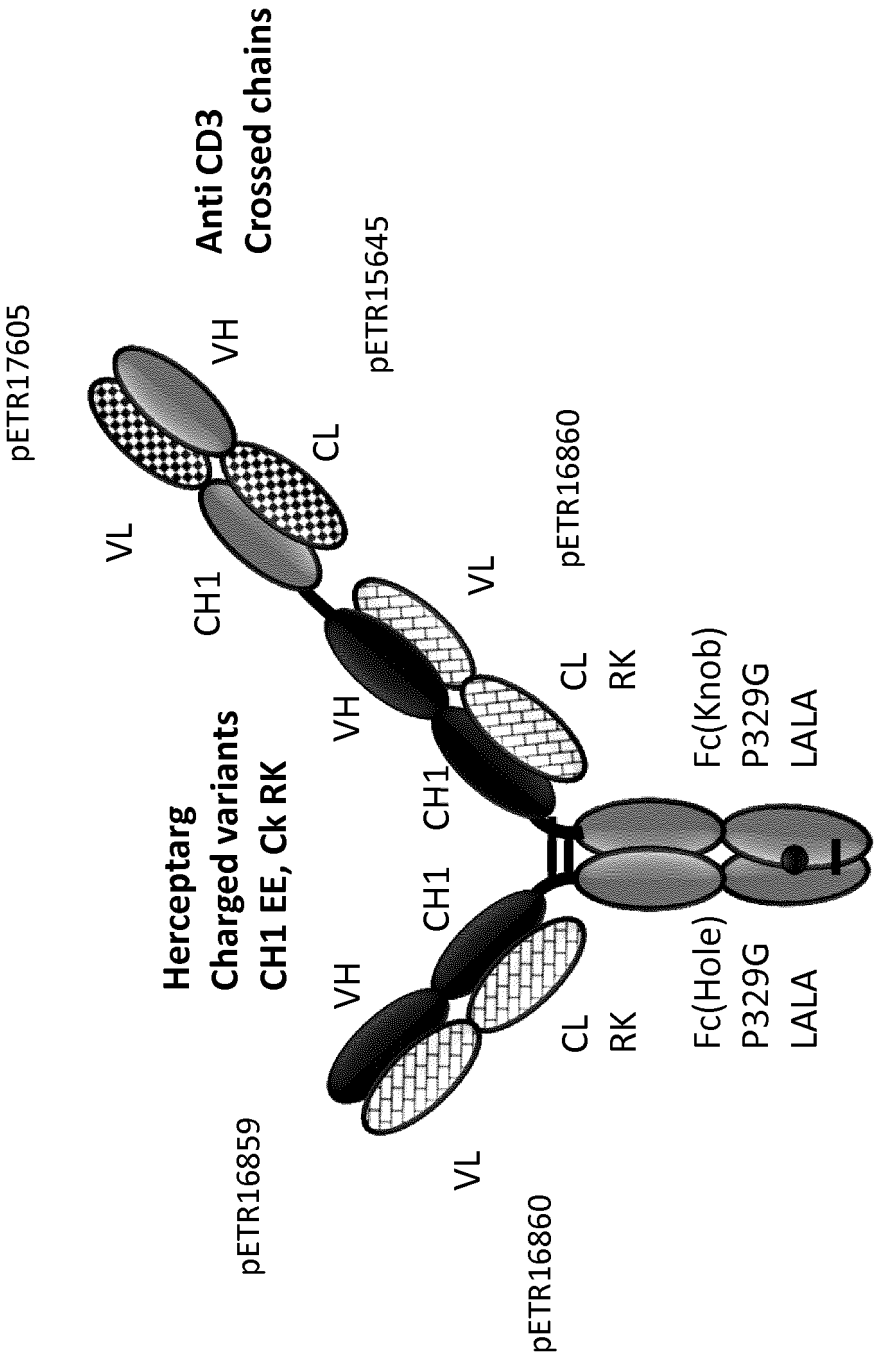


FIG. 42A

ID 8955

FIG. 42C



ID 8959

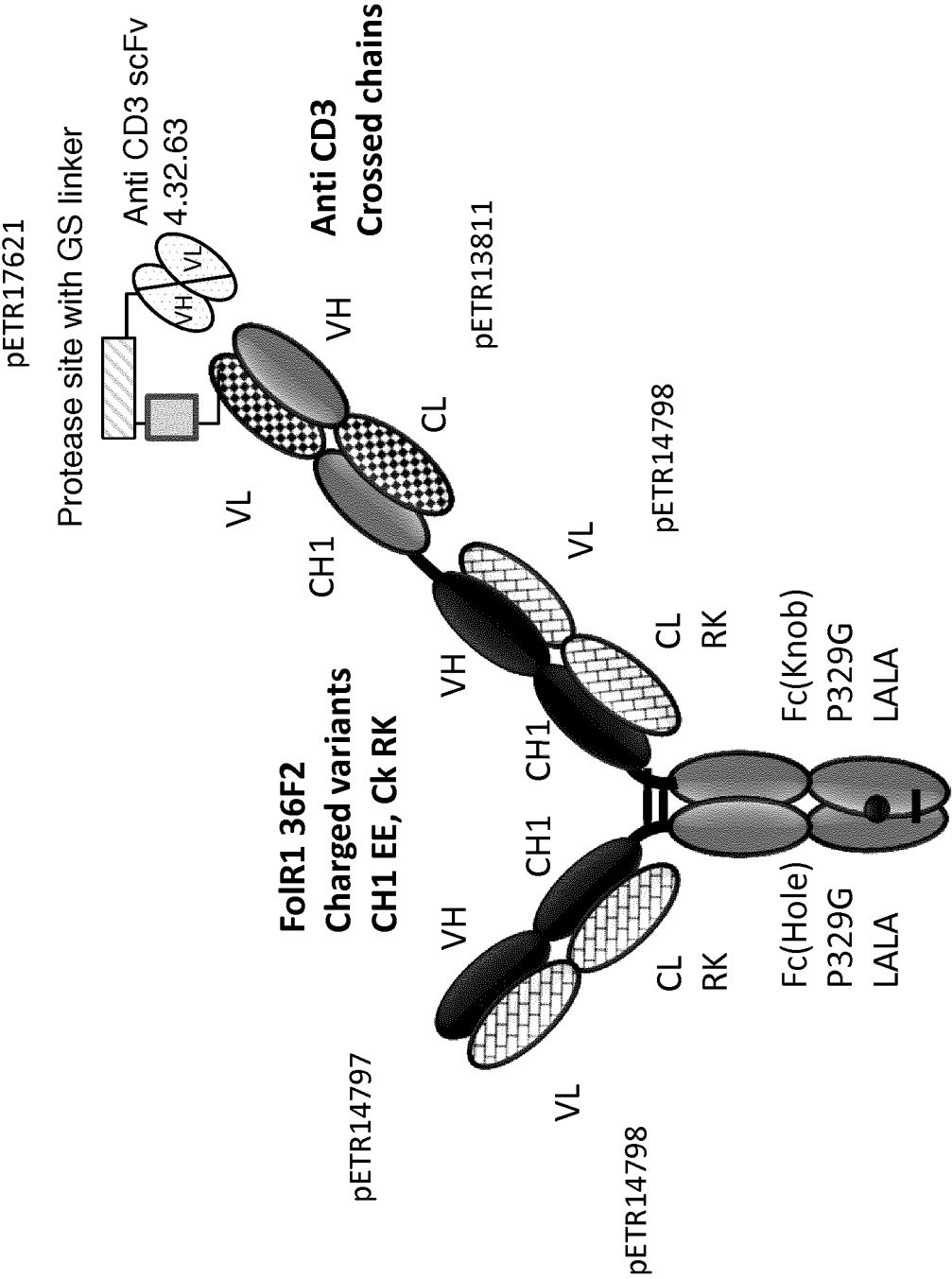
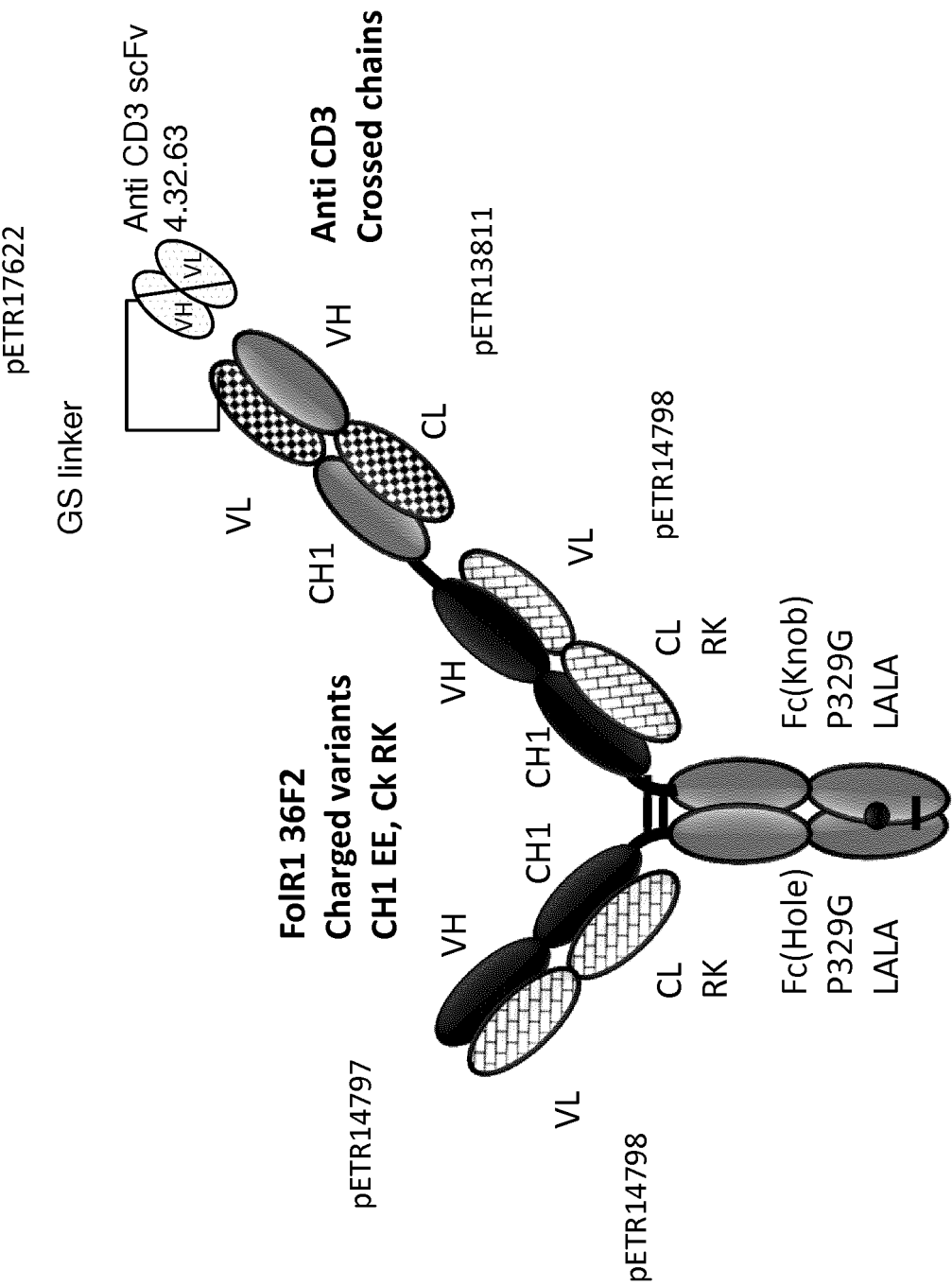


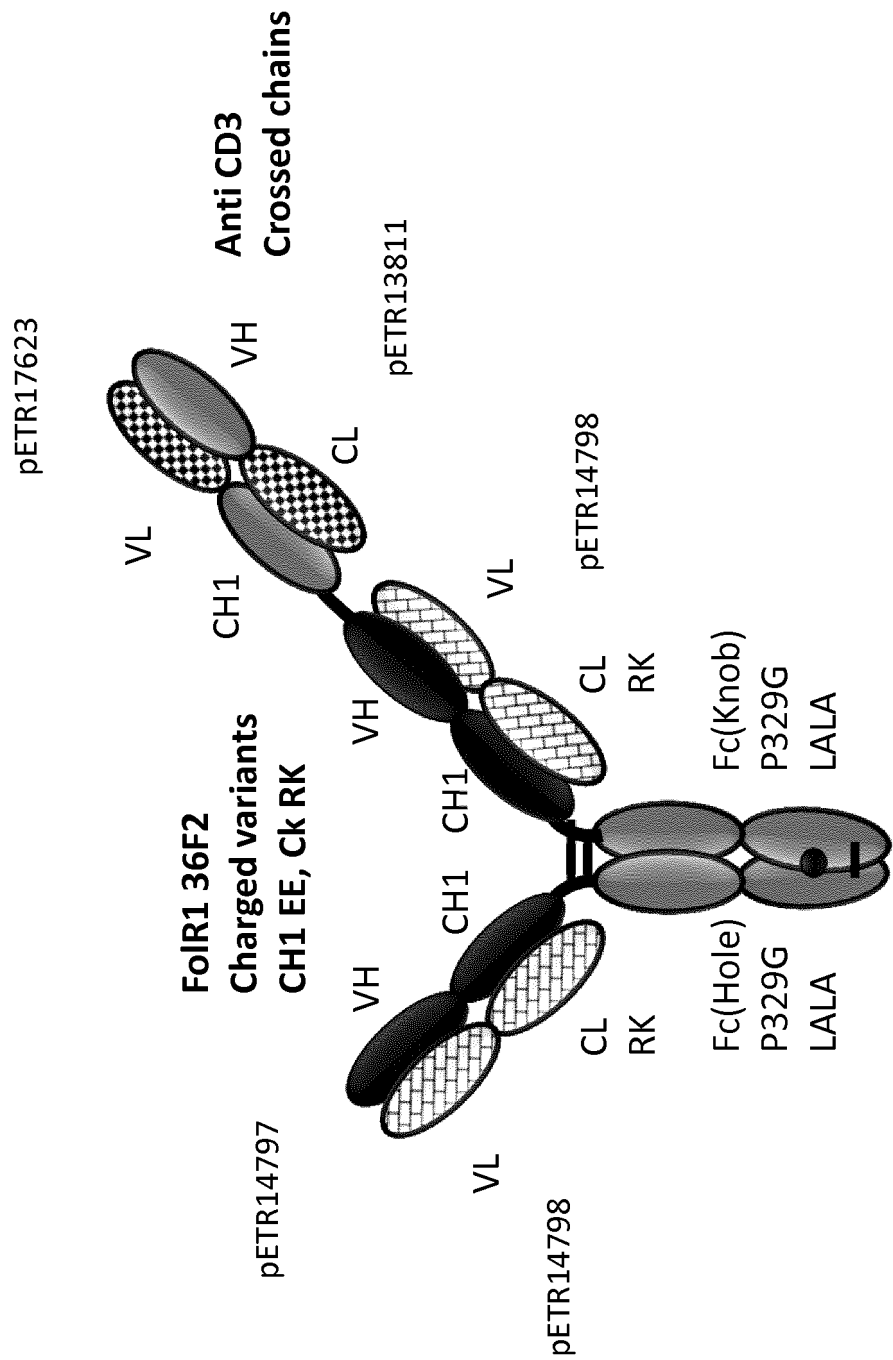
FIG. 42D

ID 8997



ID 8998

FIG. 42F



ID 8996

FIG. 43

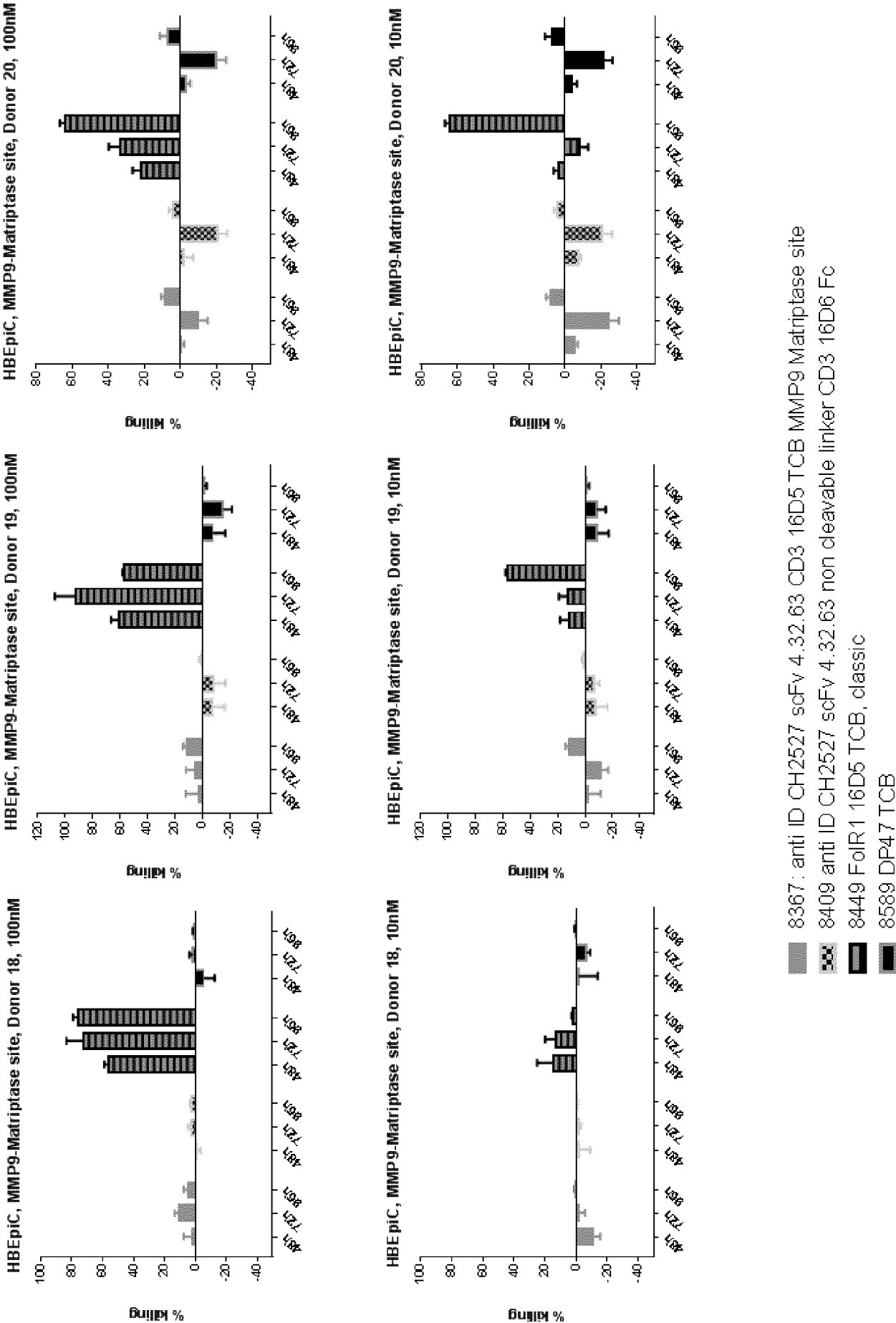


FIG. 44

