

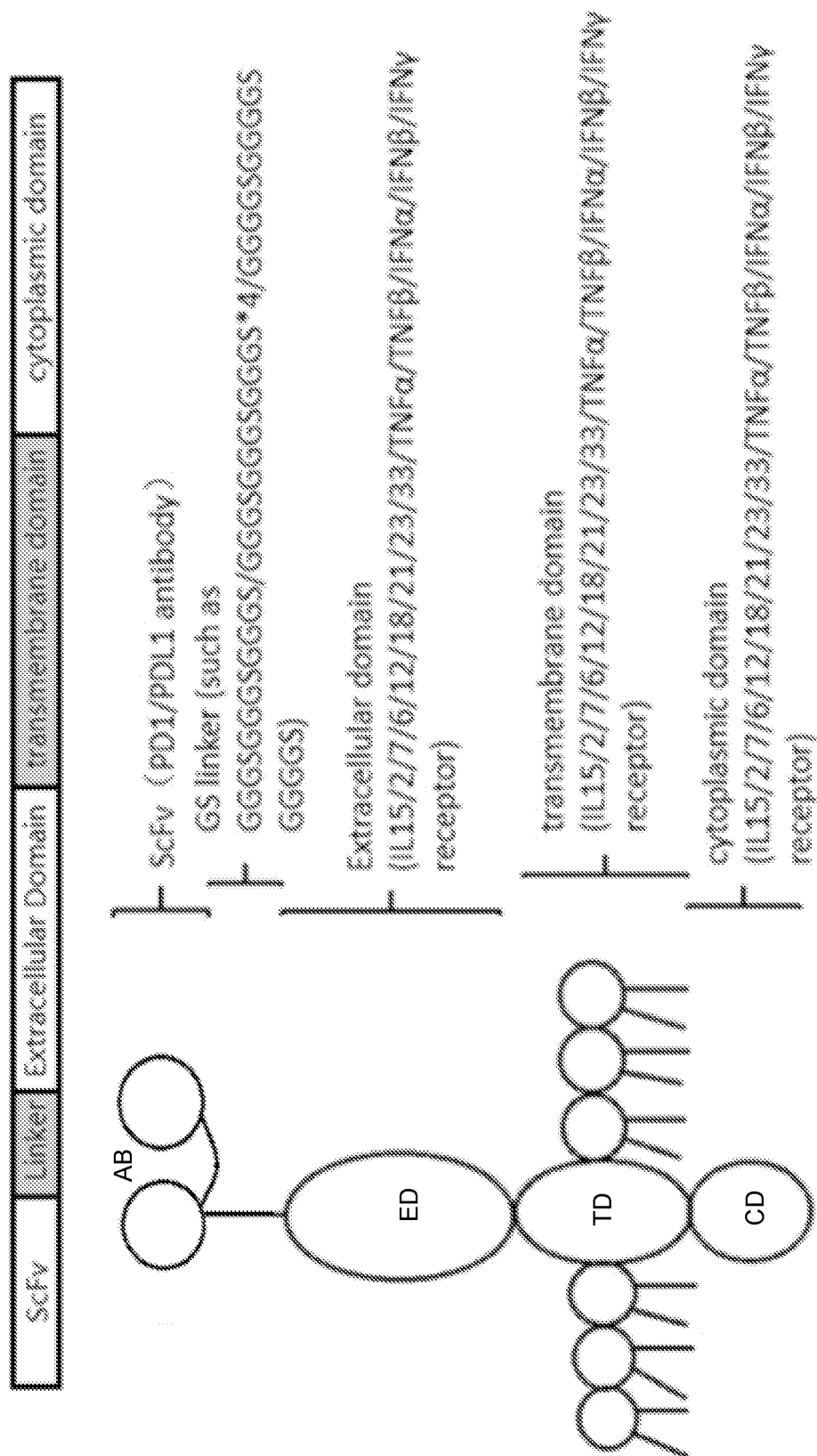


FIG. 1

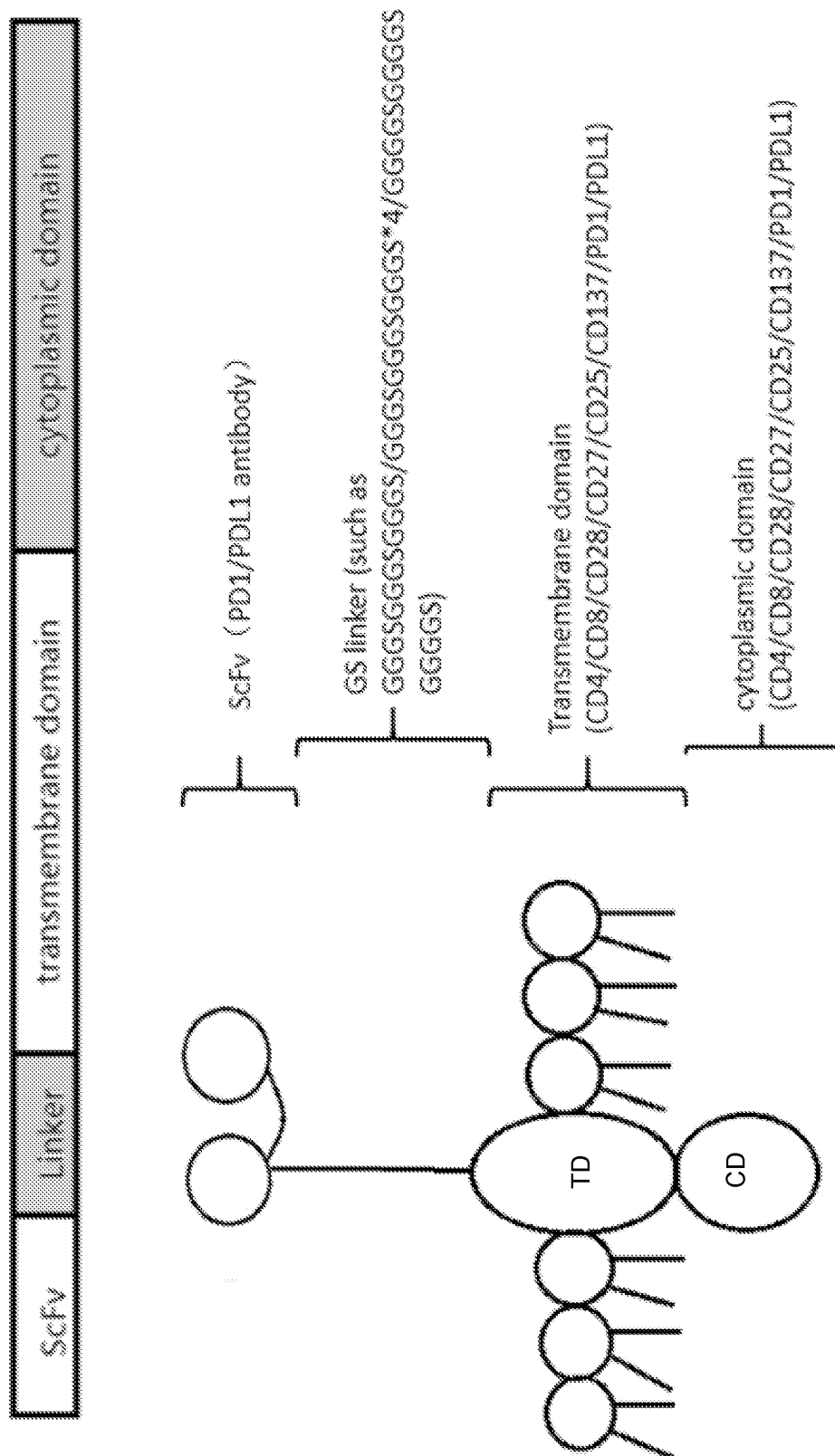


FIG. 2

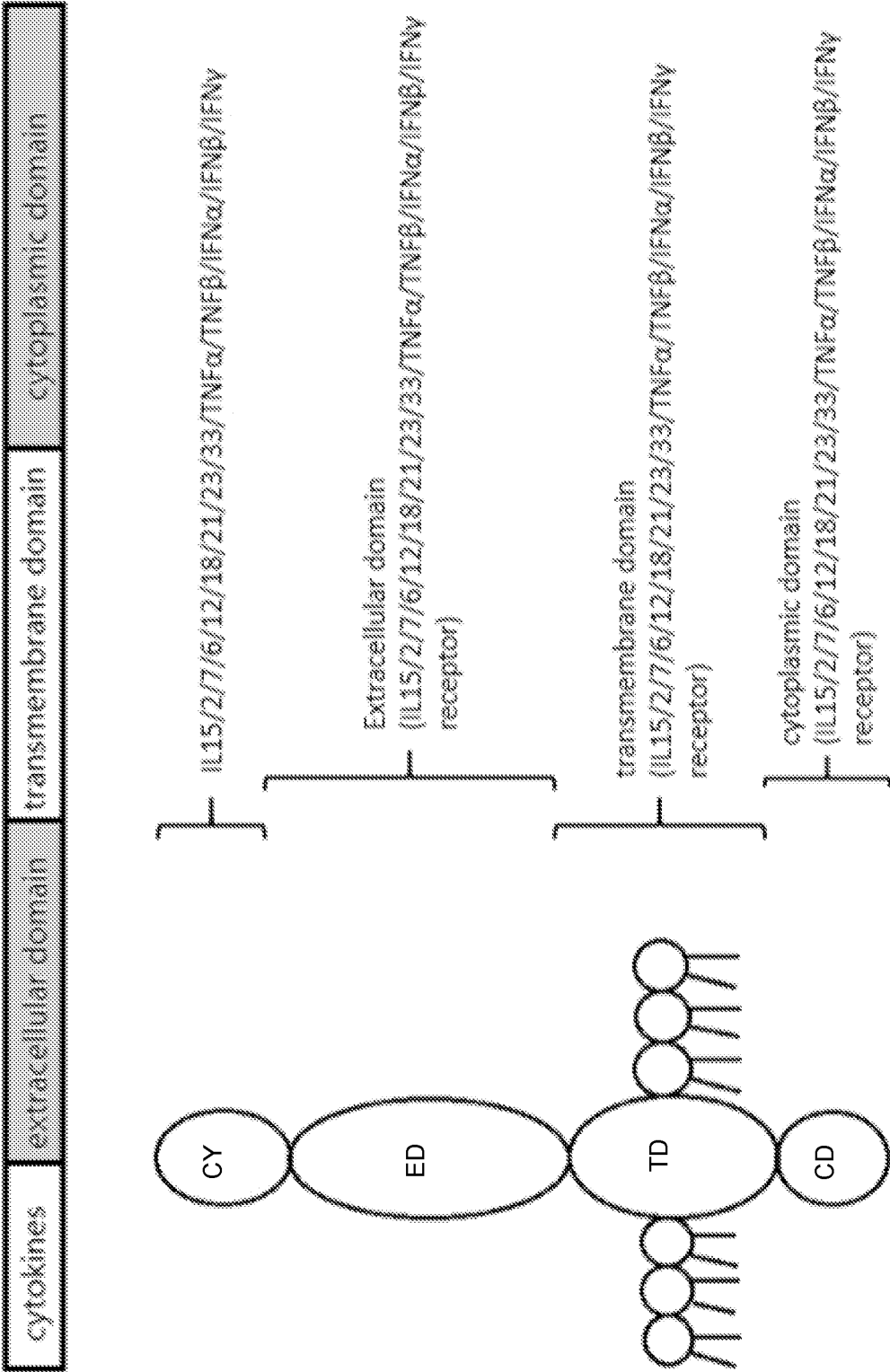


FIG. 3

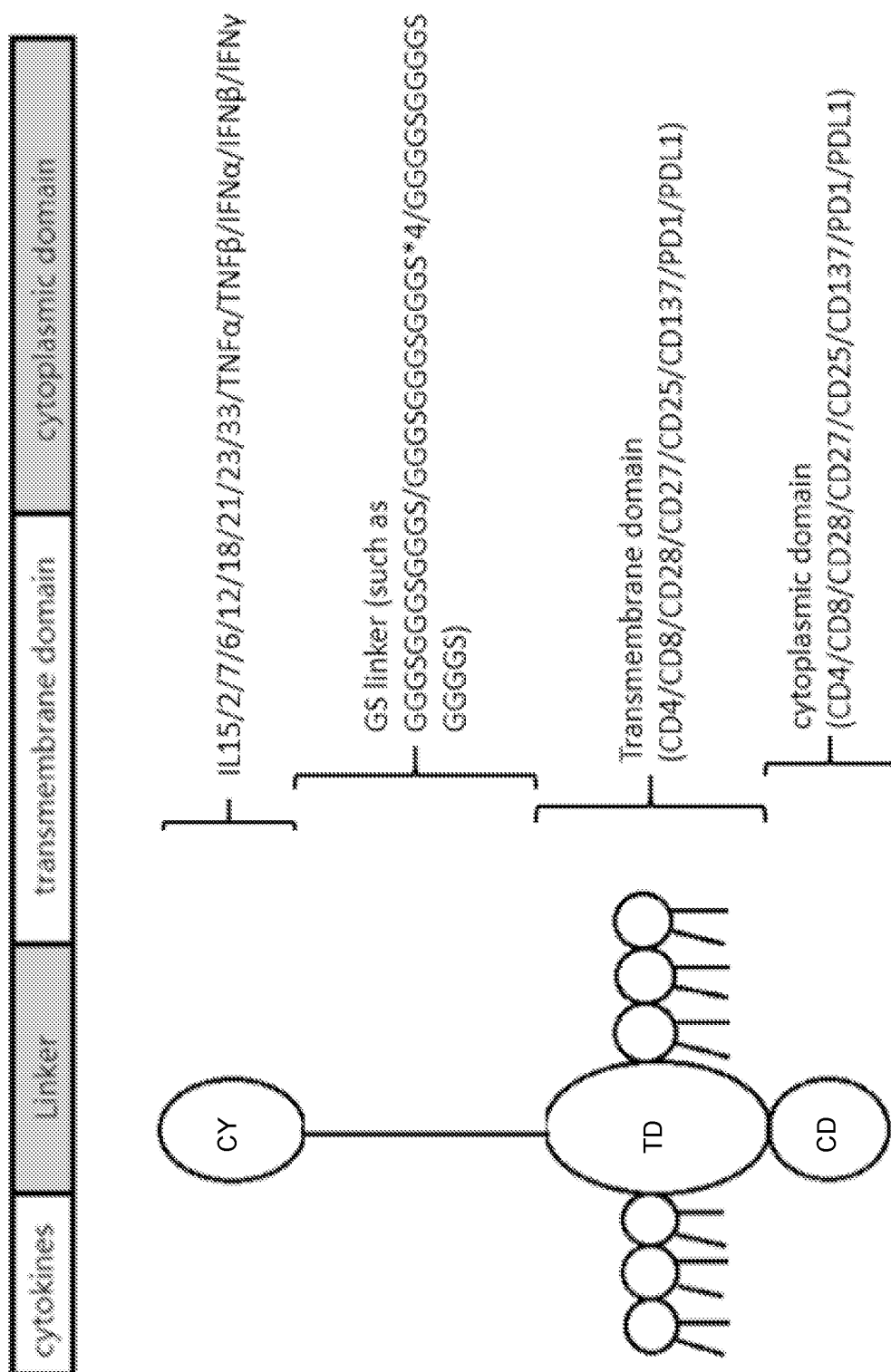


FIG. 4

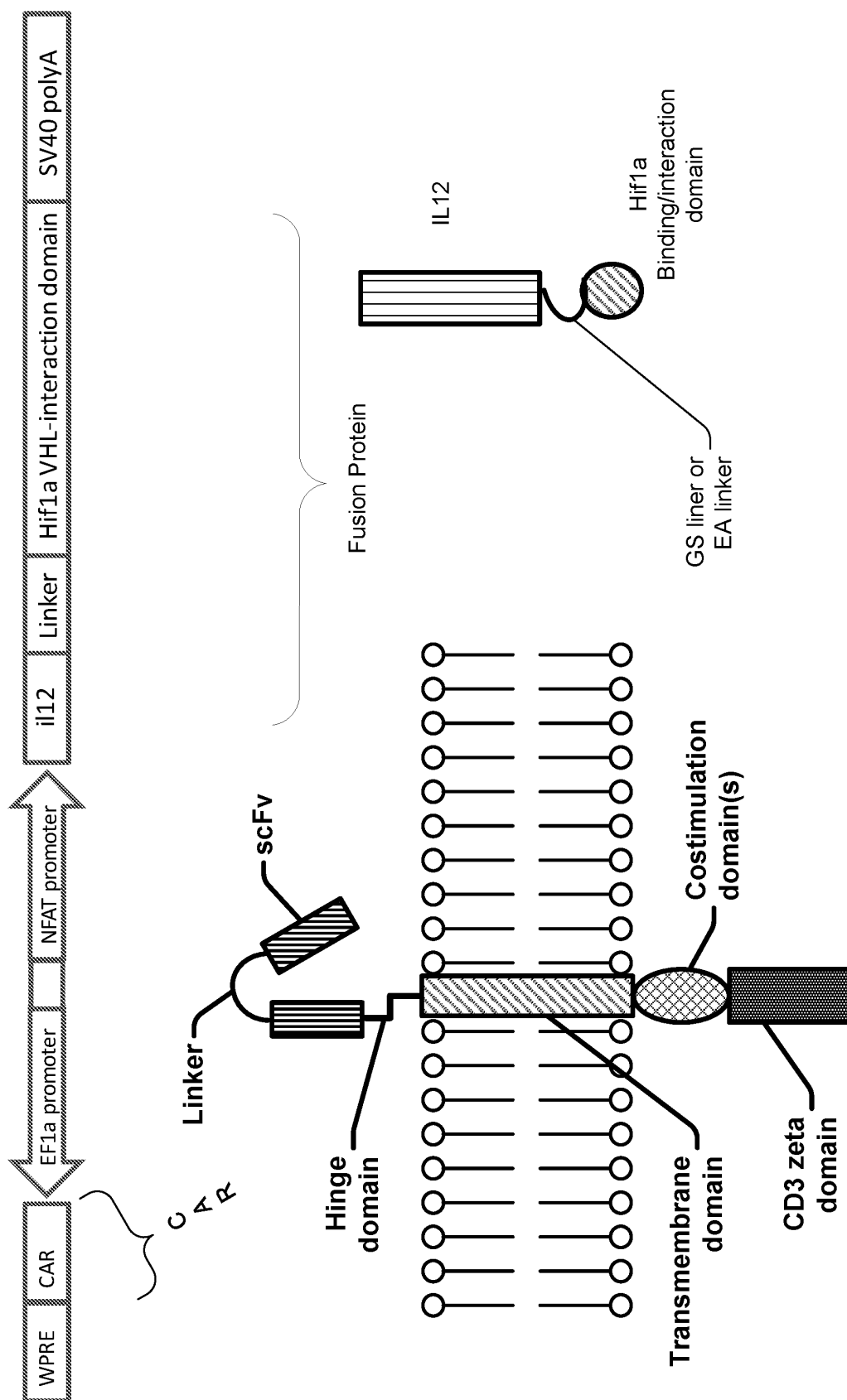


FIG. 5

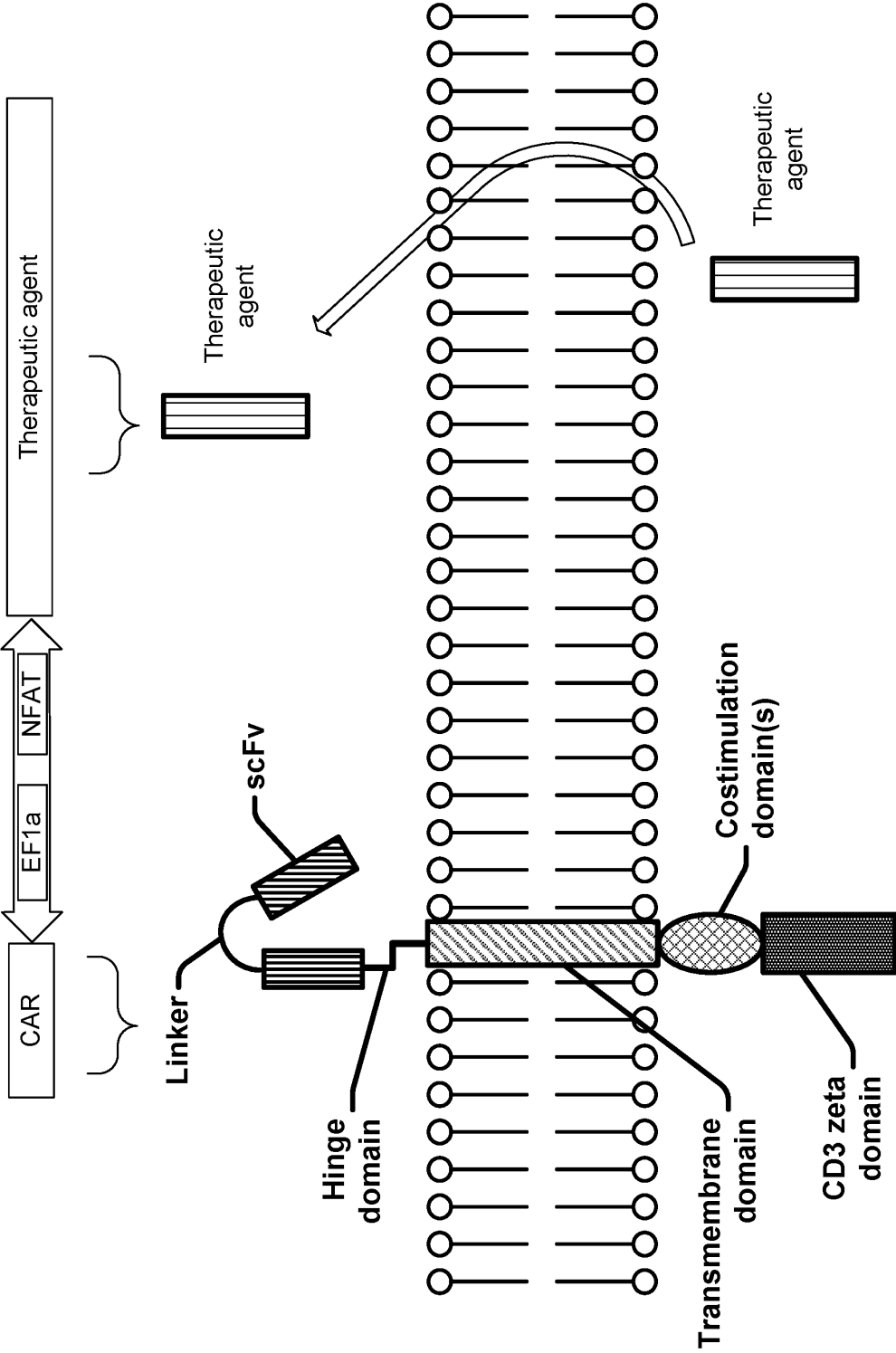


FIG. 6

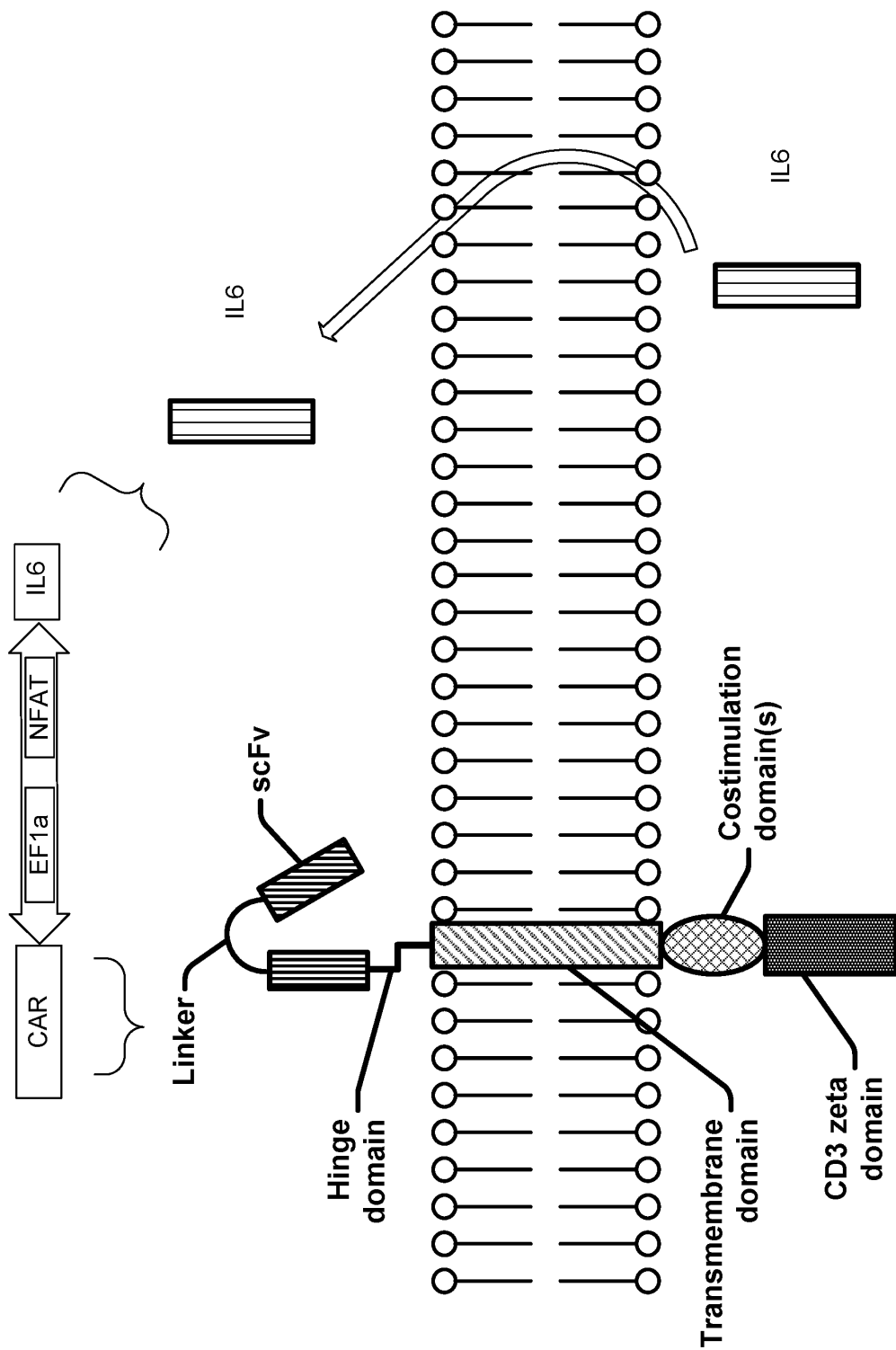


FIG. 7

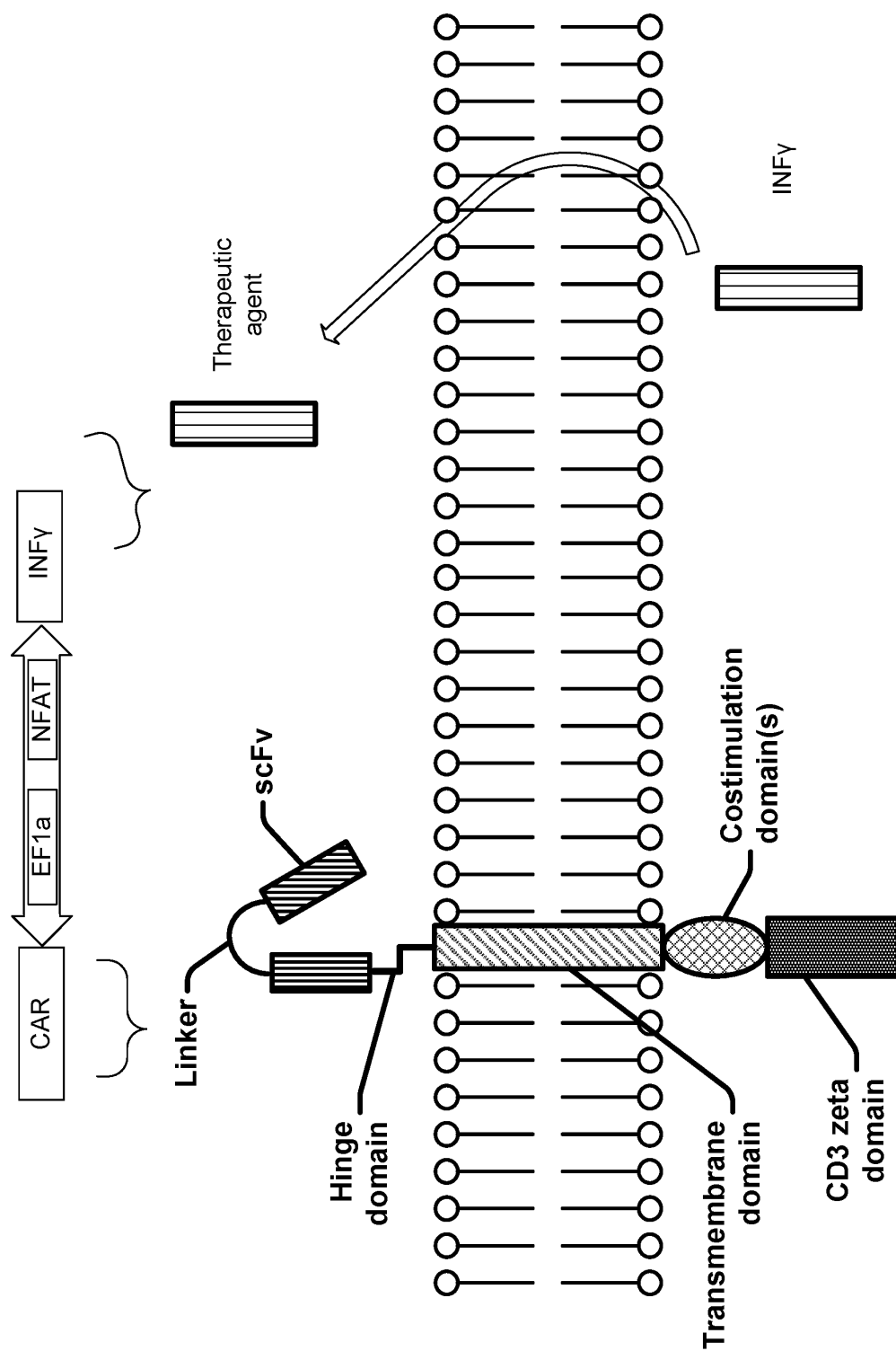


FIG. 8

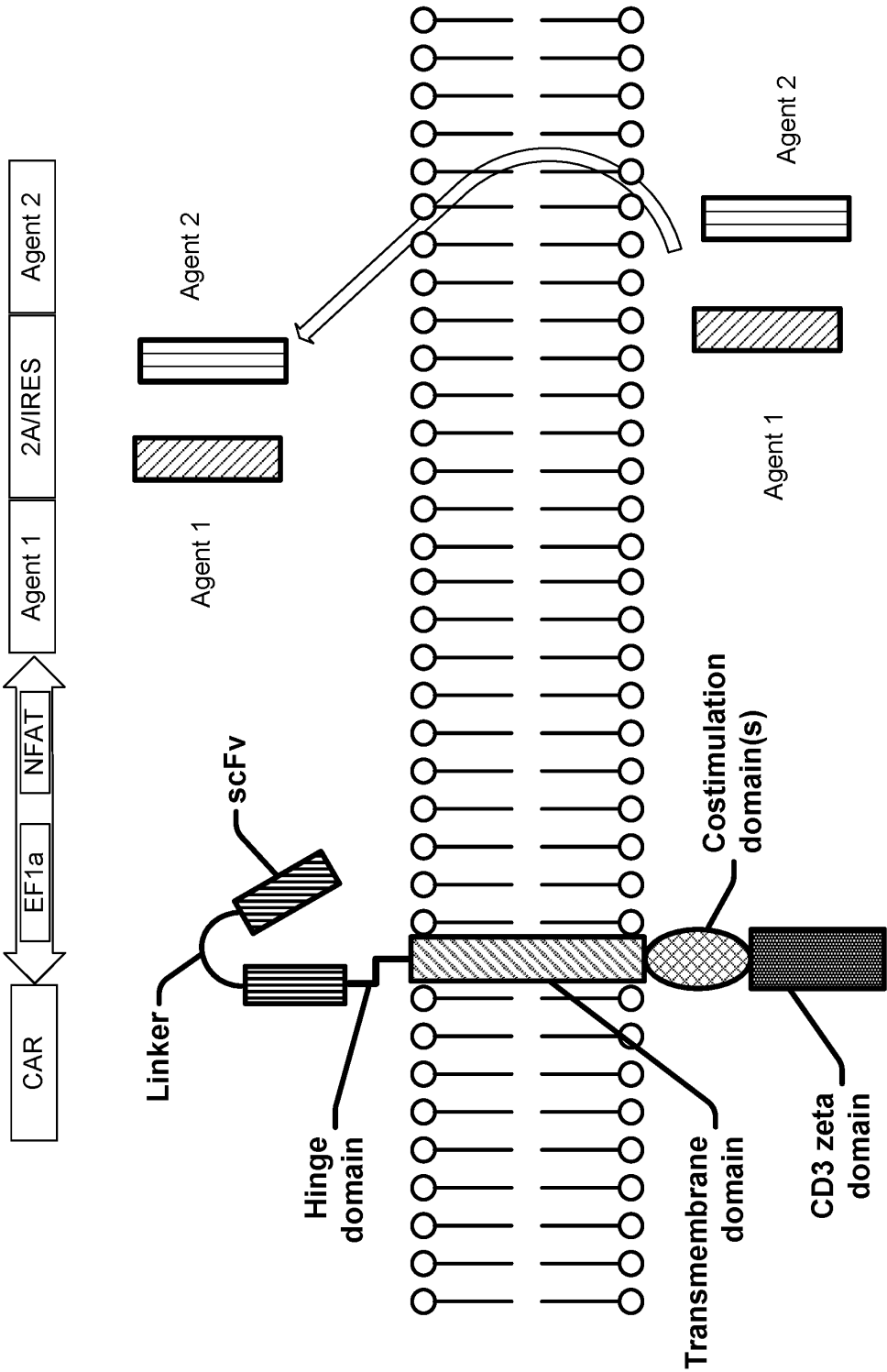


FIG. 9

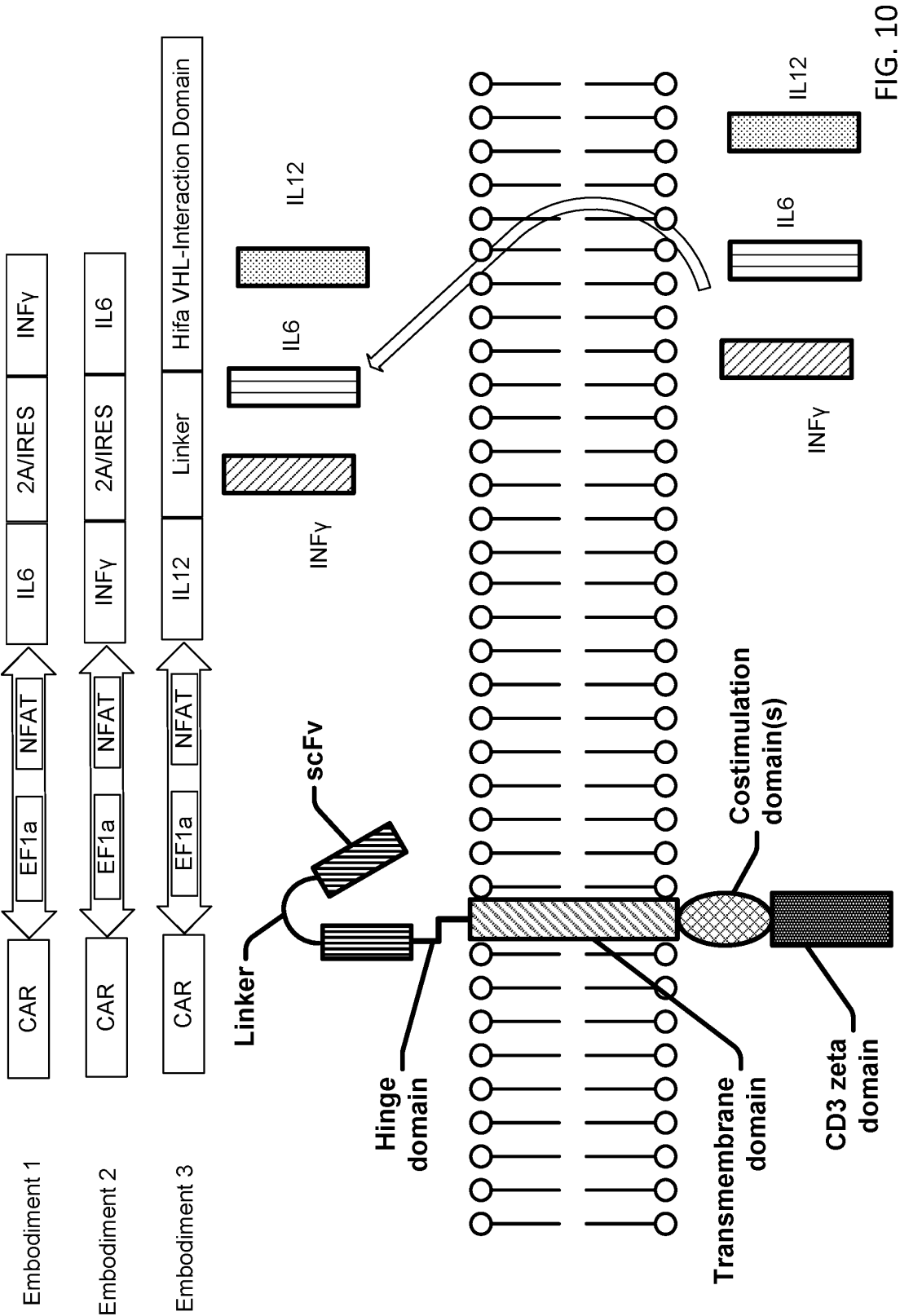


FIG. 10

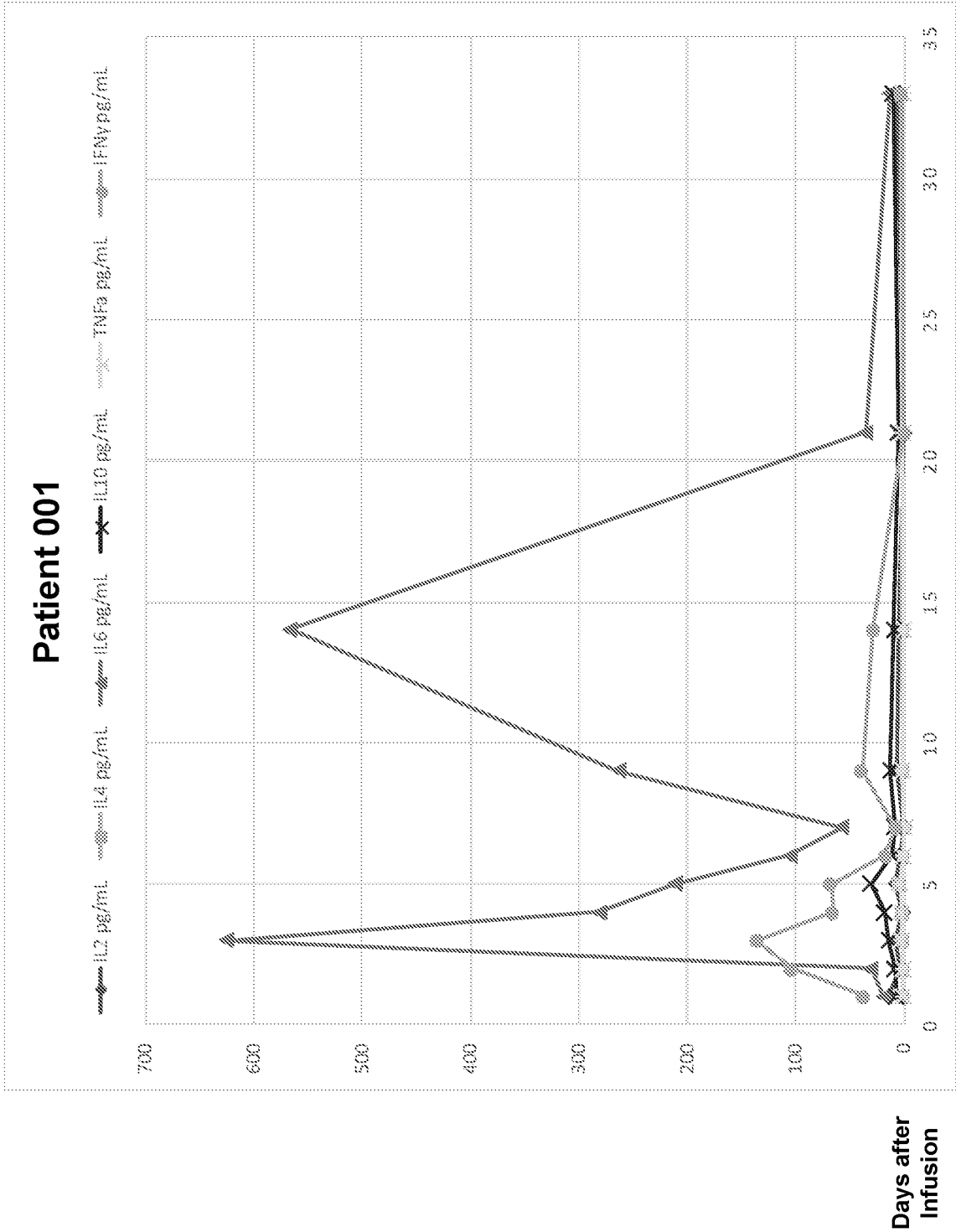


FIG. 11

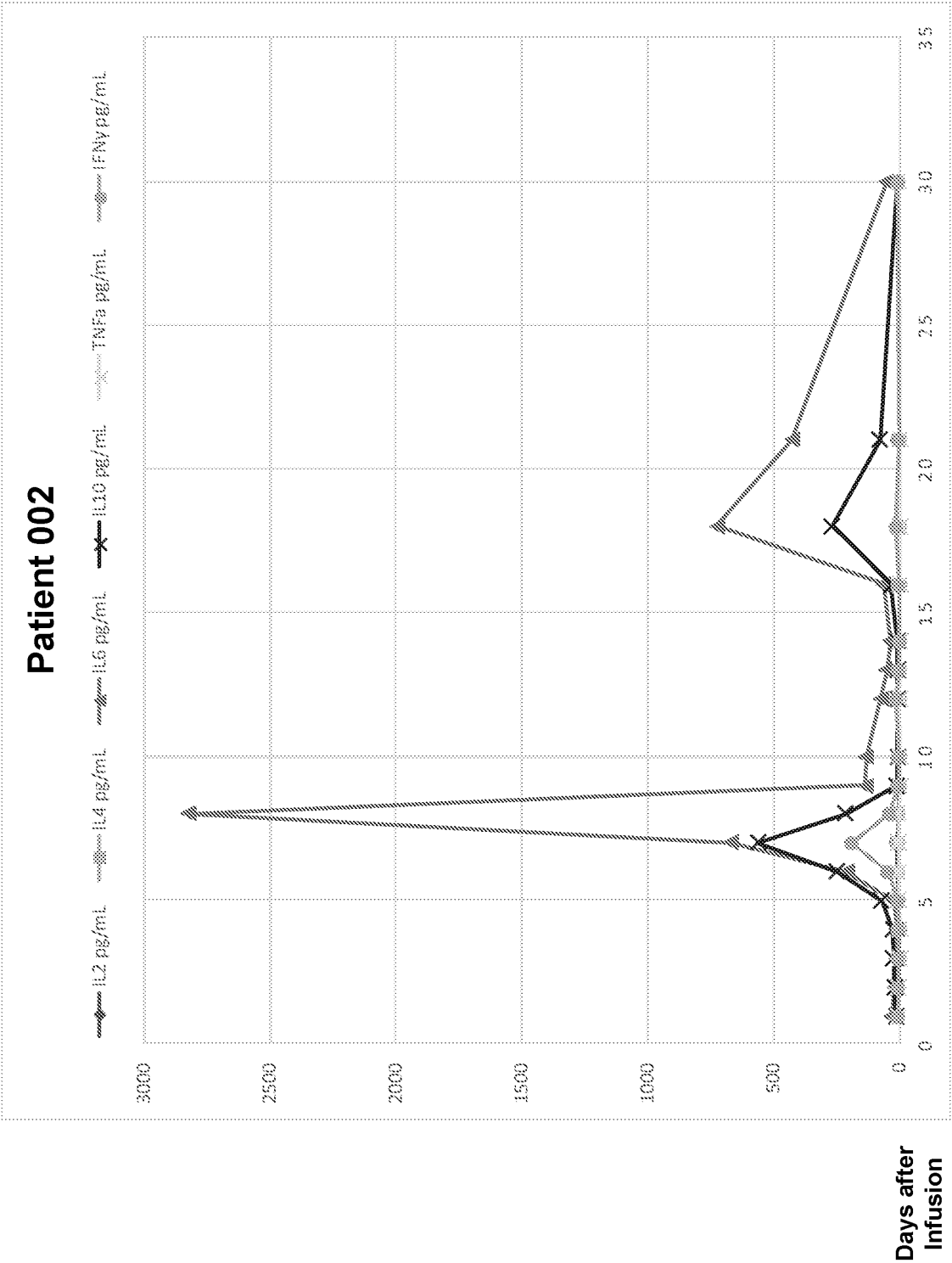


FIG. 12

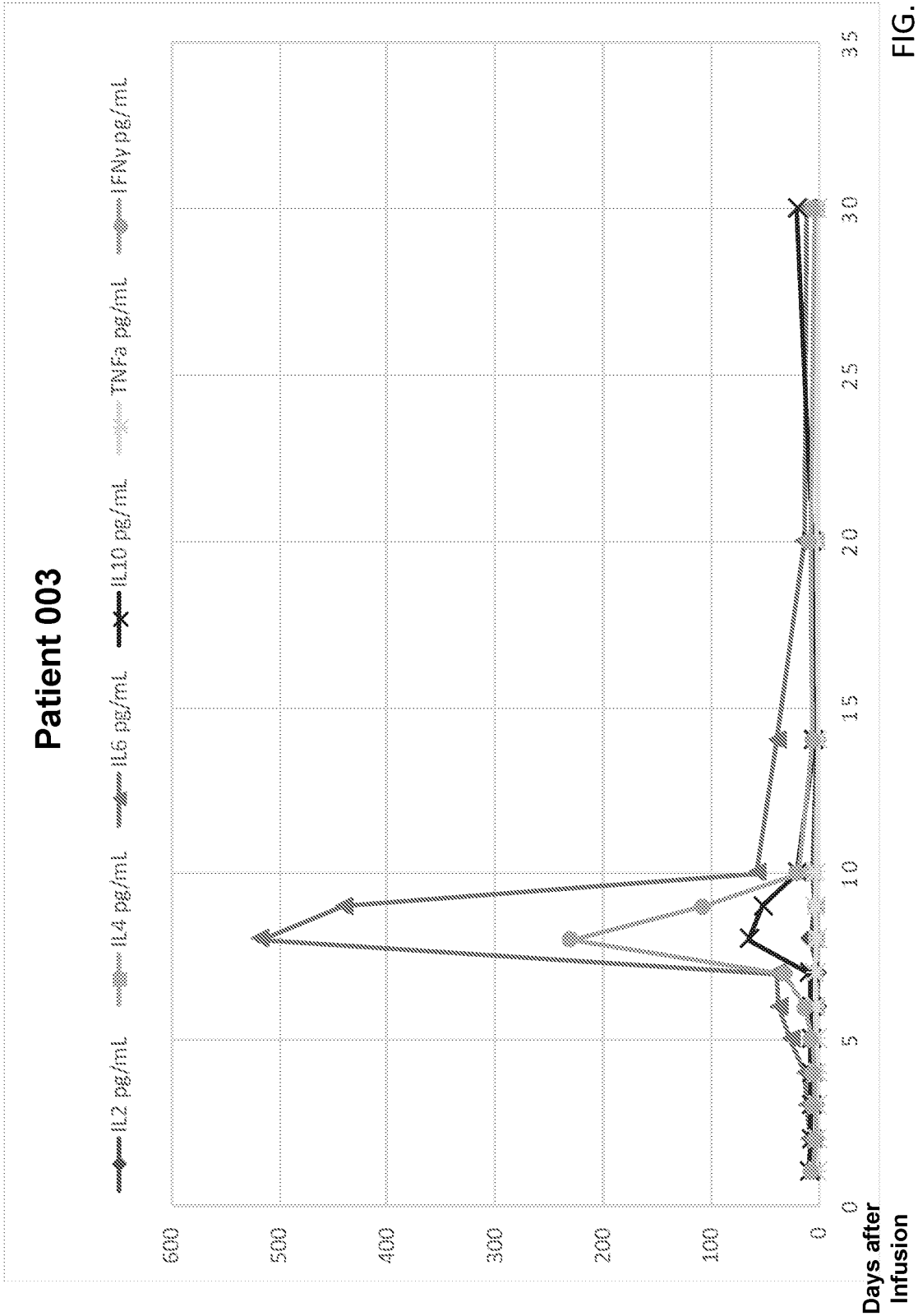


FIG. 13

M2 macrophage 0h

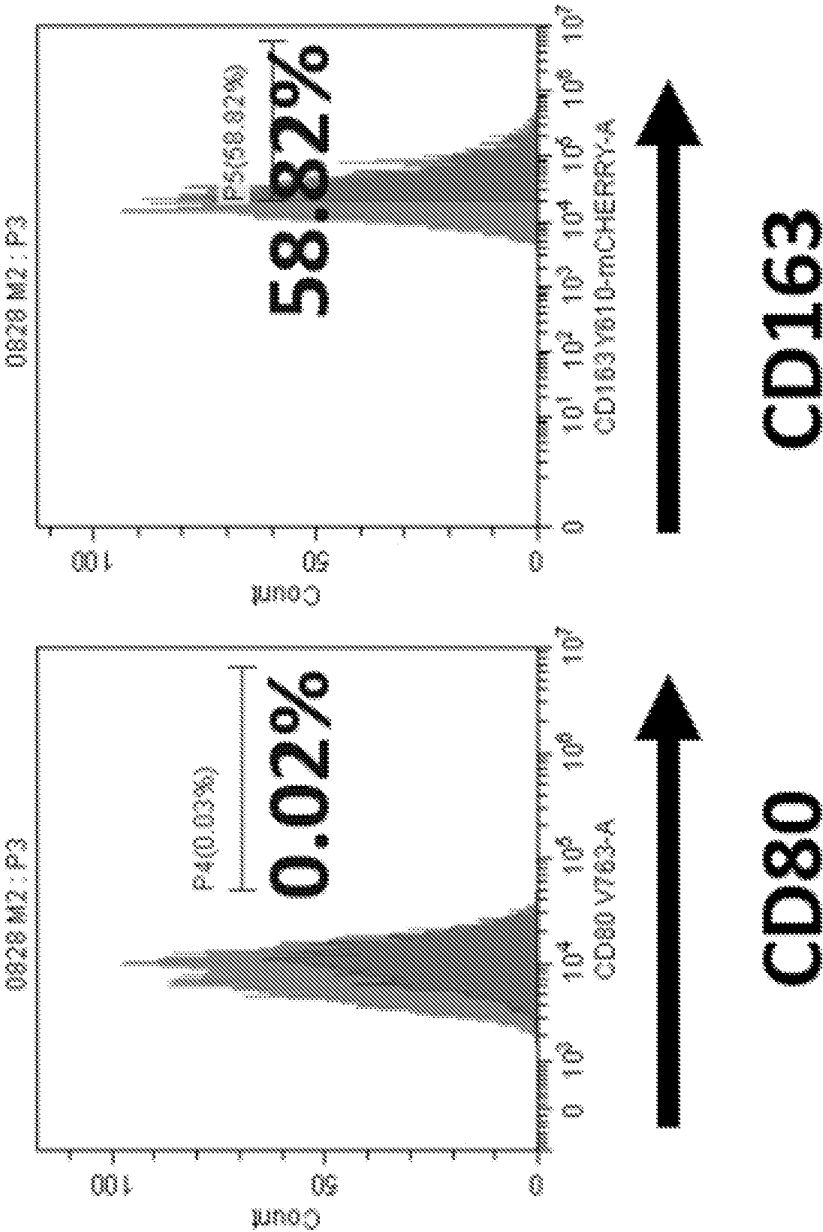
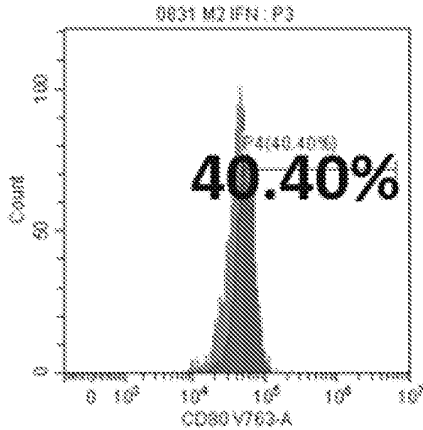
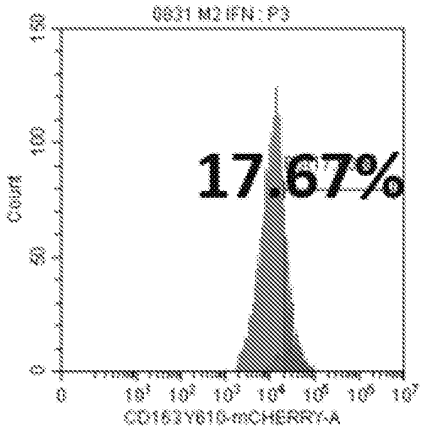
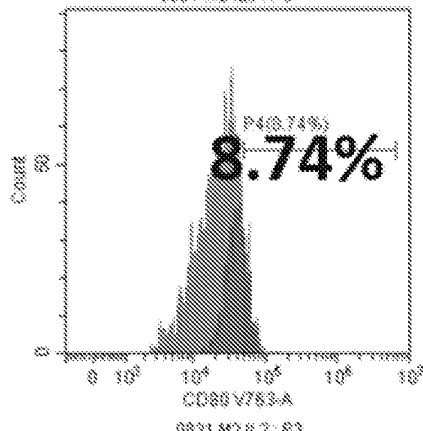
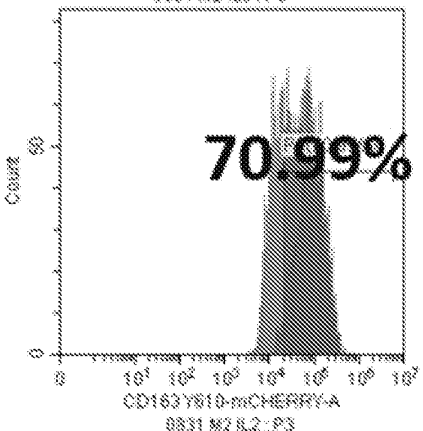


FIG. 14

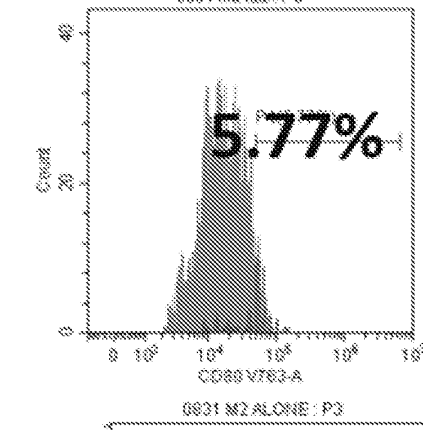
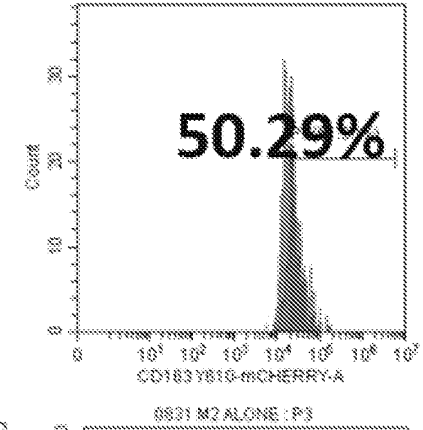
+ 200ng IFN γ
48h



+200ng IL6
48h



+200ng IL2
48h



No cytokine 48h

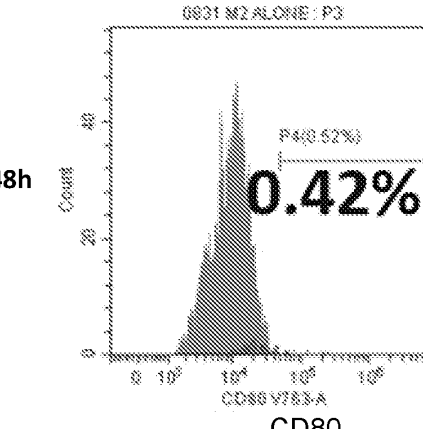
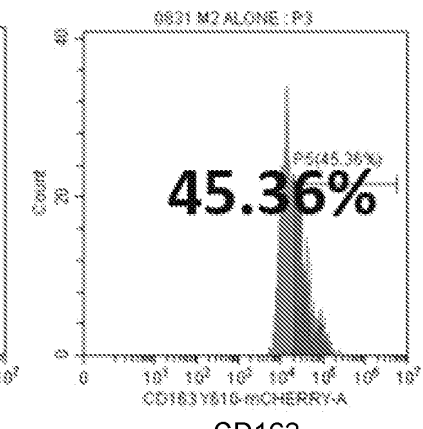


FIG. 15

CD80

CD163

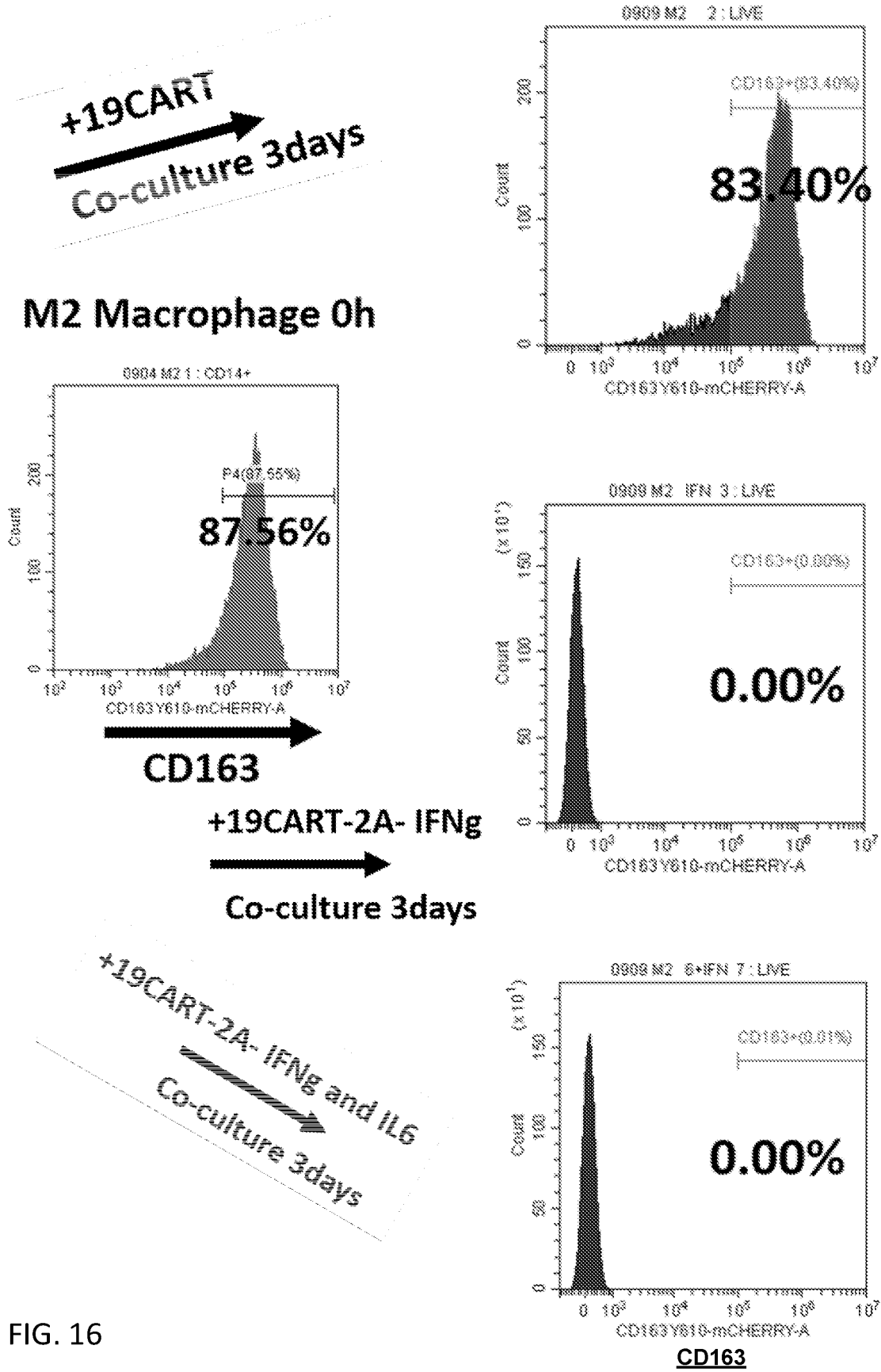
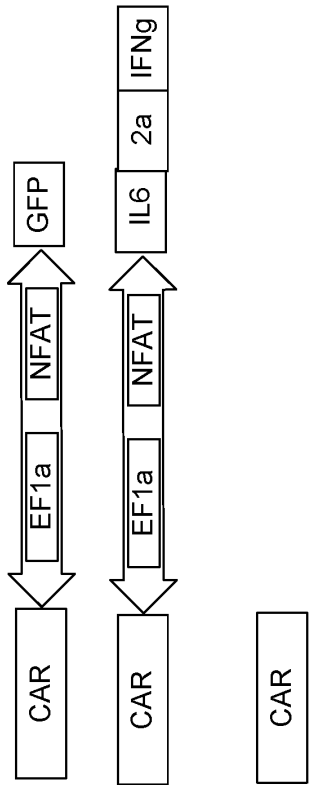


FIG. 16



6205: hCD19CAR-6xNFAT-GFP
6221: hCD19CAR-6xNFAT-IL6-2a-IFNg
1230: hCD19CAR

FIG. 17

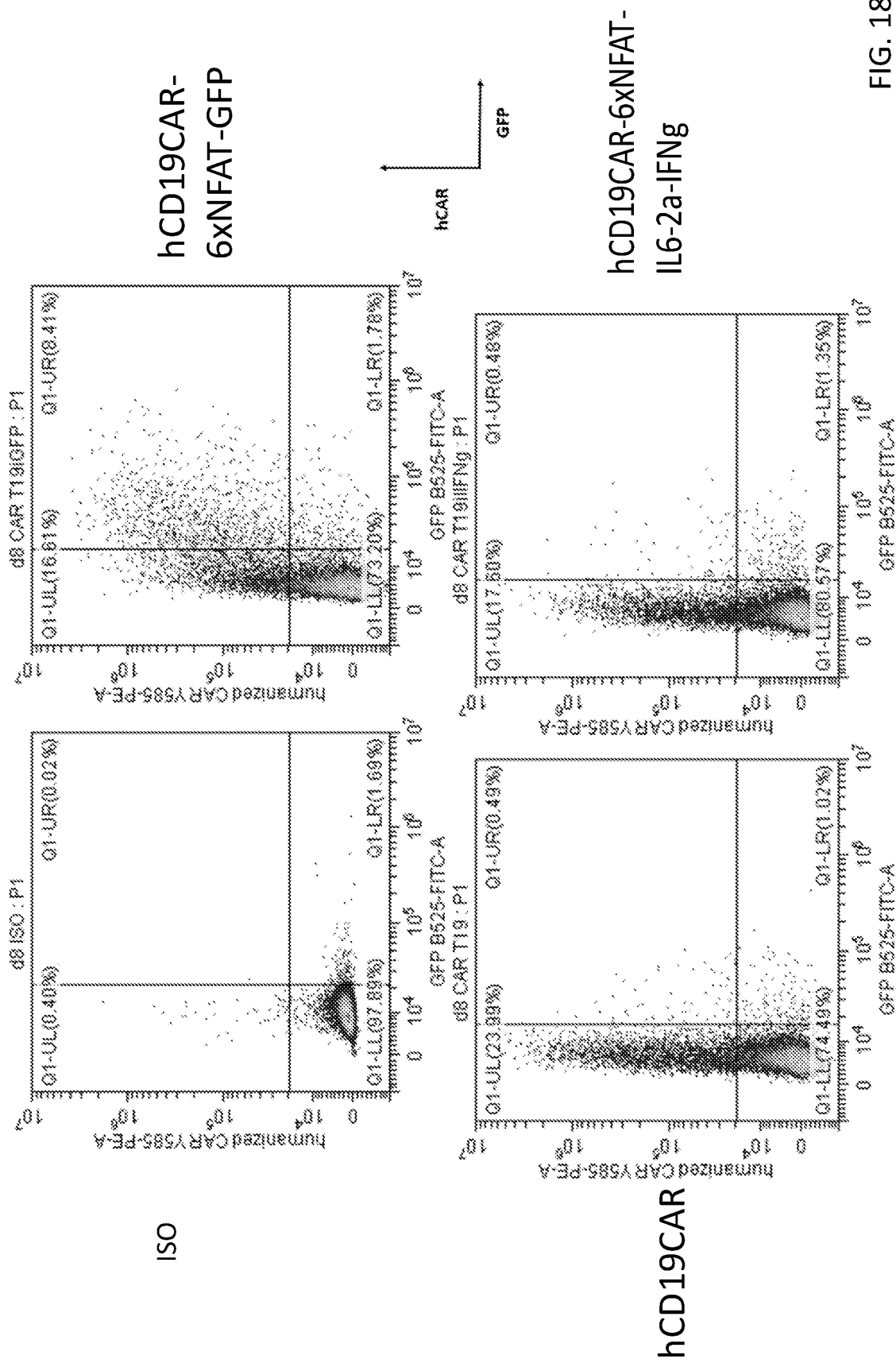


FIG. 18

FIG. 19

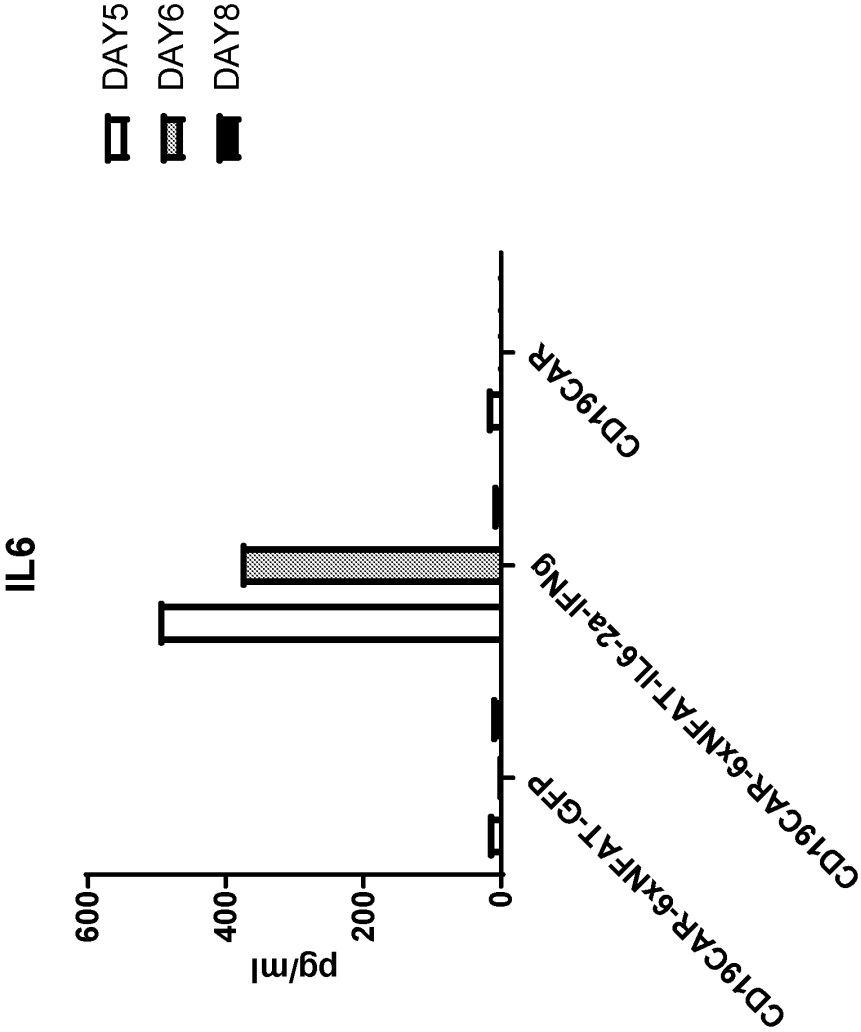
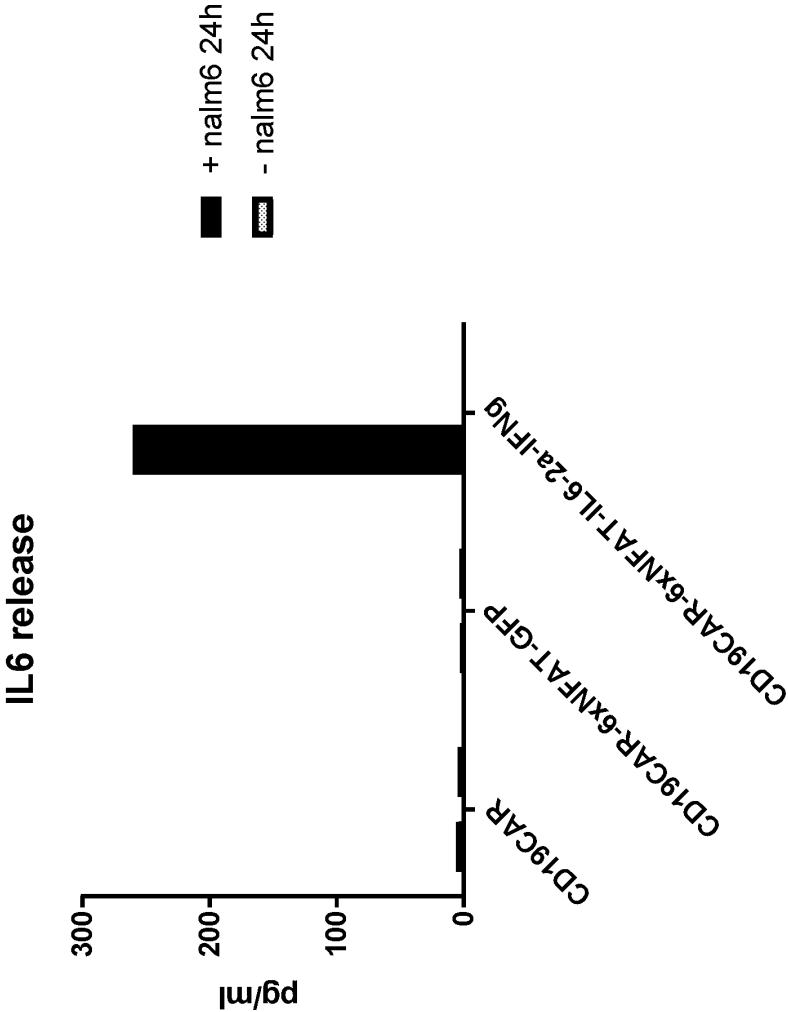


FIG. 20



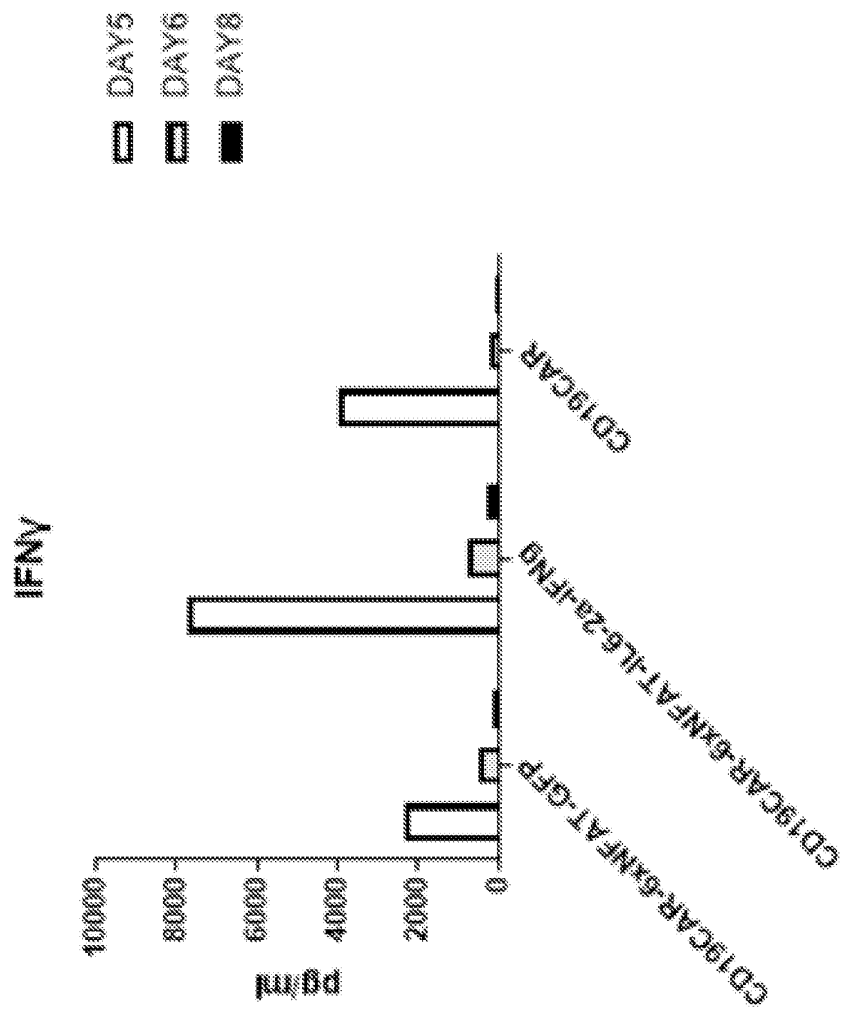


FIG. 21

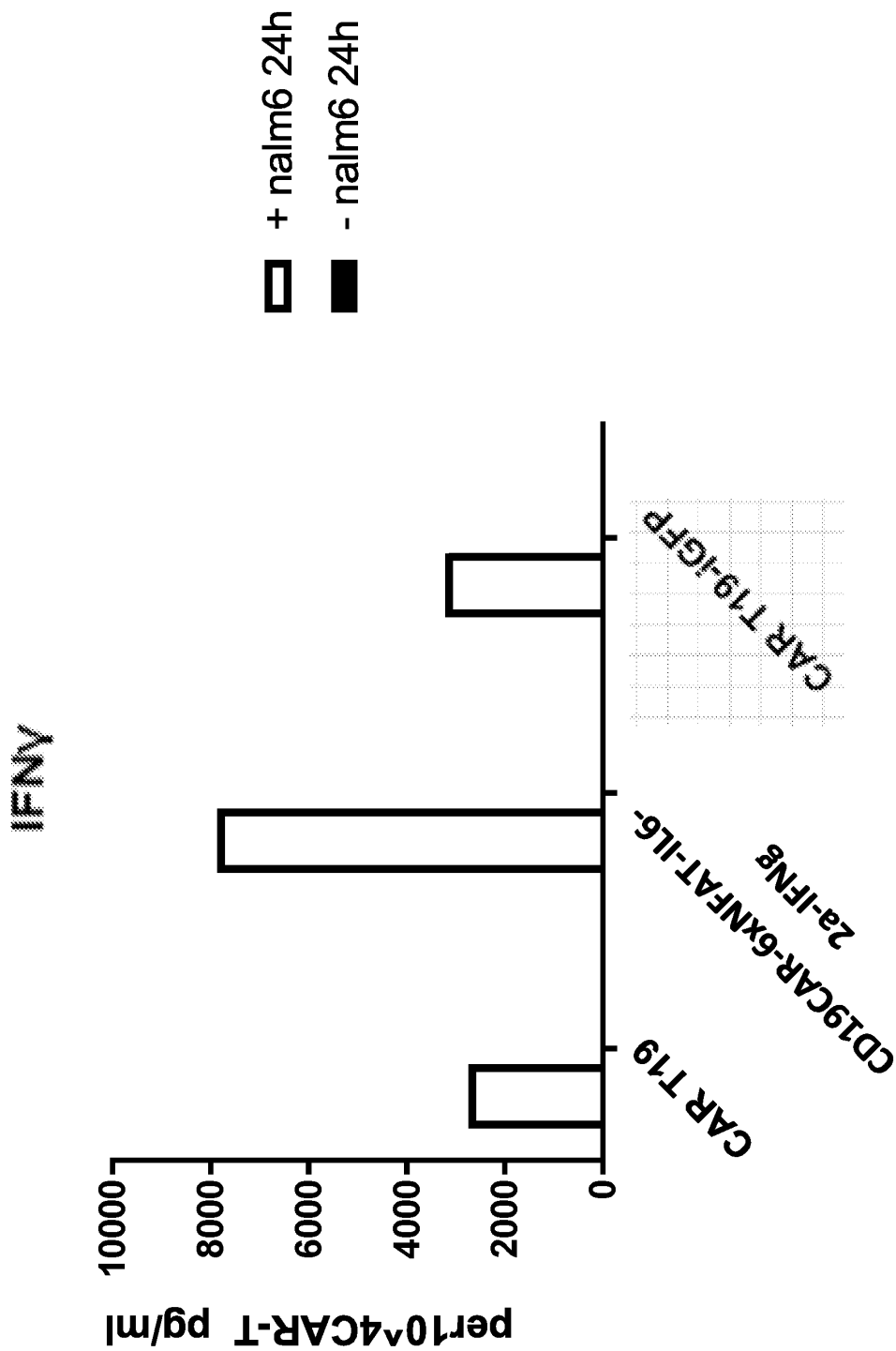


FIG. 22

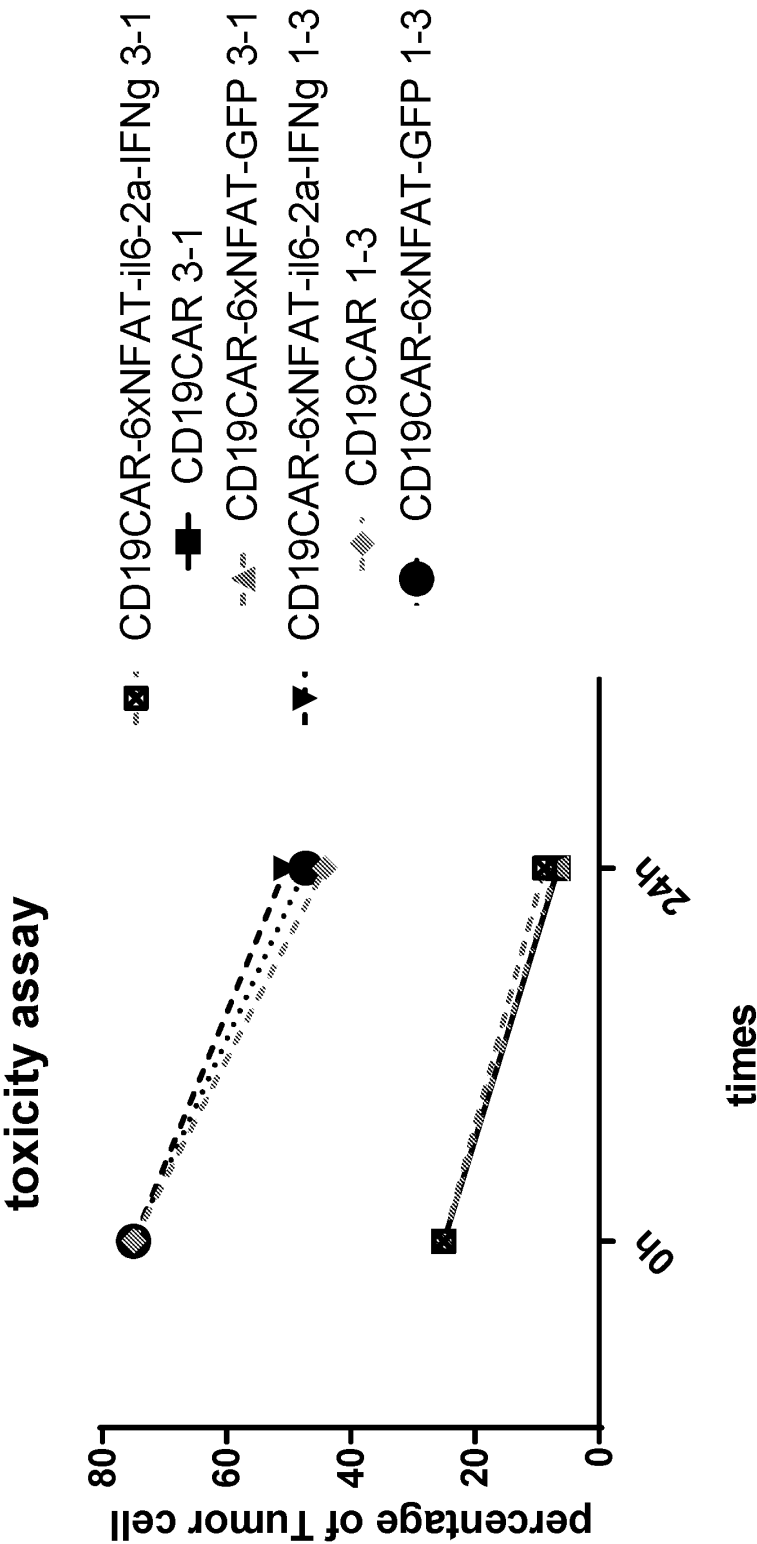
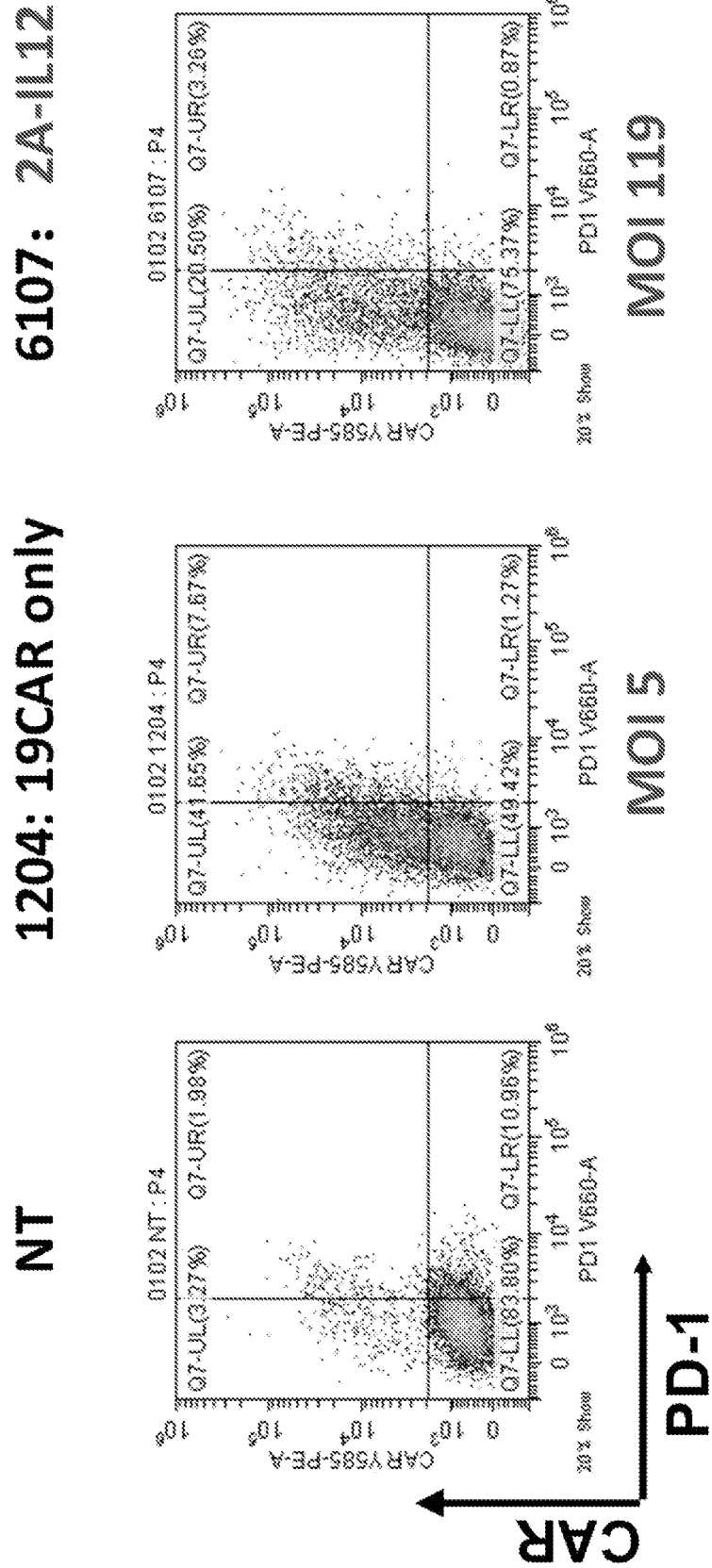


FIG. 23



scFV primer	copy/ug	copy/cell	CAR%	copy/CART
WX NT	185.39	0.00	5.25%	
WX 6107	33350.12	0.22	23.76%	0.94
WX 1204	111557.89	0.74	49.50%	1.50

FIG. 24

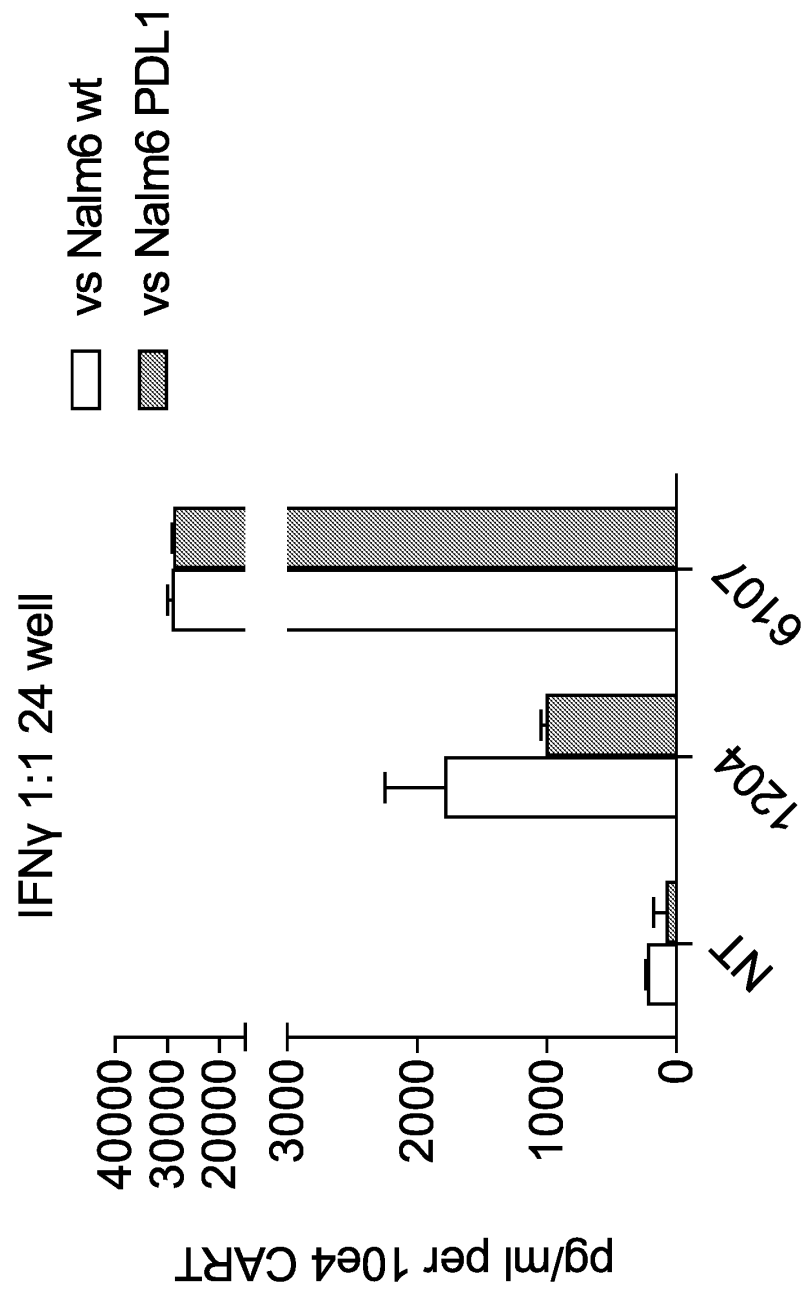


FIG. 25

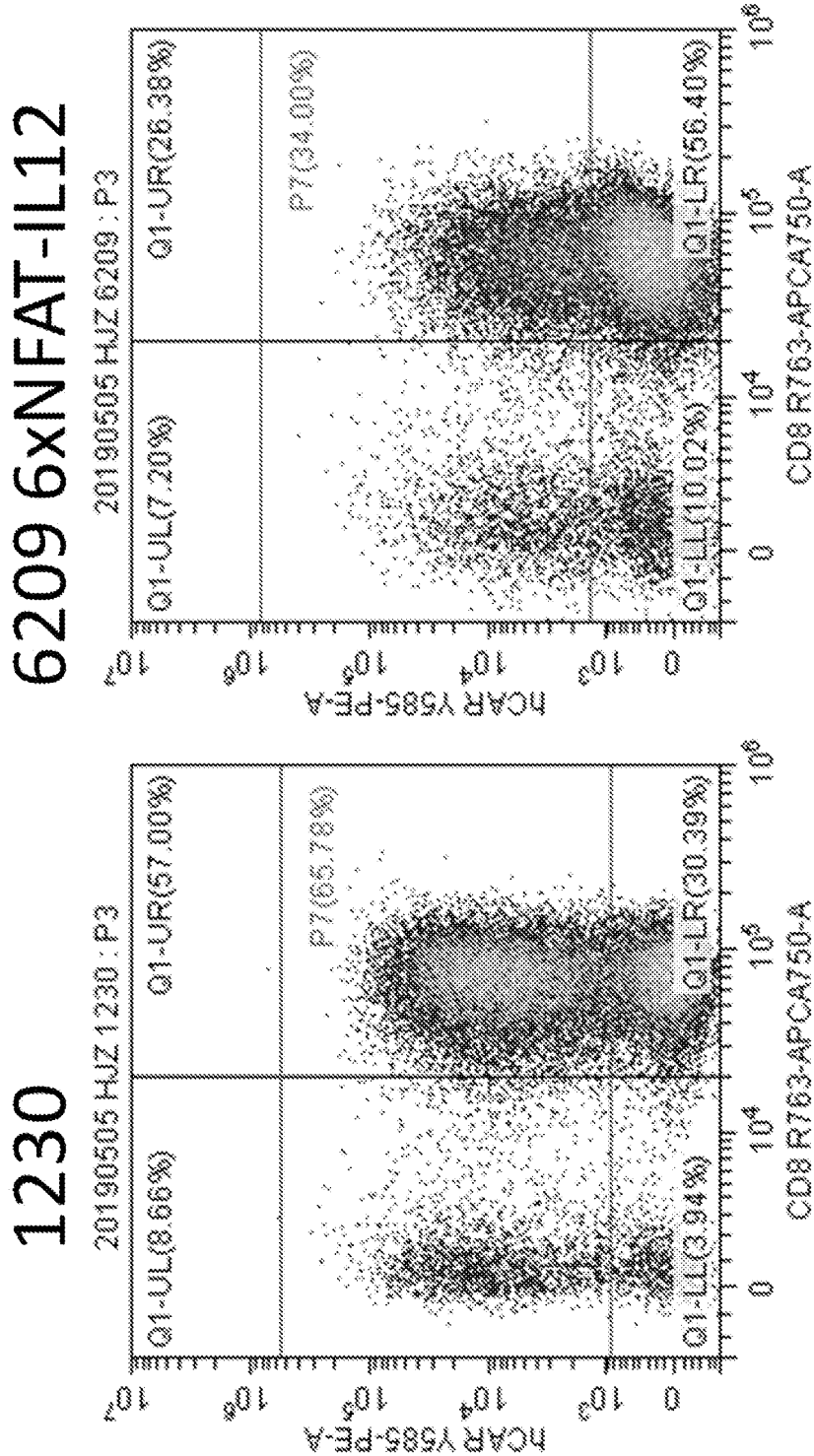


FIG. 26

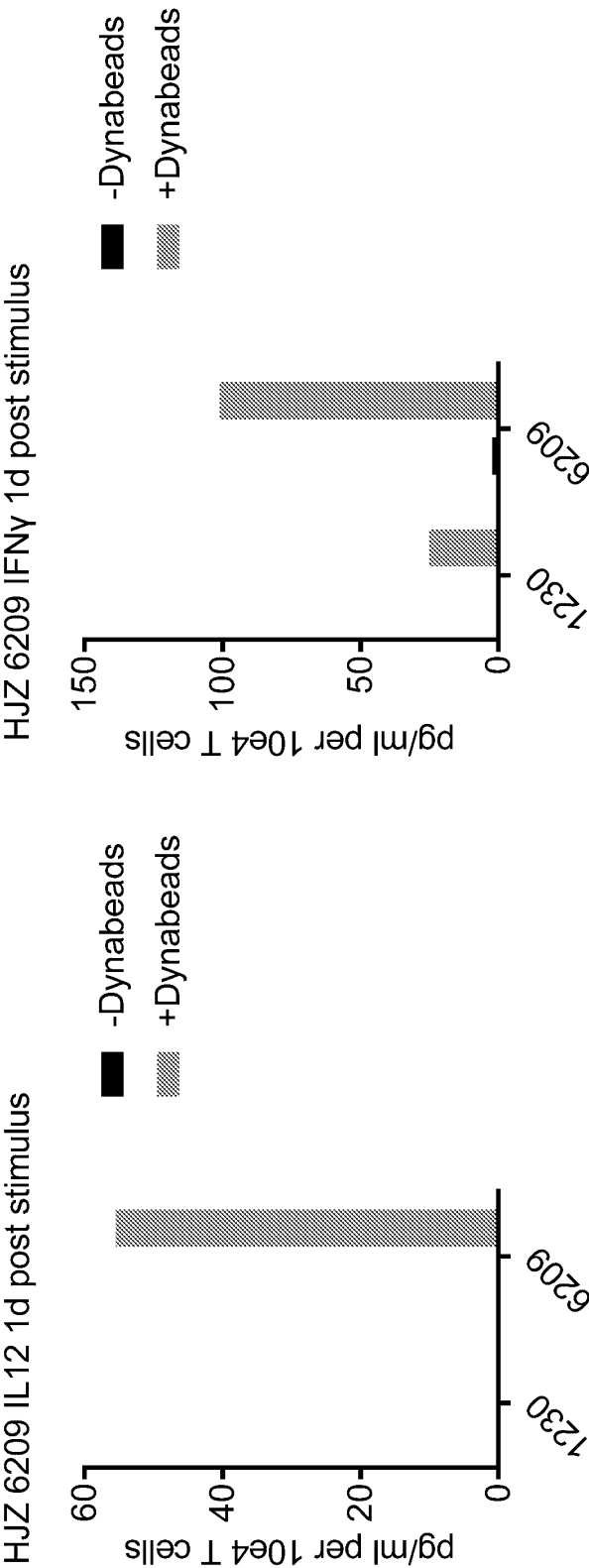


FIG. 27

1230

MOI20

6221 6xNFAT-IL6+ IFN γ

MOI80

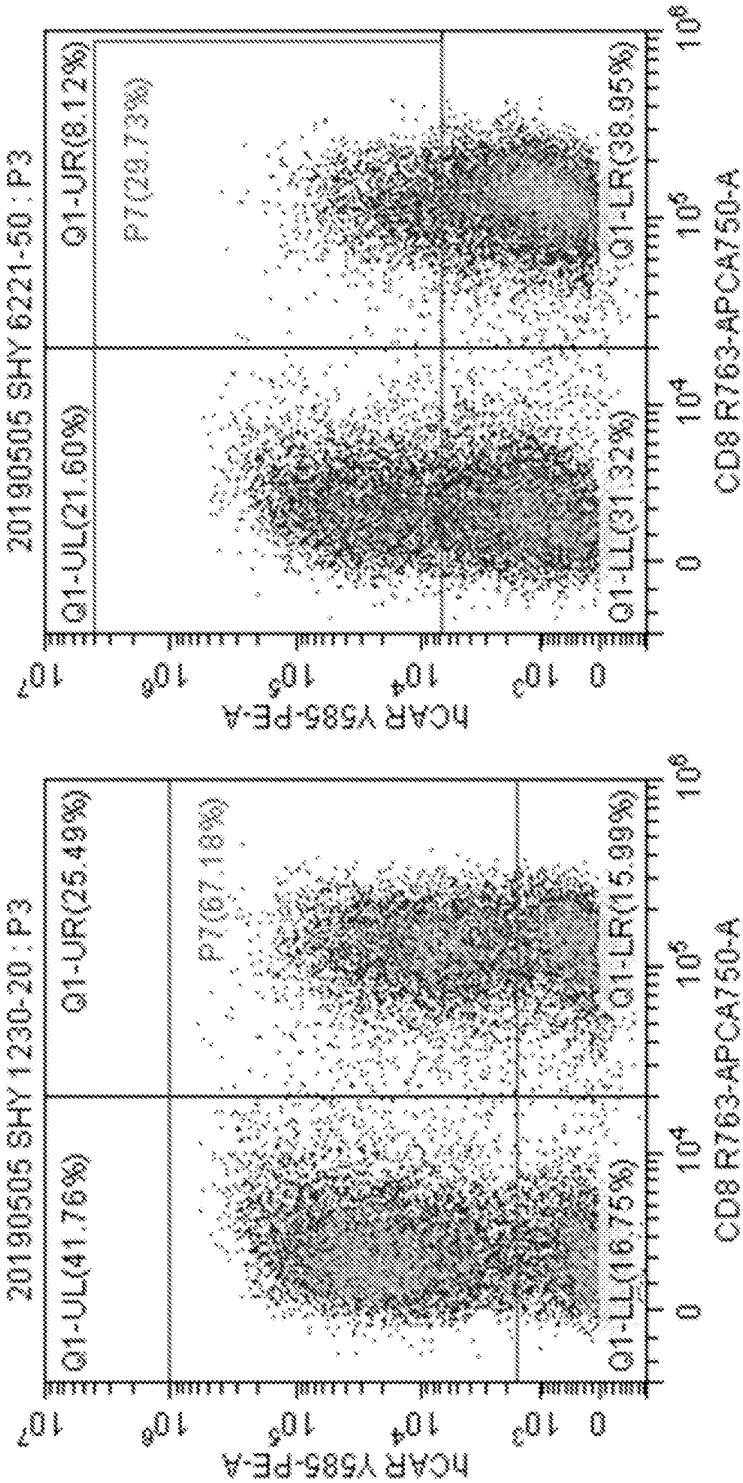


FIG. 28

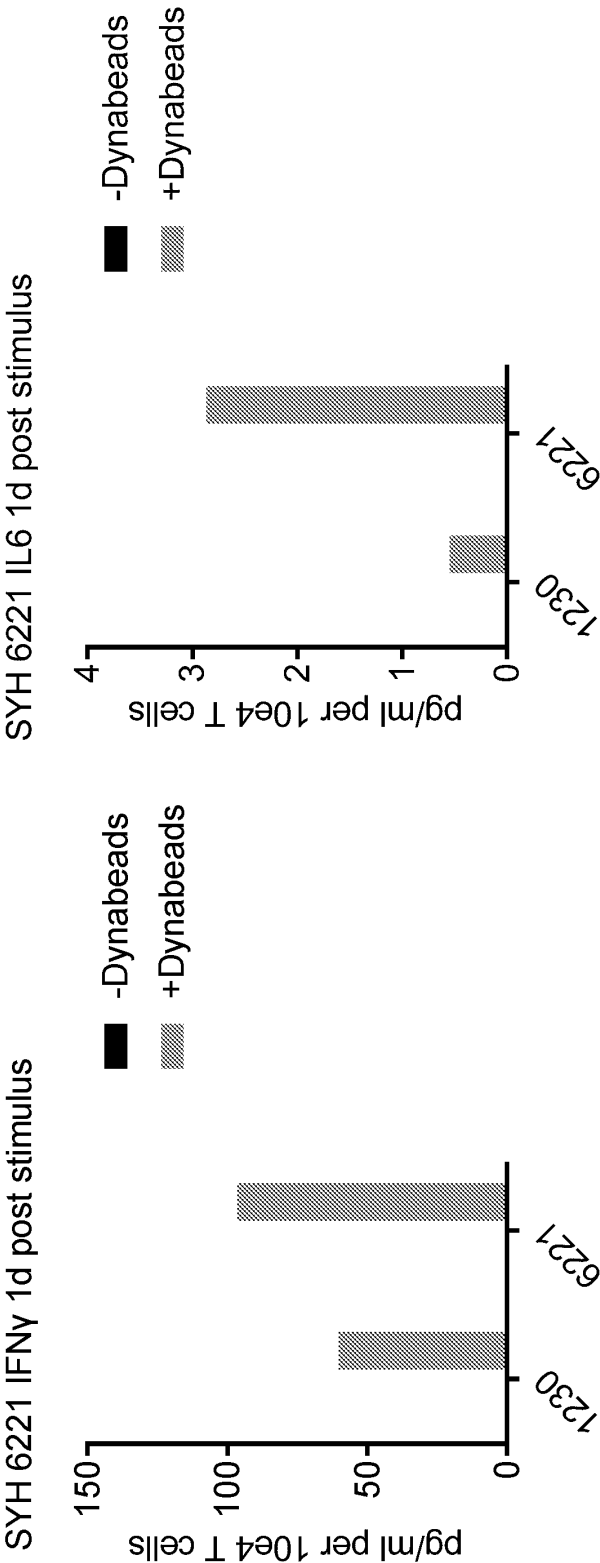


FIG. 29

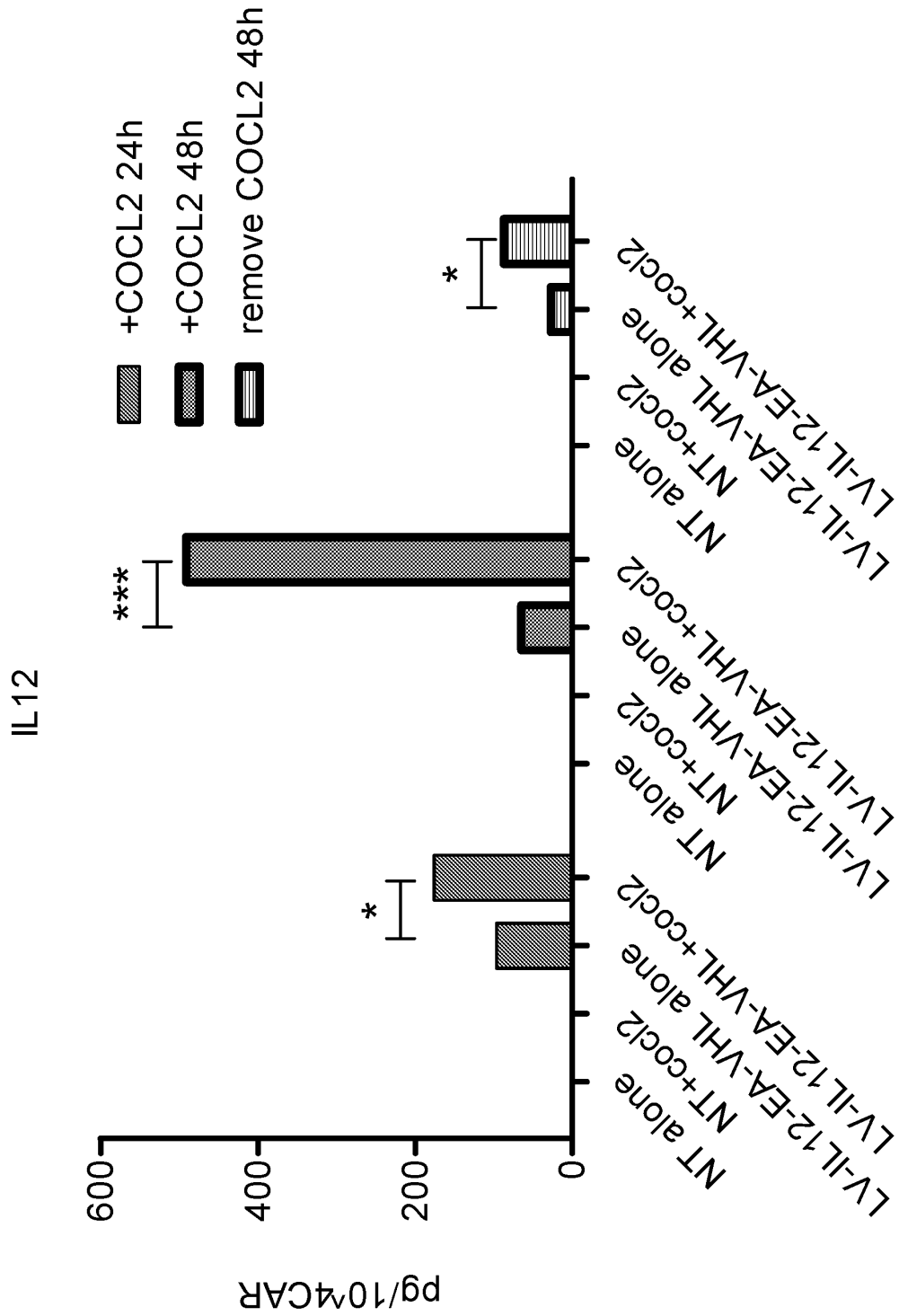


FIG. 30

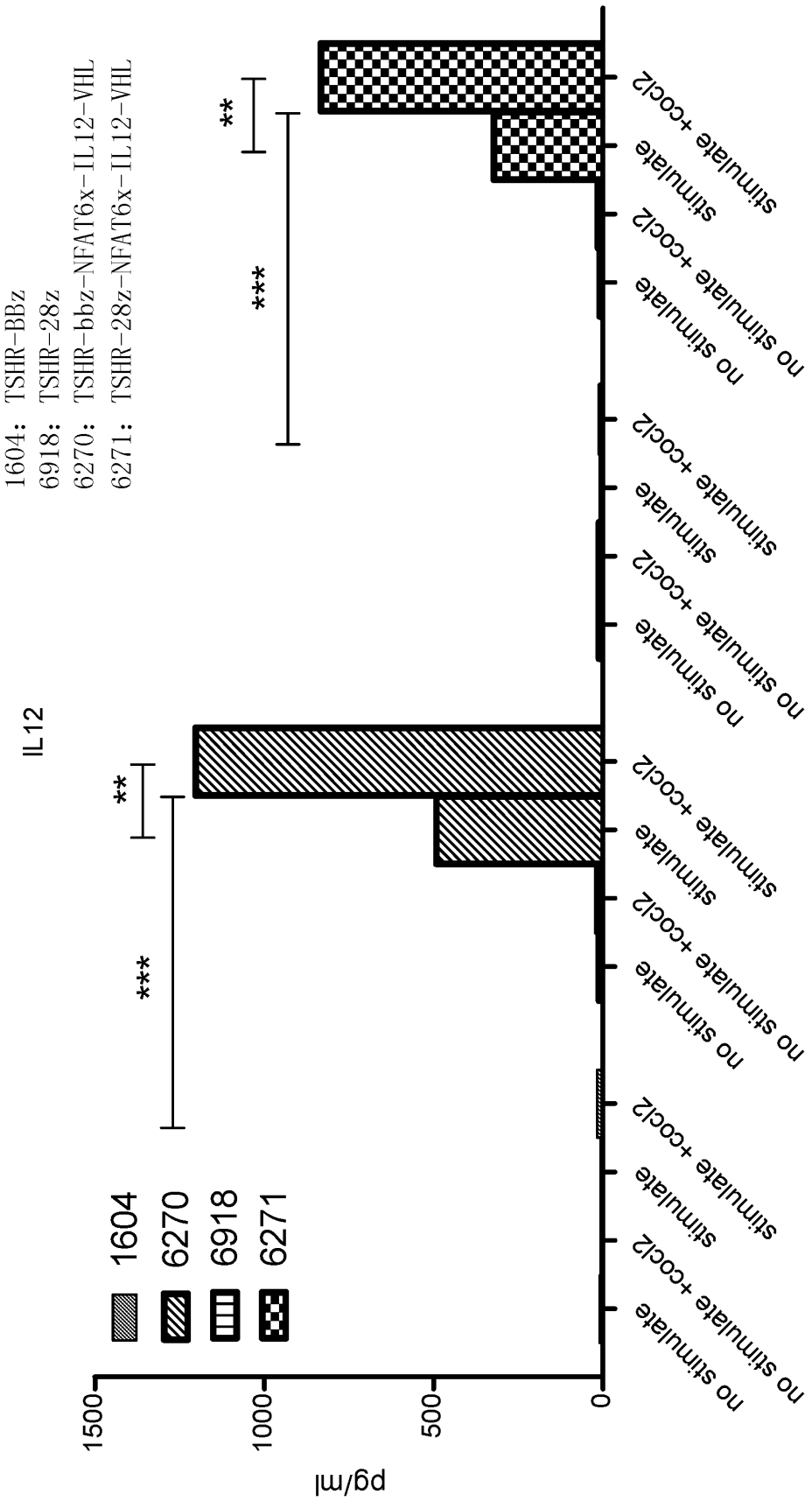


FIG. 31

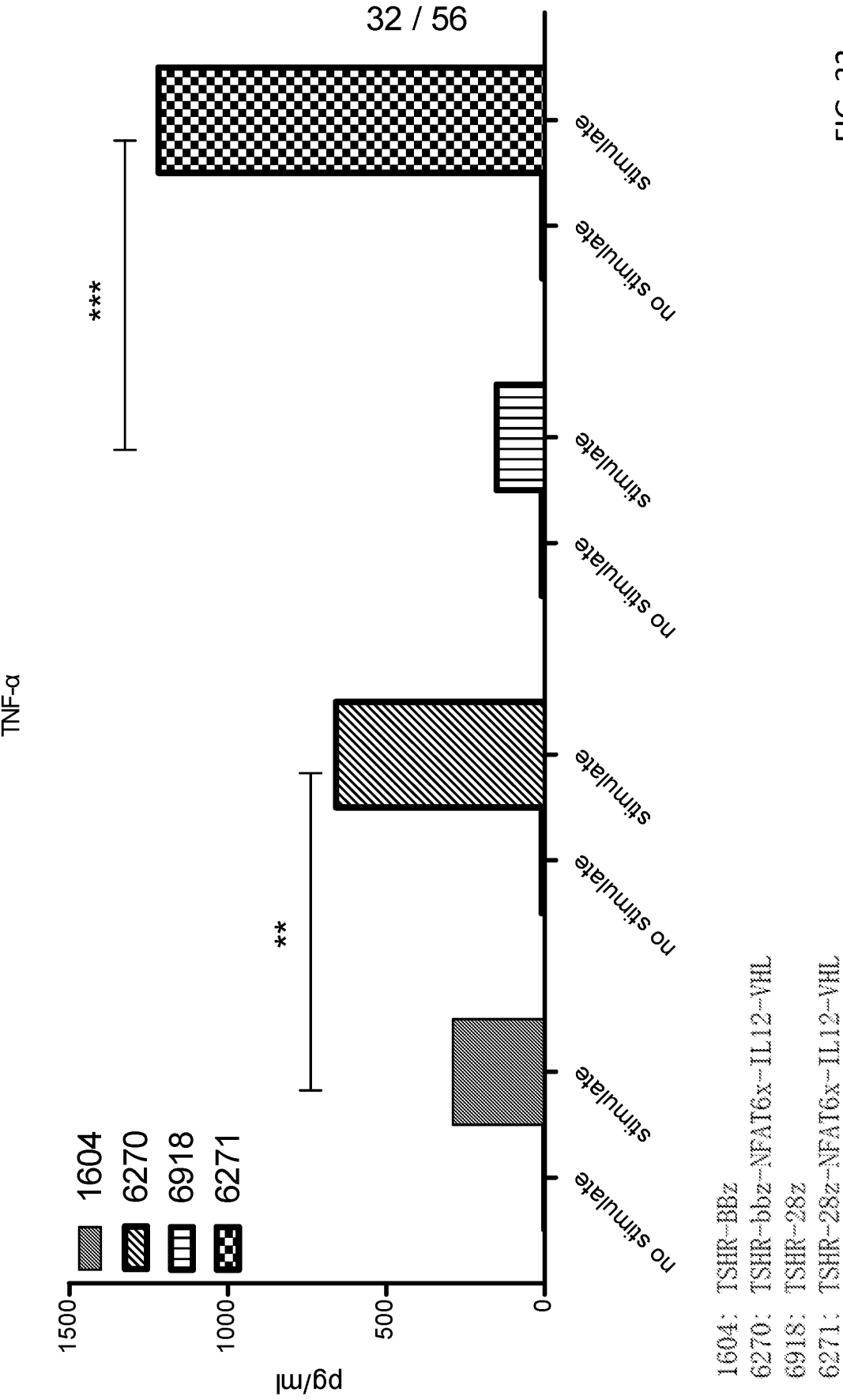


FIG. 32

33 / 56

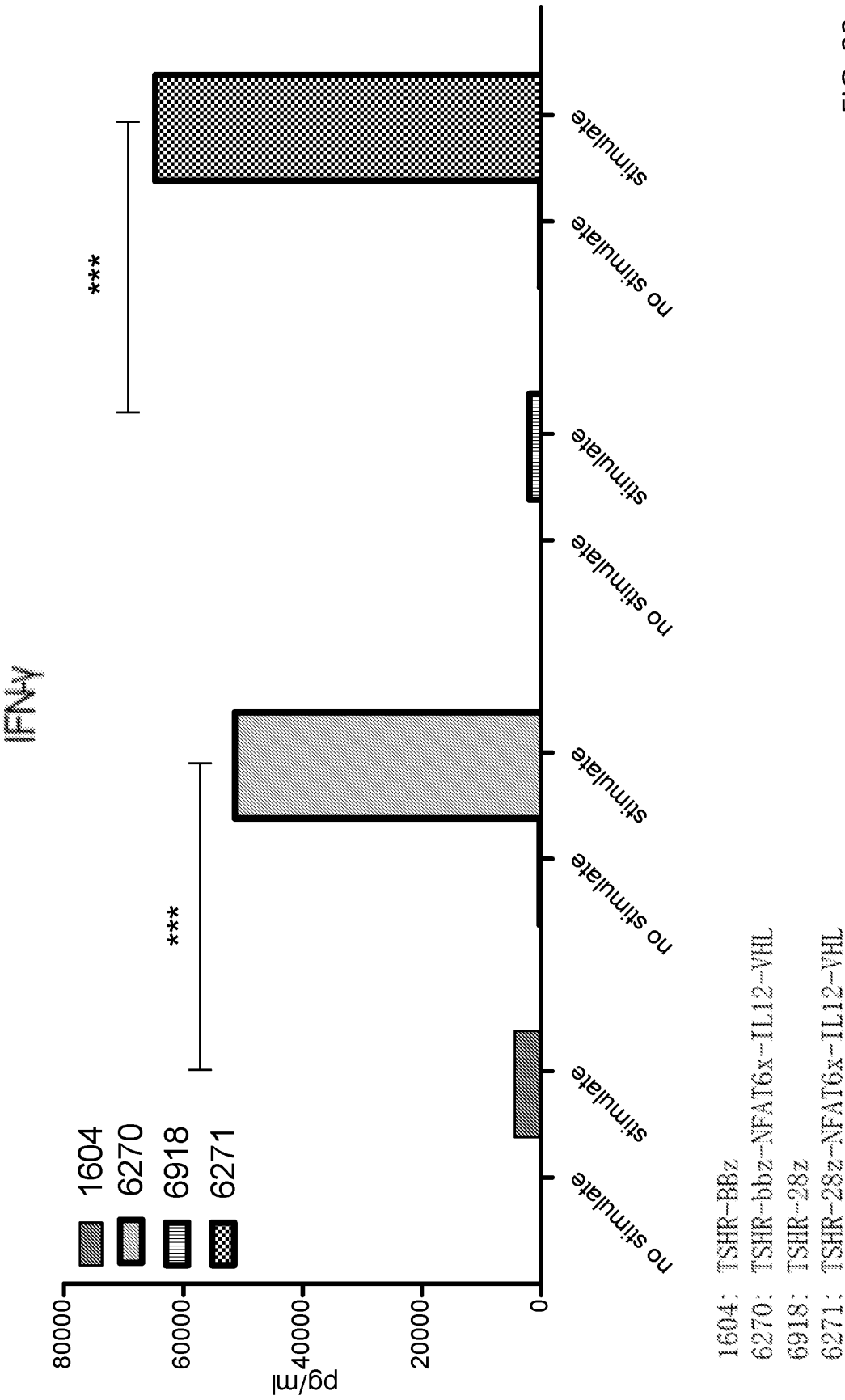


FIG. 33

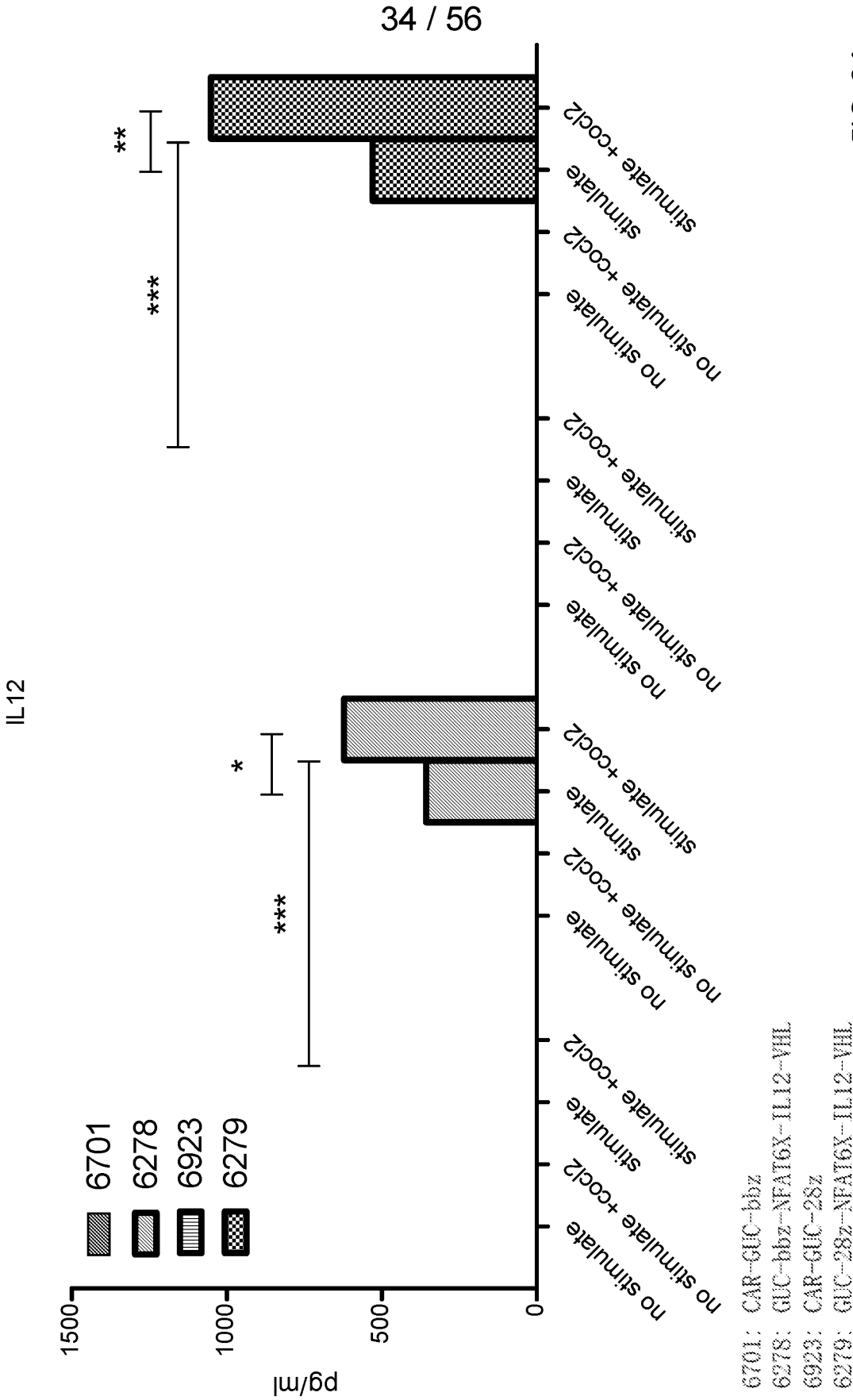
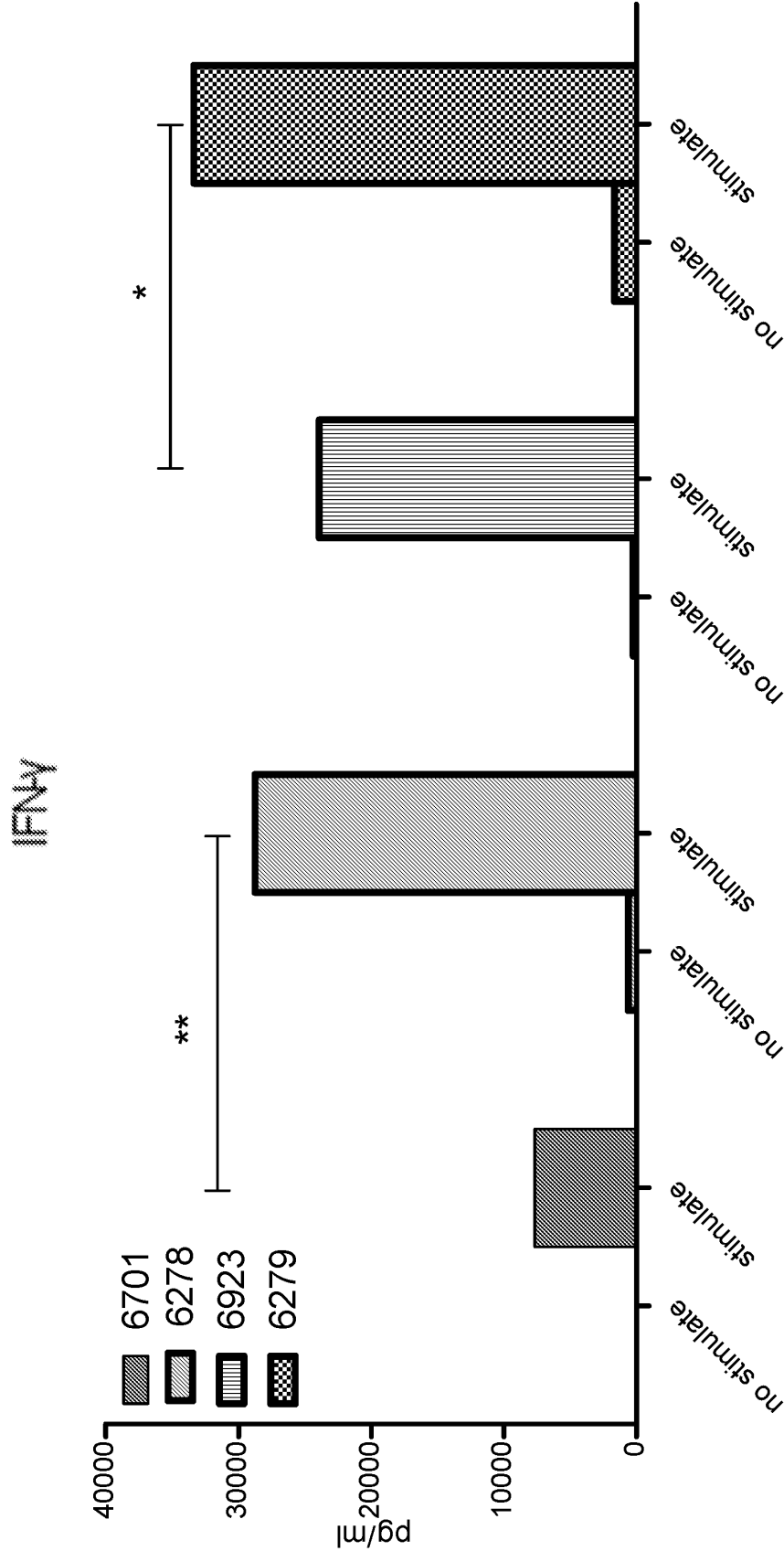


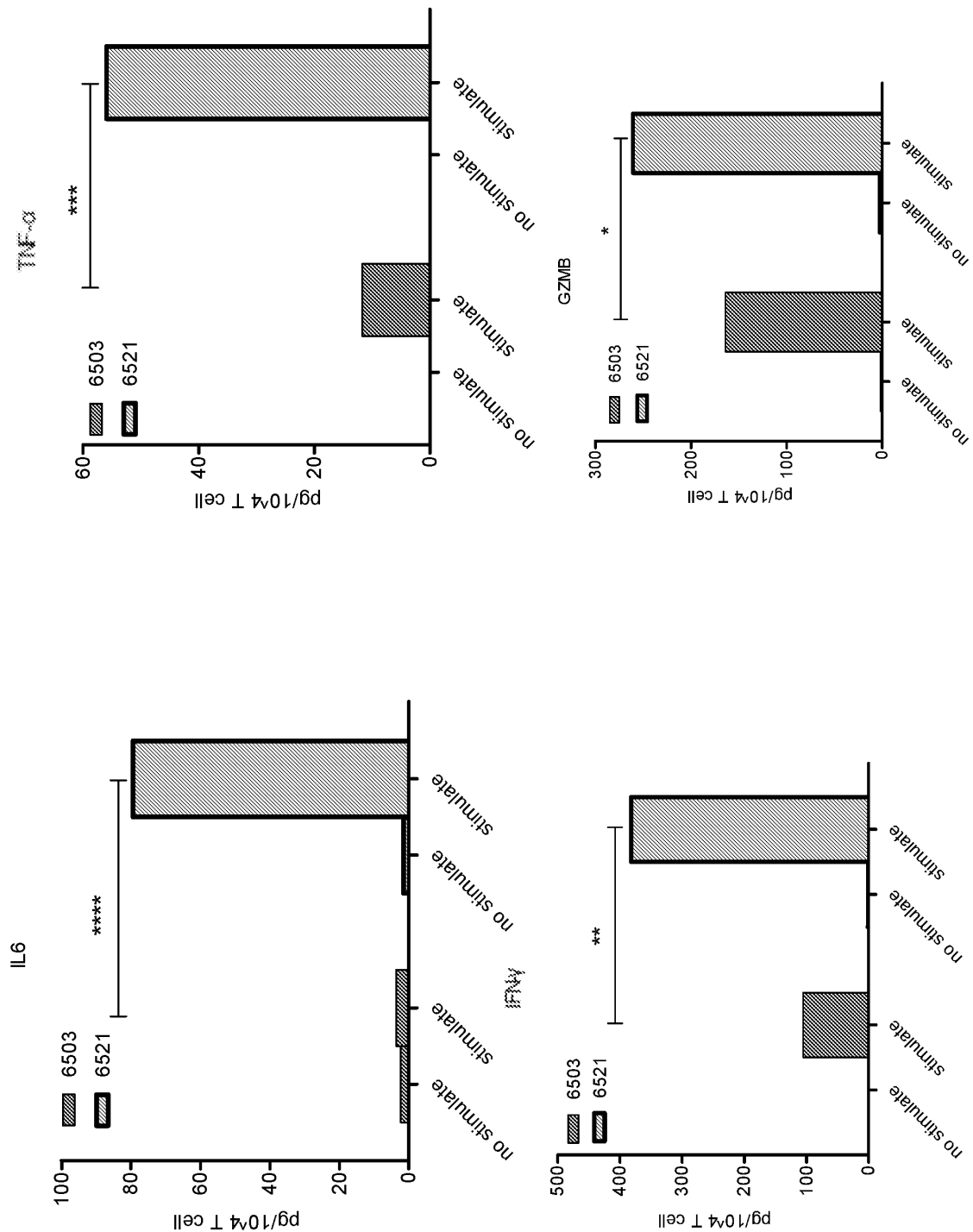
FIG. 34



6701: CAR-GUC-bbz
6278: GUC-bbz-NFAT6X-IL12-VHL
6923: CAR-GUC-28z
6279: GUC-28z-NFAT6X-IL12-VHL

FIG. 35

FIG. 36



37 / 56

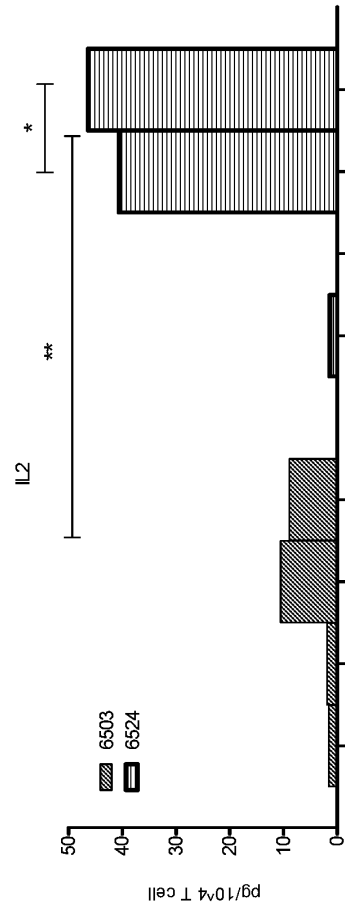
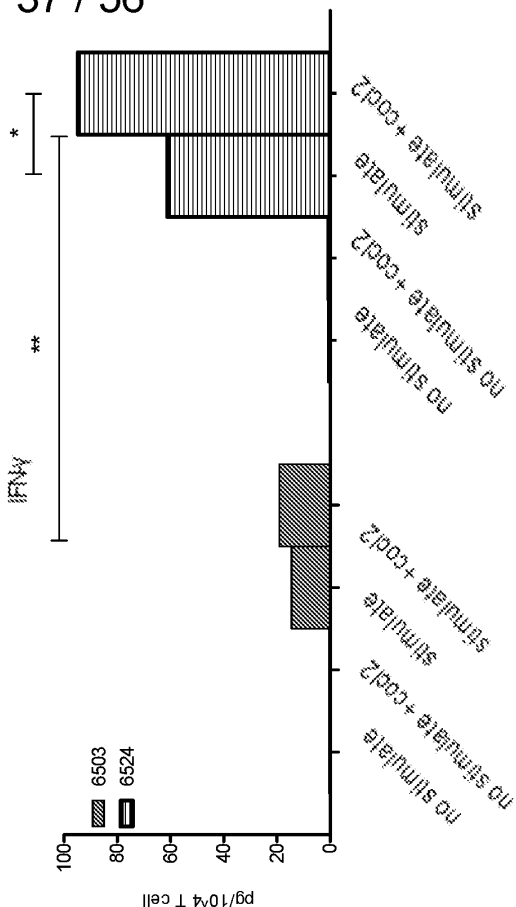
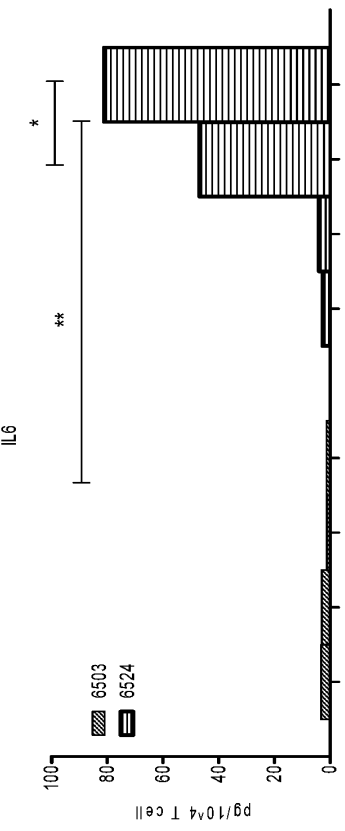
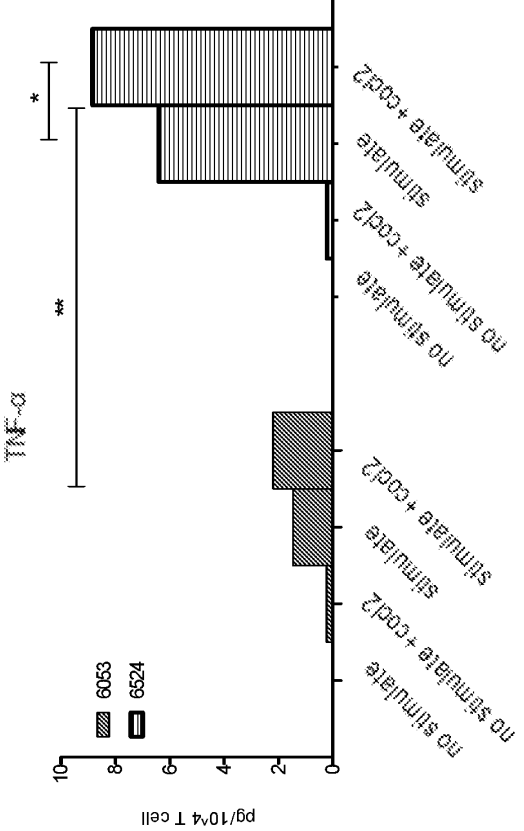


FIG. 37

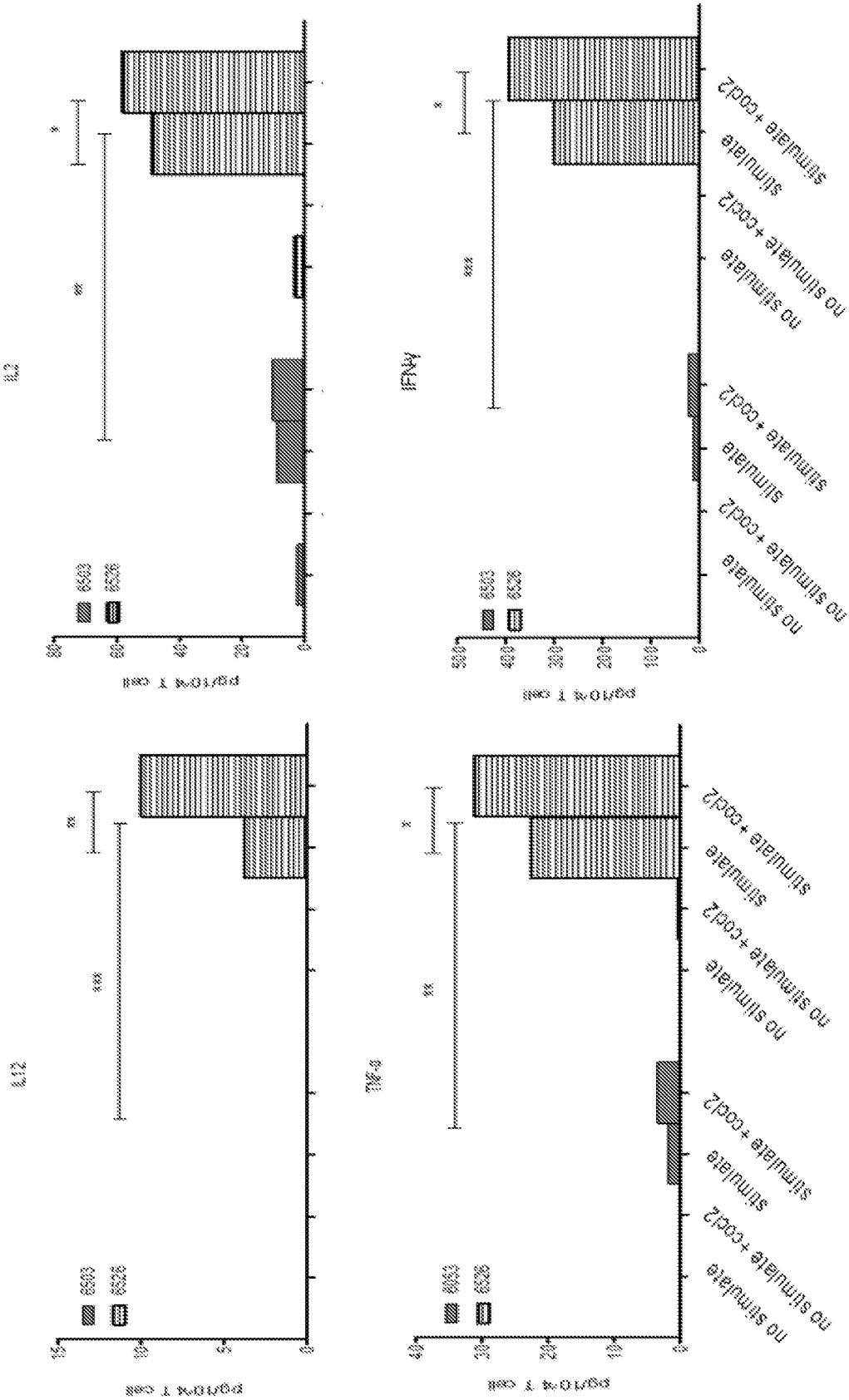
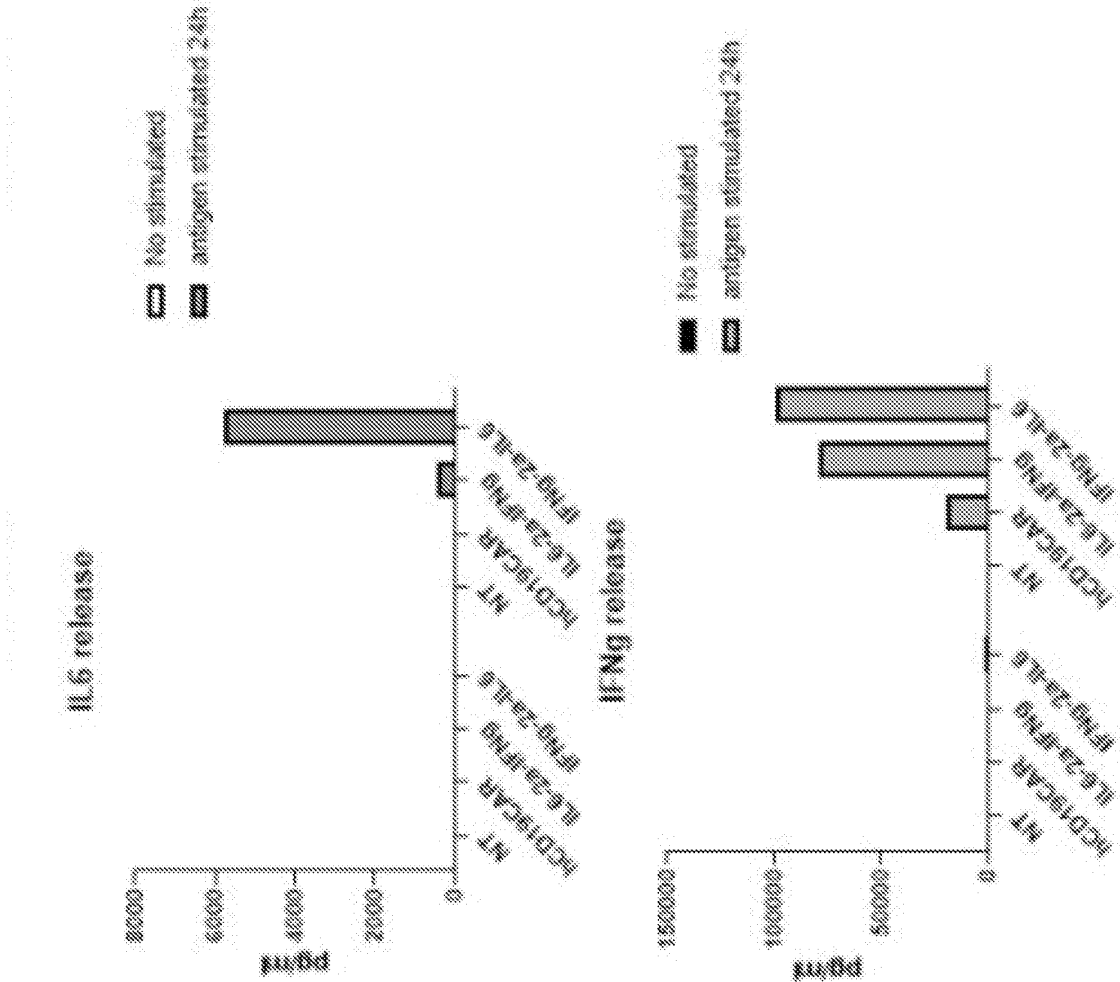
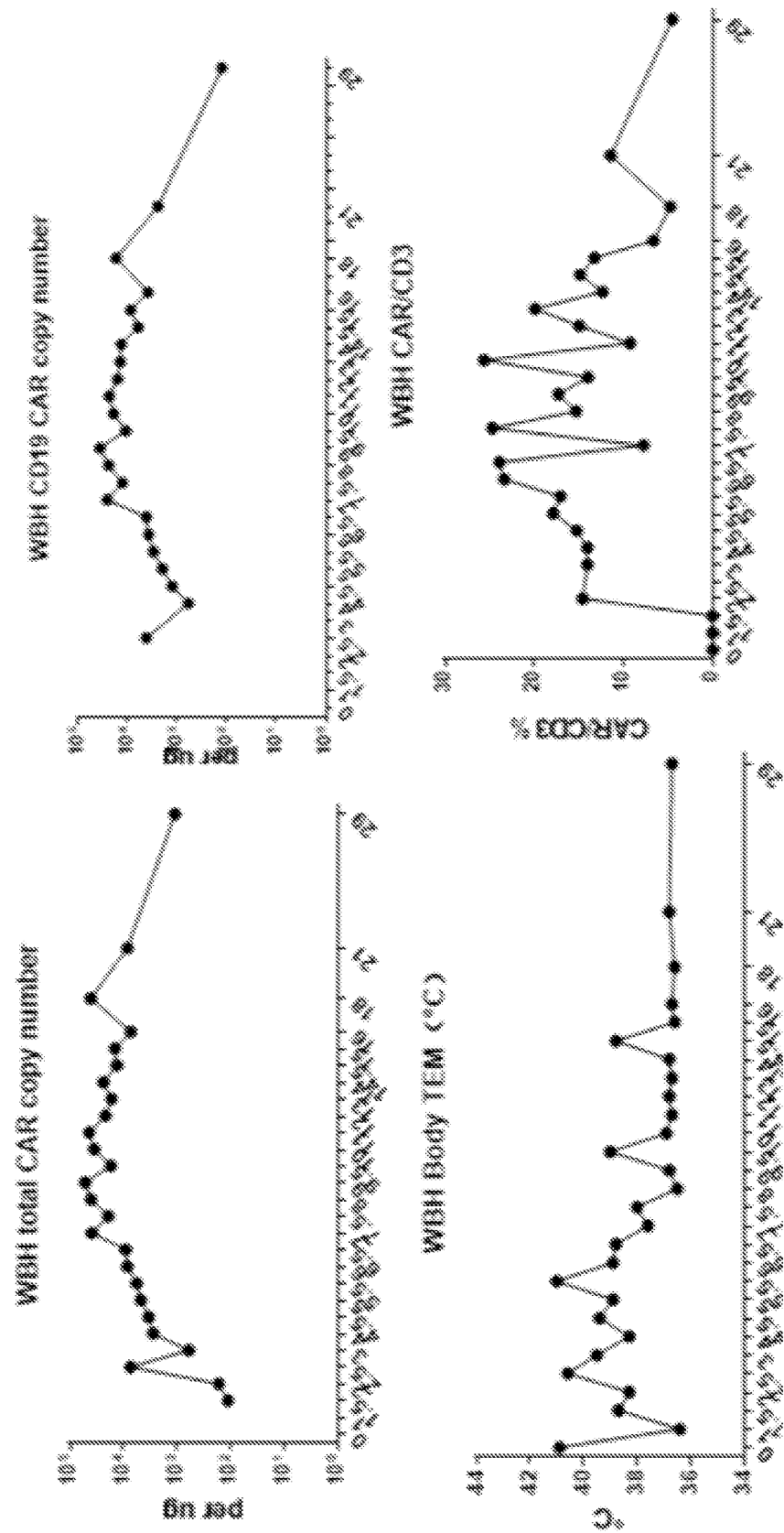


FIG. 38

FIG. 39





TSHR CAR Infusion:
Patient 005

FIG. 40

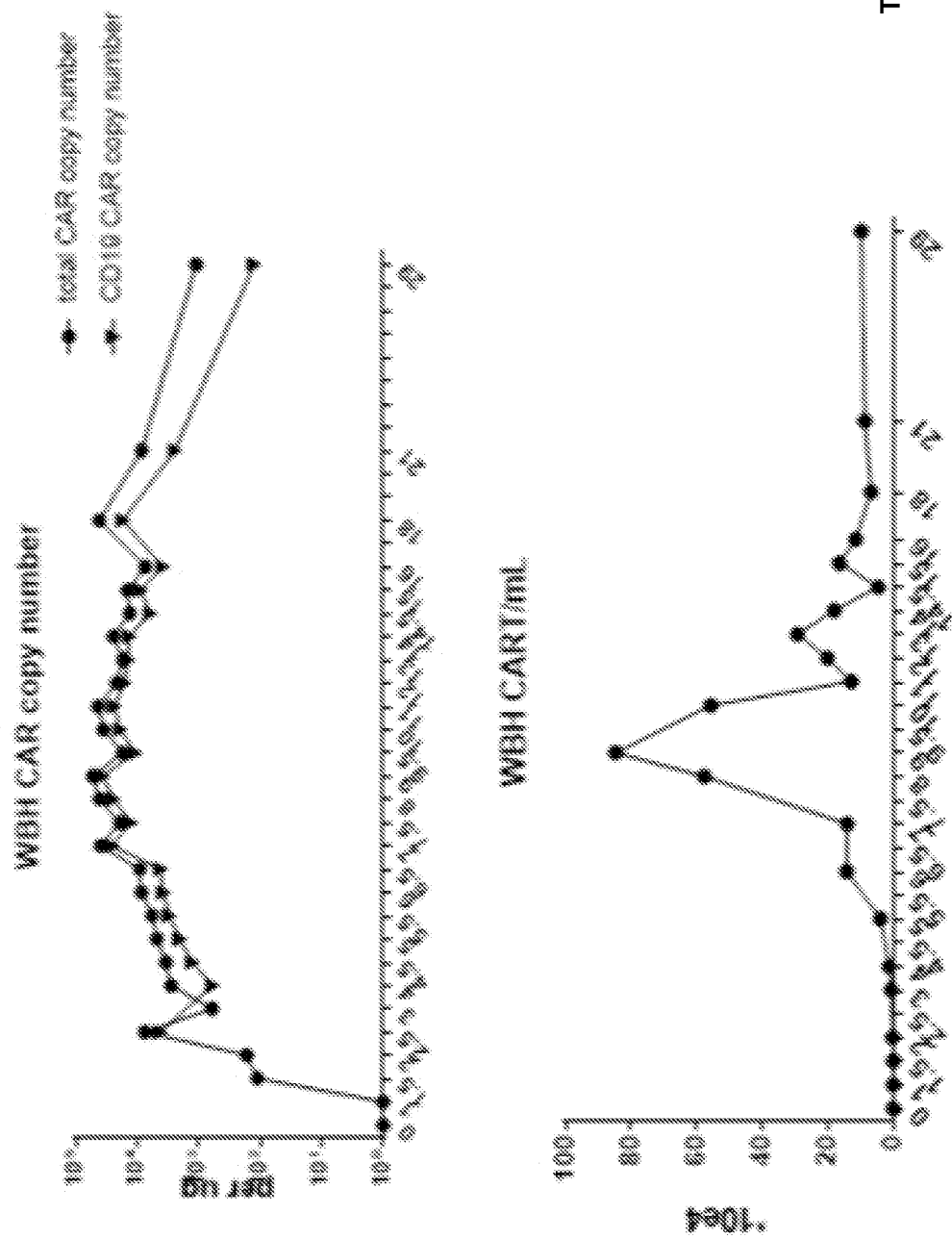
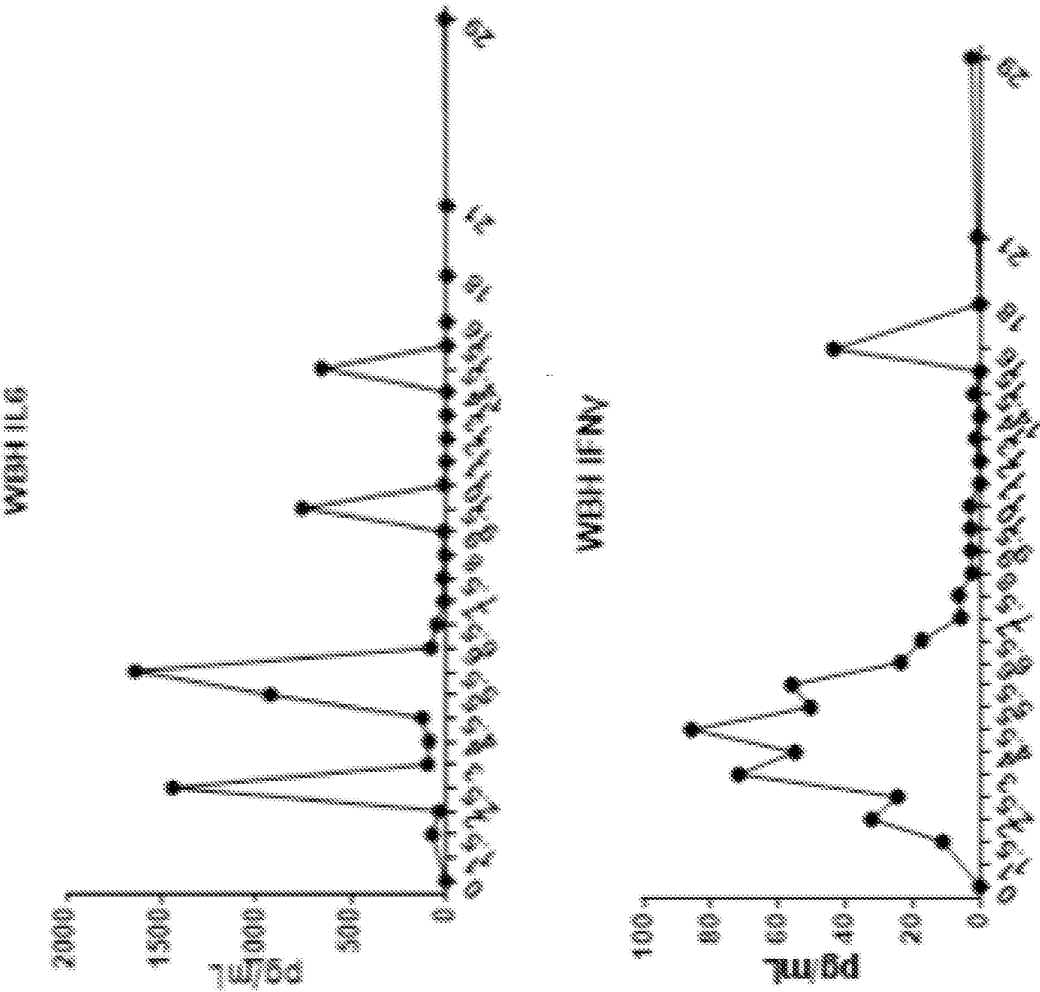


FIG. 41



TSHR CAR Infusion:
Patient 005

FIG. 42

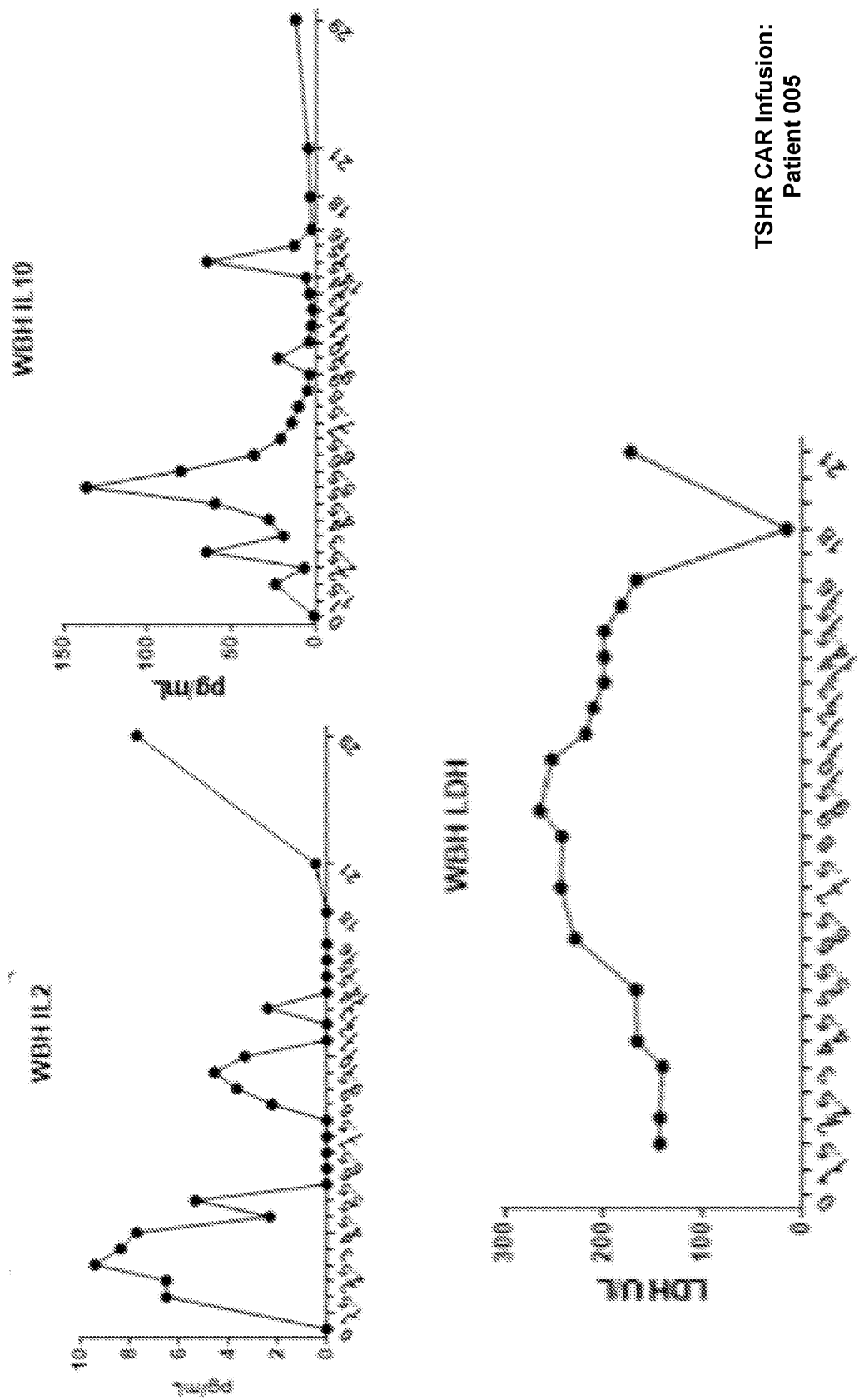
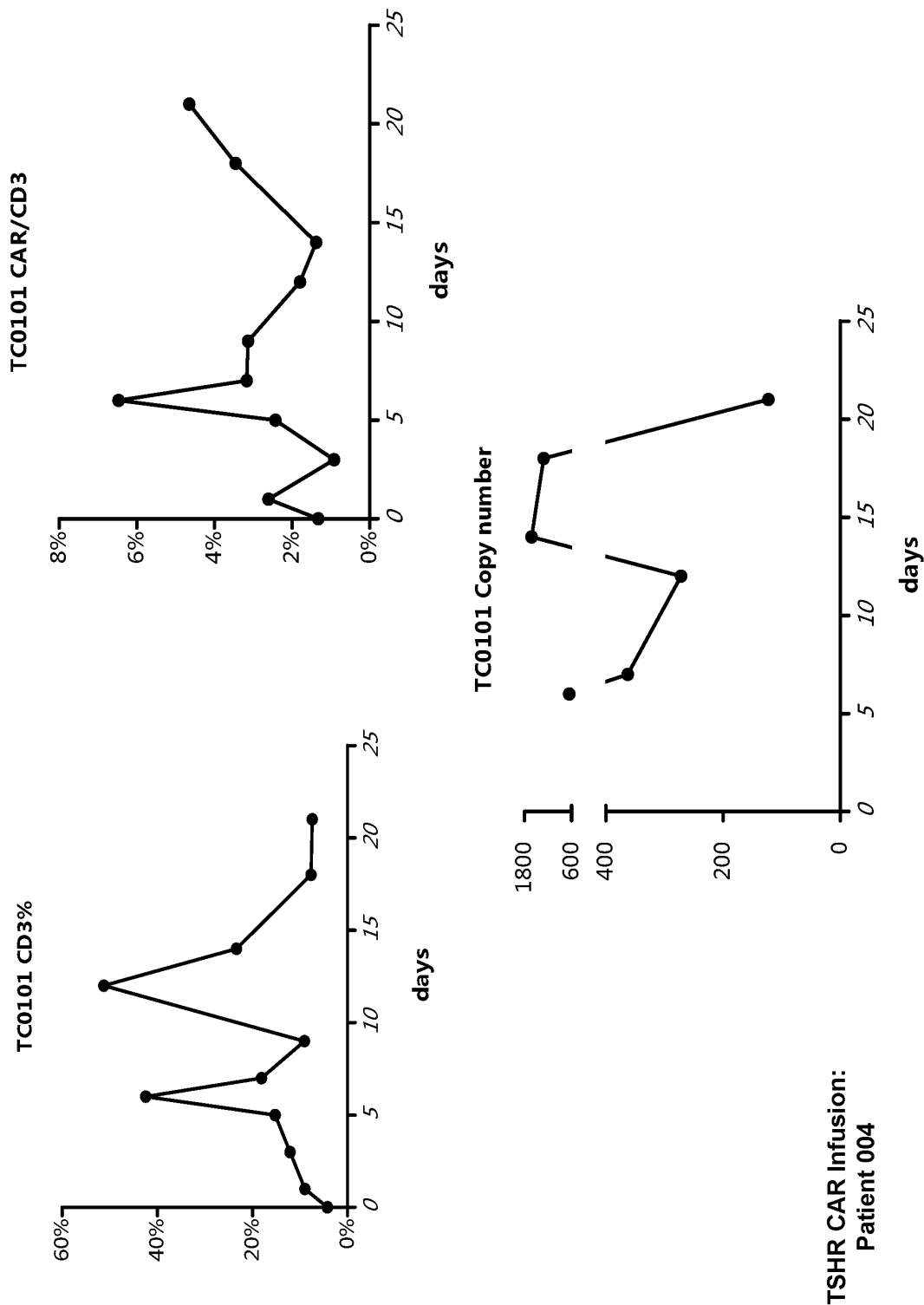
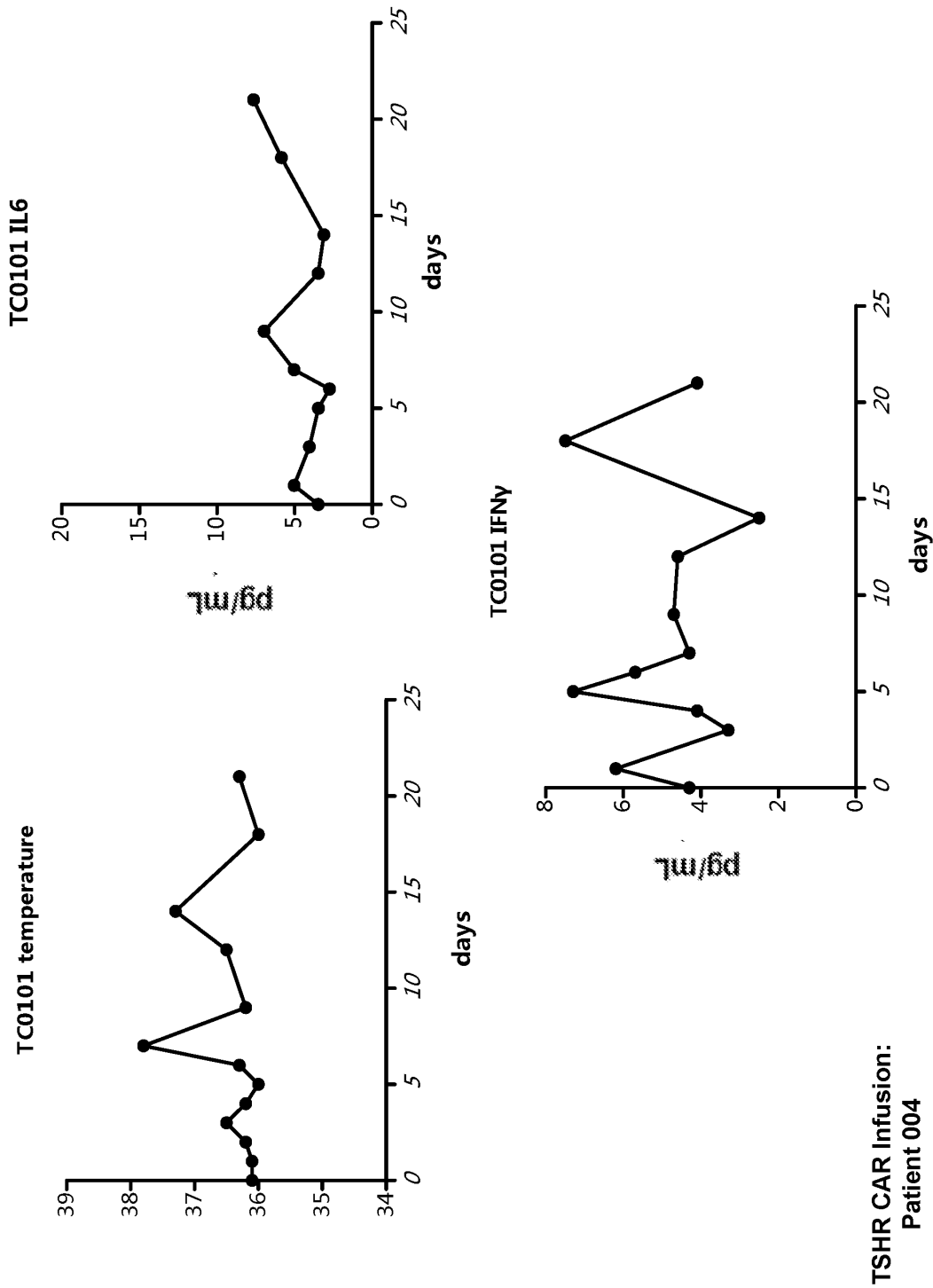
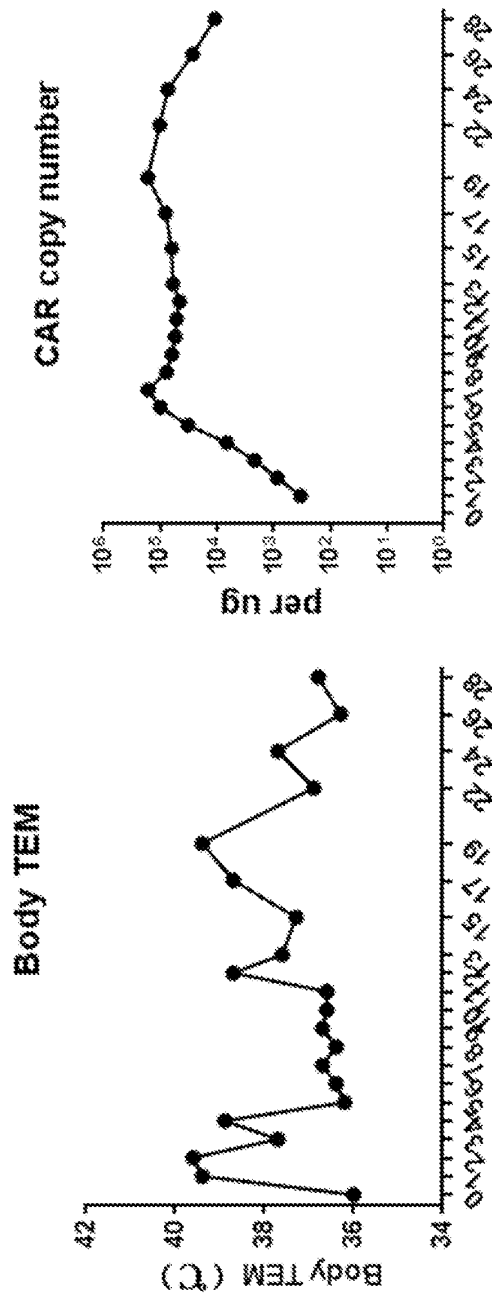


FIG. 44

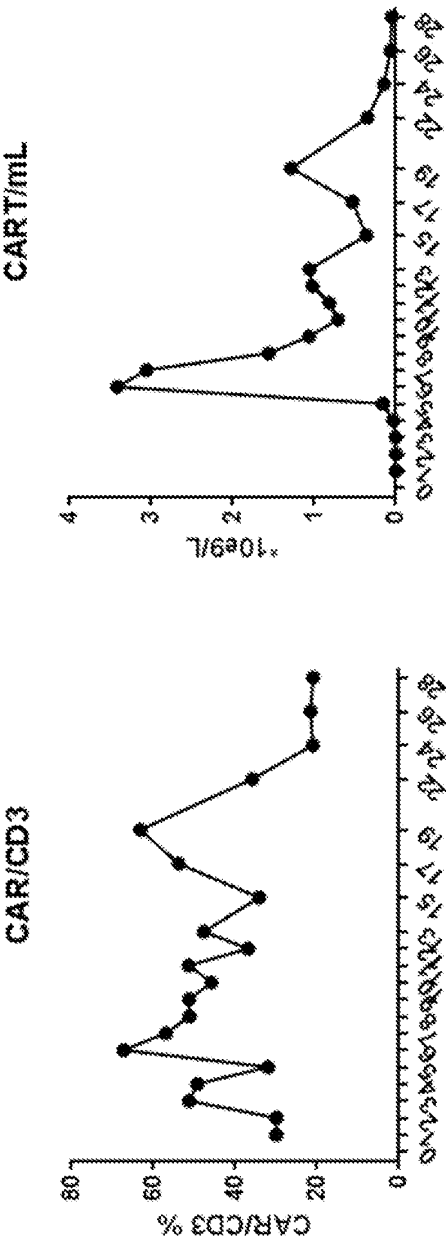




Patient
006



Days post
infusion:



Days post
infusion:

FIG. 46

Patient
006

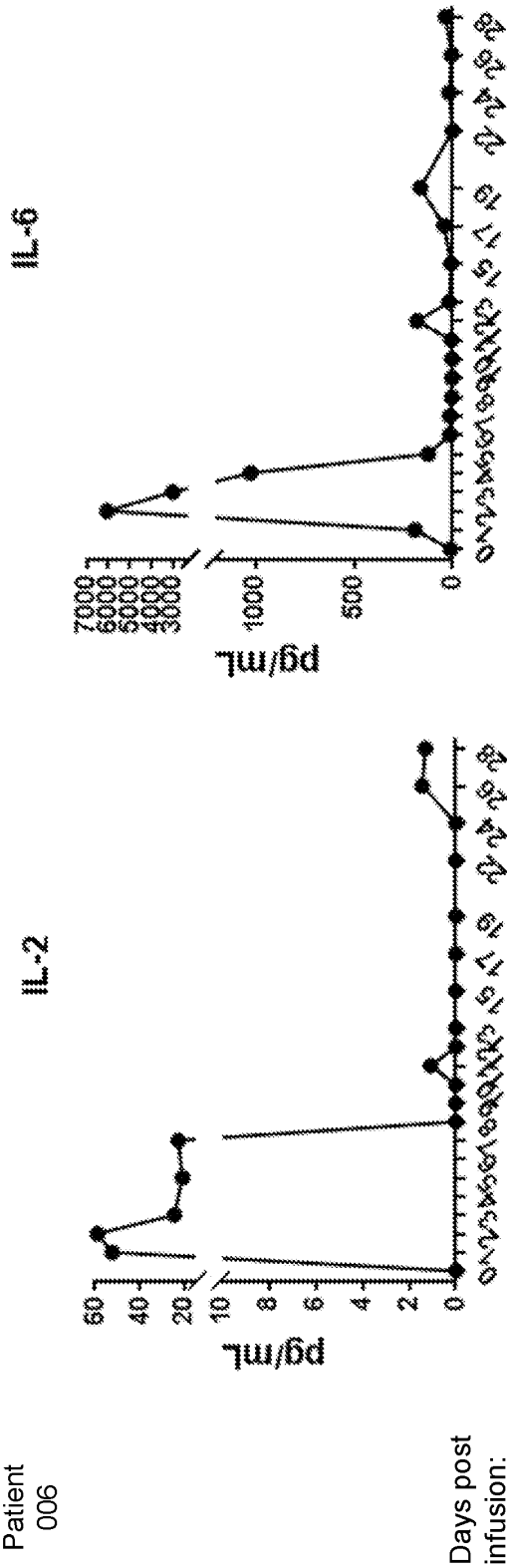
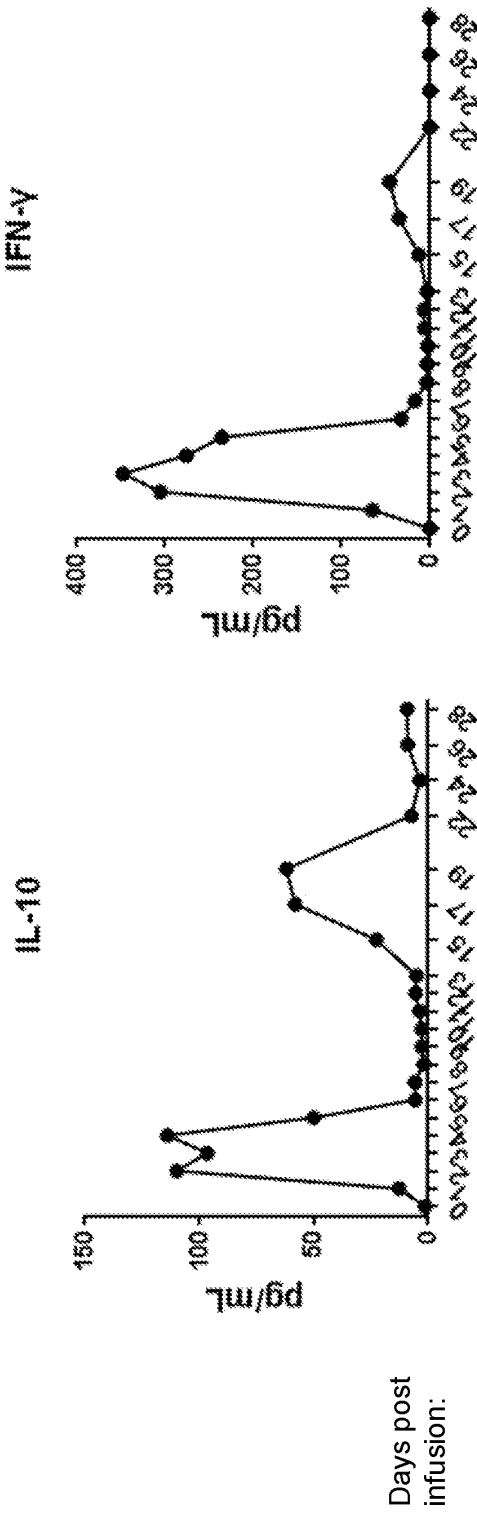


FIG. 47

PET/CT Images

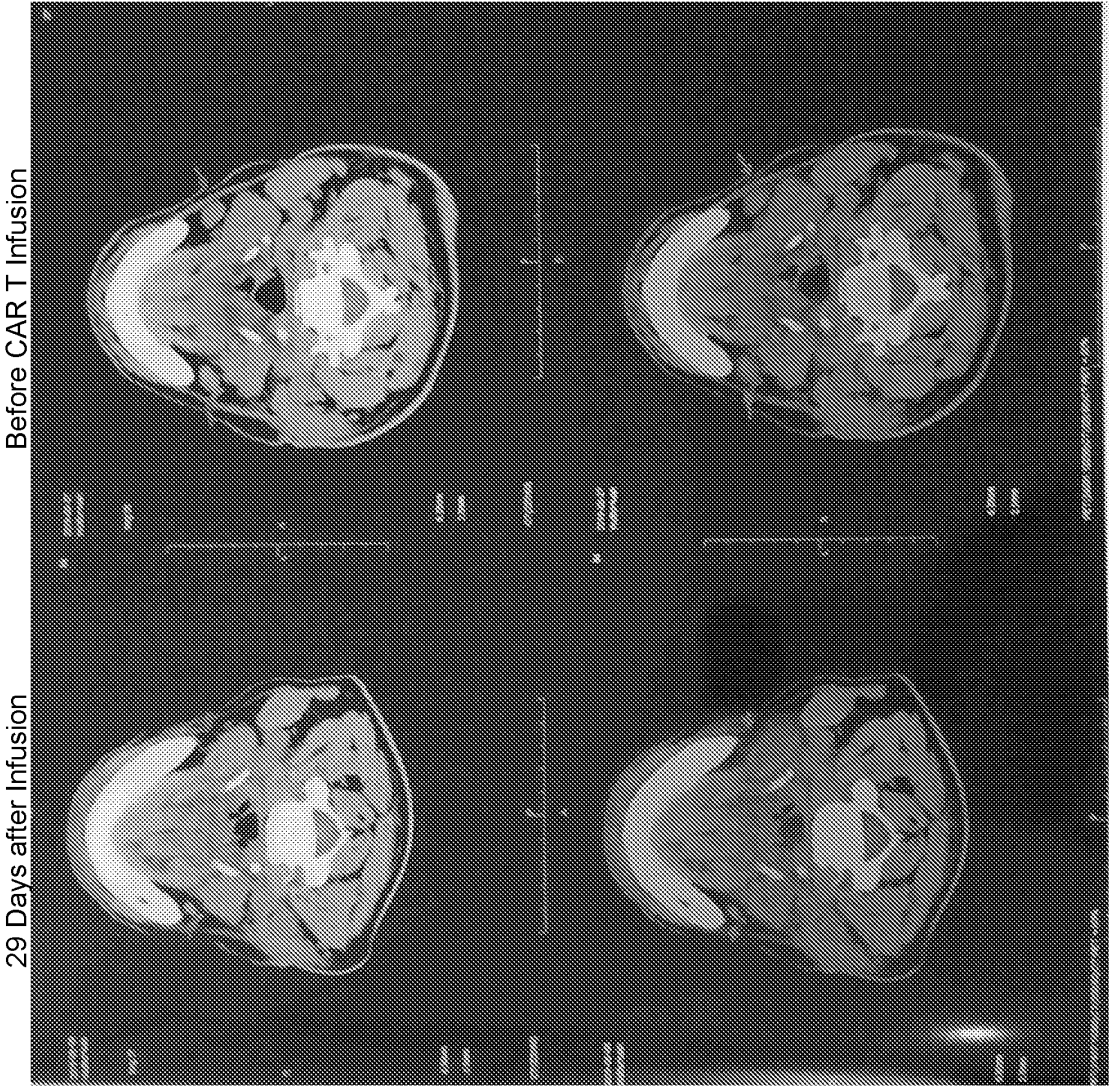
TSHR CAR T and CAR 19 CAR T cells were infused on day 0.

Red arrows refer to the sites of tumors

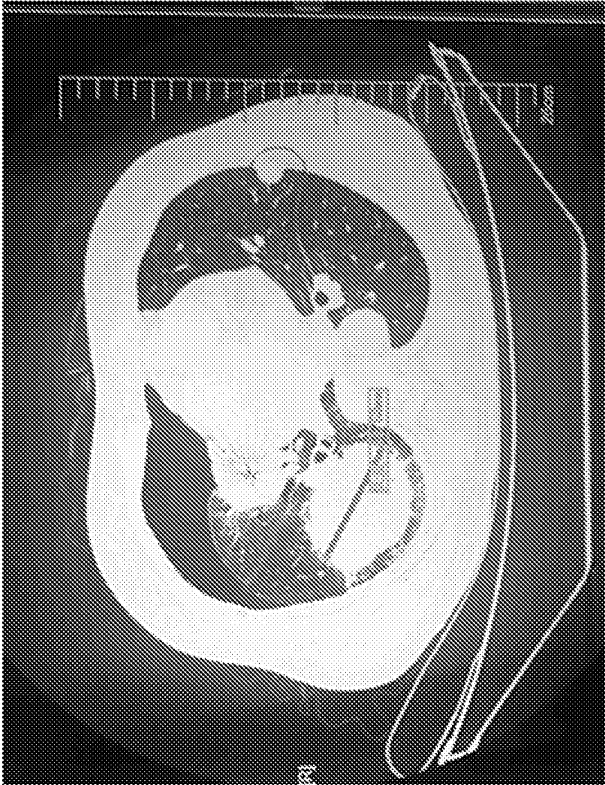
29 days after the infusion, the right tumor disappeared, and the size of the left tumor reduced

TSHR CAR Infusion:
Patient 005

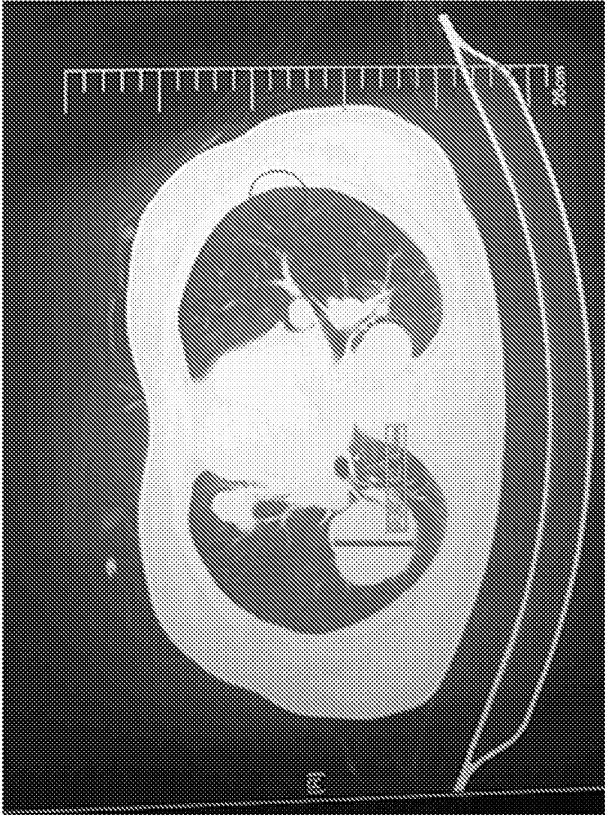
FIG. 48



CT Scanning Patient 006



Before Infusion



30 days after Infusion

FIG. 49

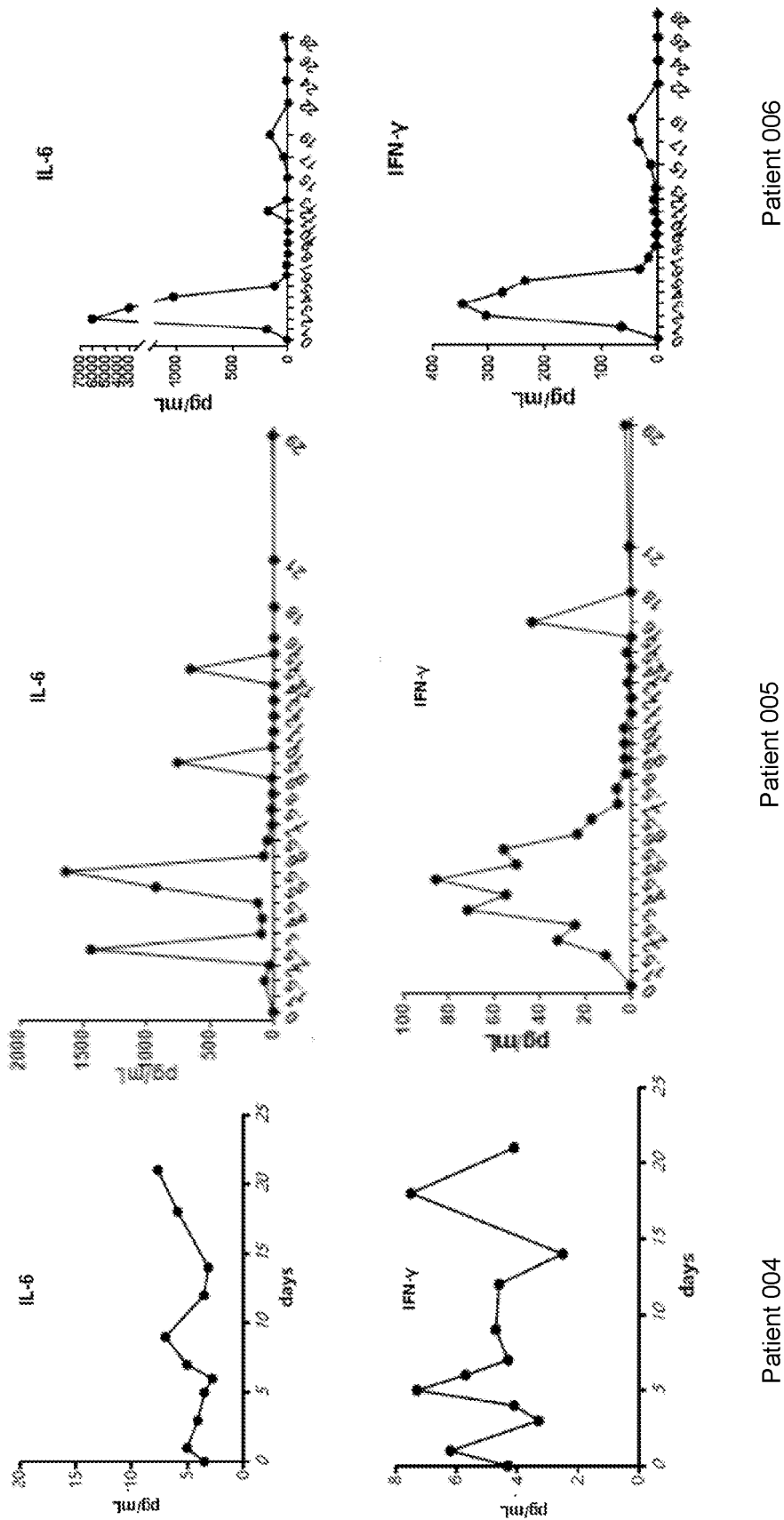
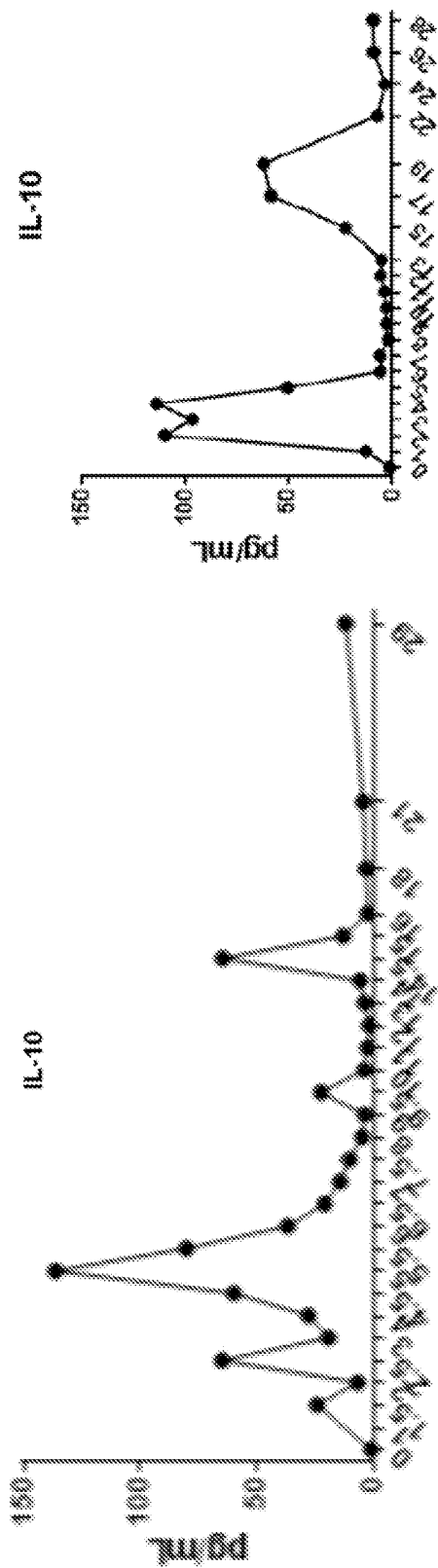


FIG. 50



Patient 006

Patient 005

FIG. 51

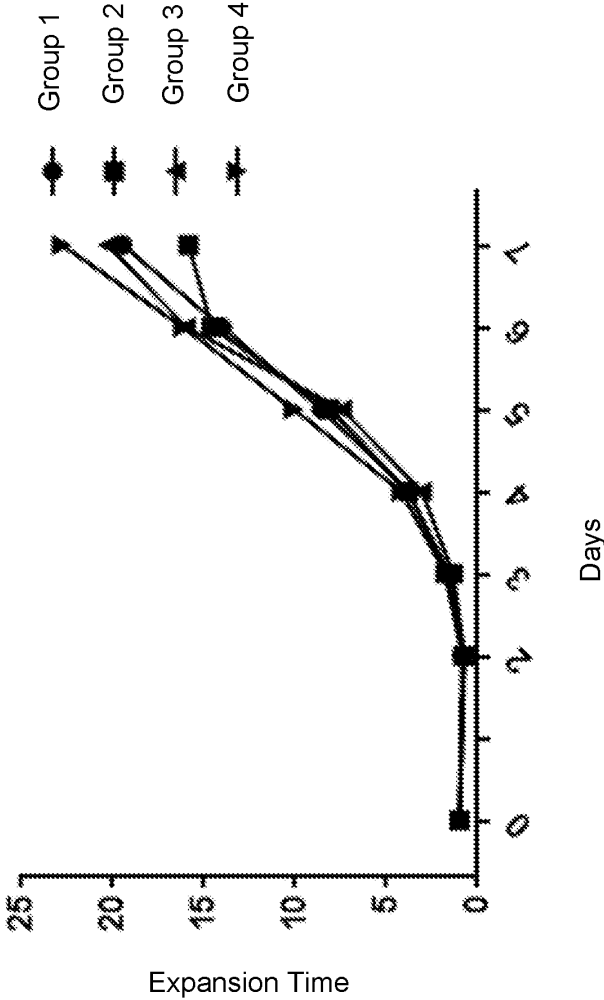
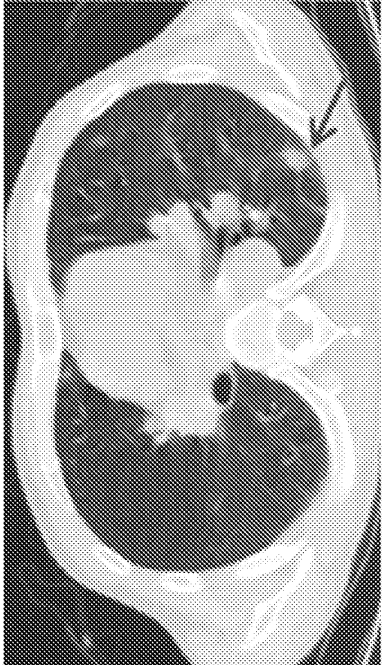
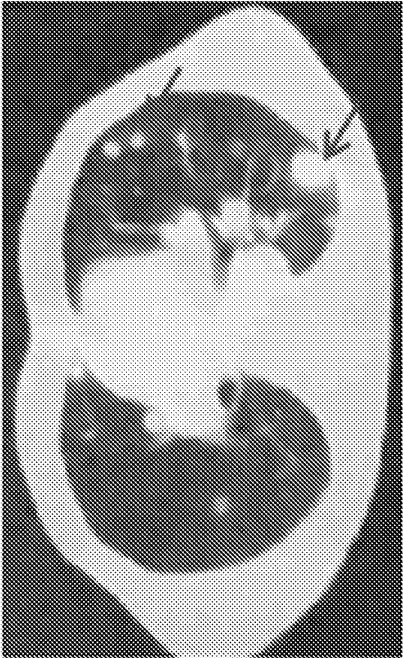


FIG. 52

30 days after Infusion



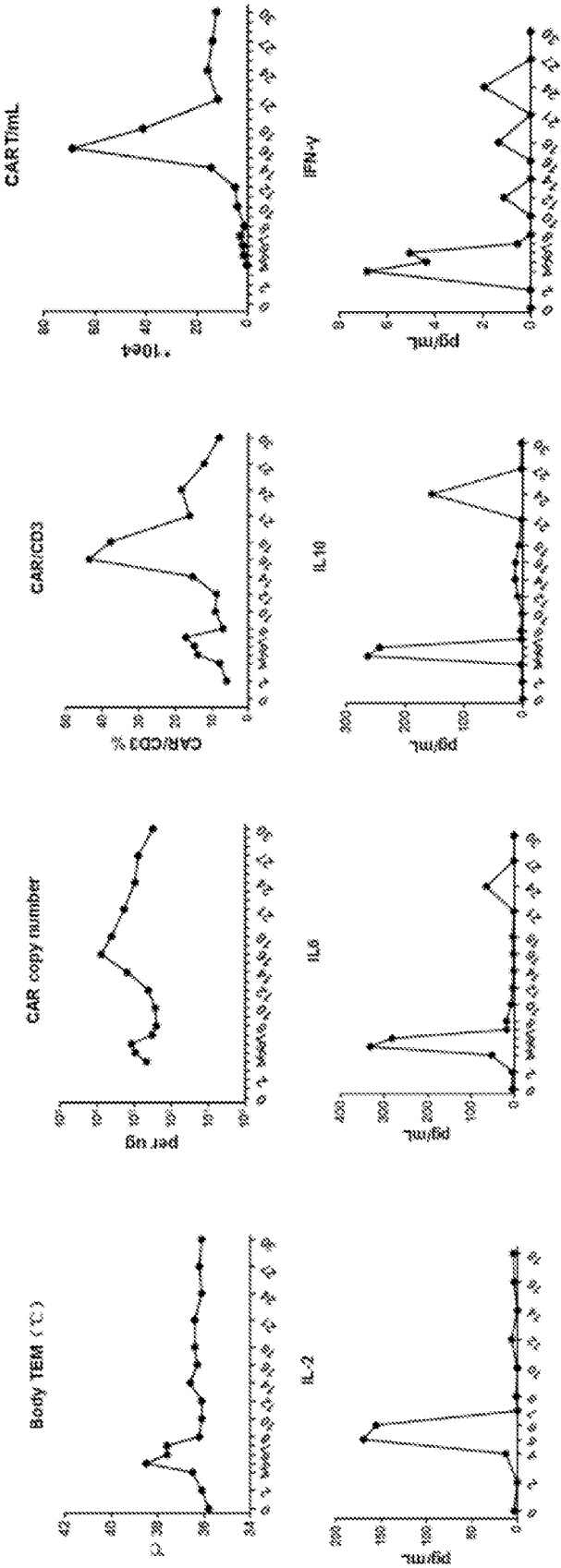
Before Infusion



Patient 007

FIG. 53

Patient 007



Days post infusion:

FIG. 54

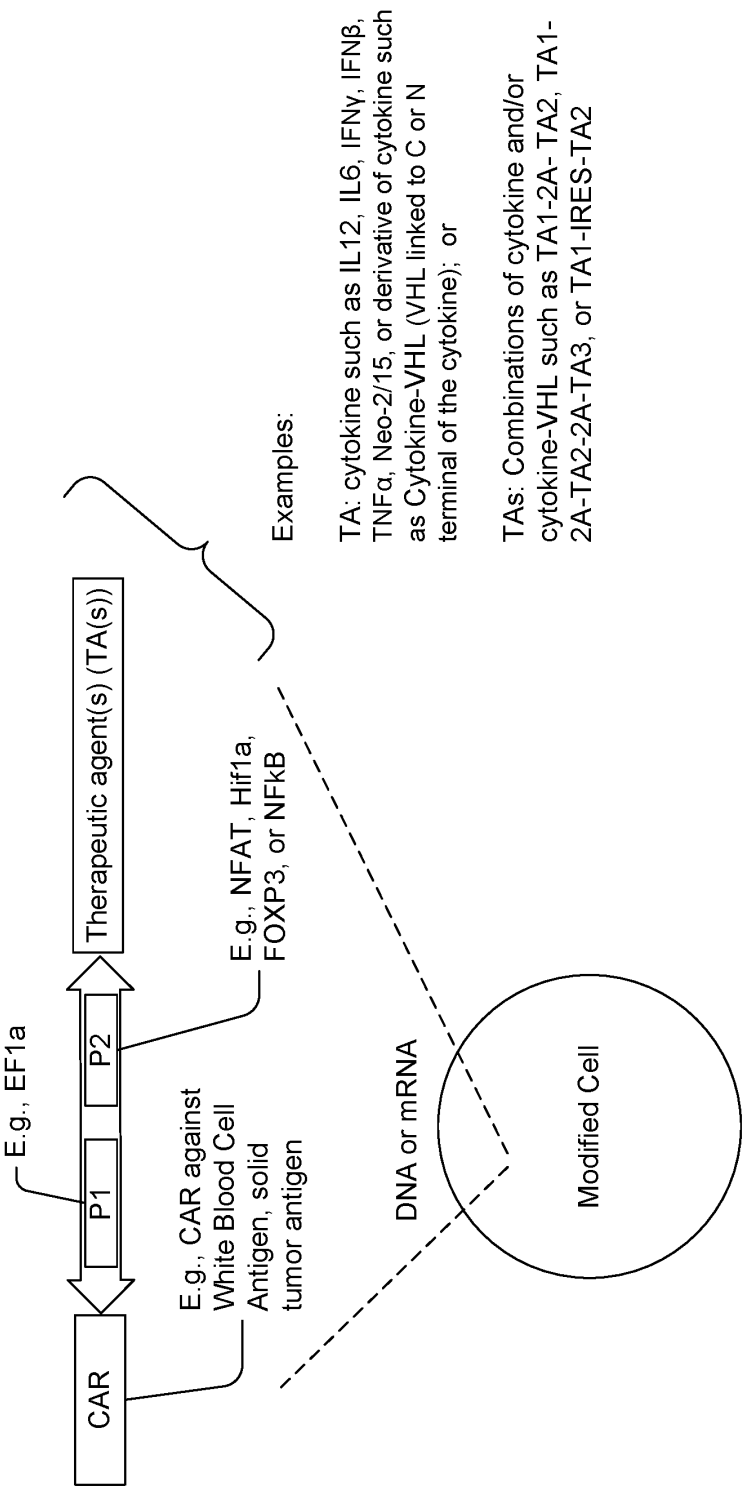


FIG. 55

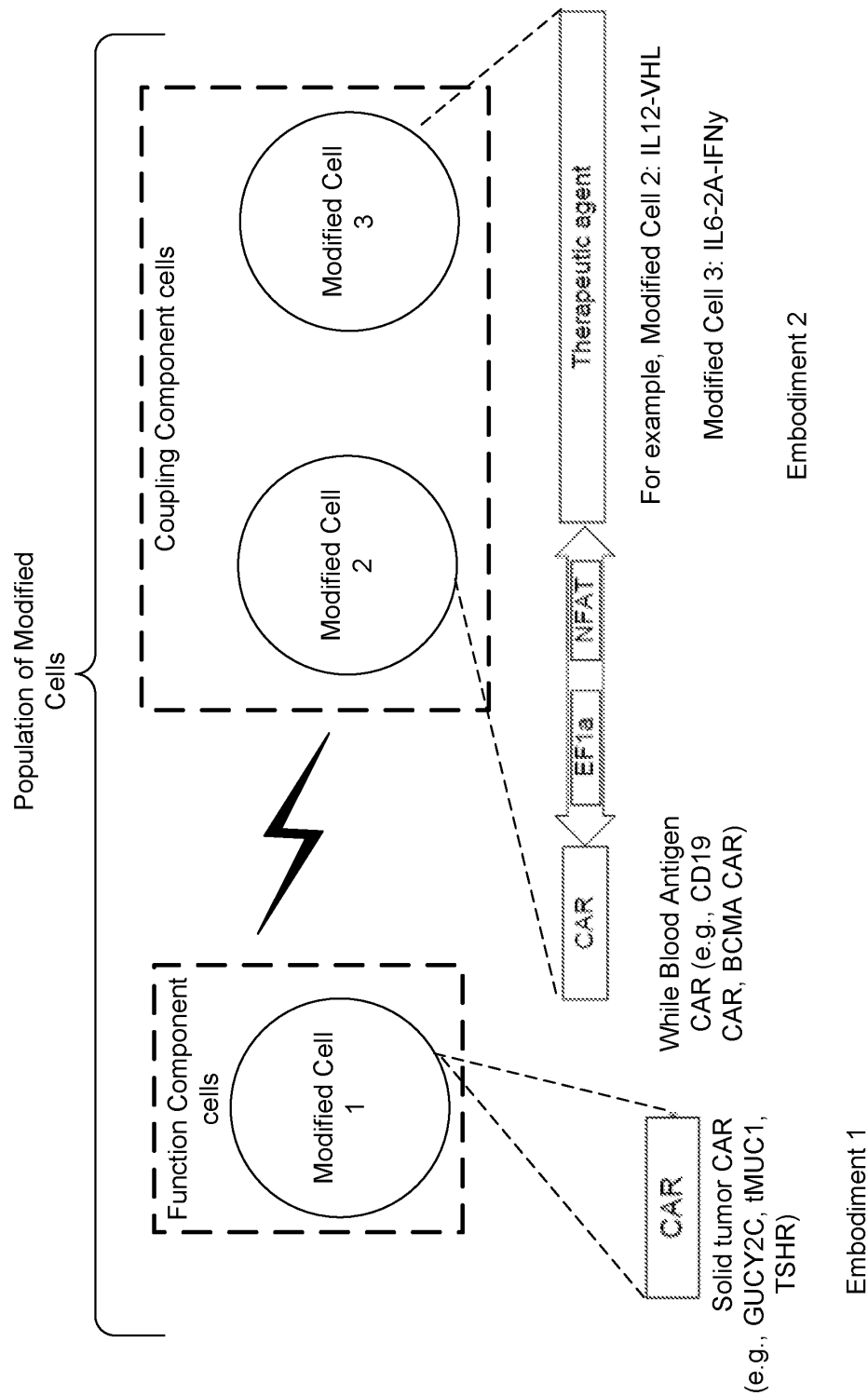


FIG. 56