

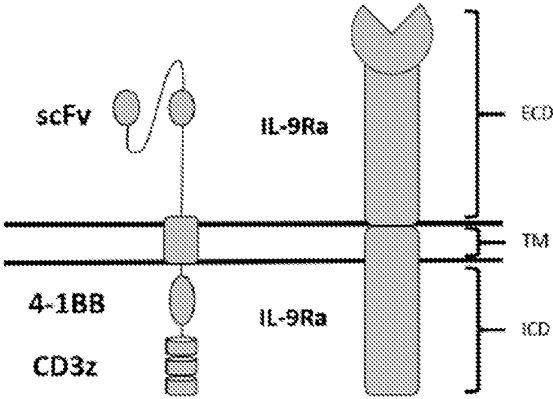


FIG. 1A

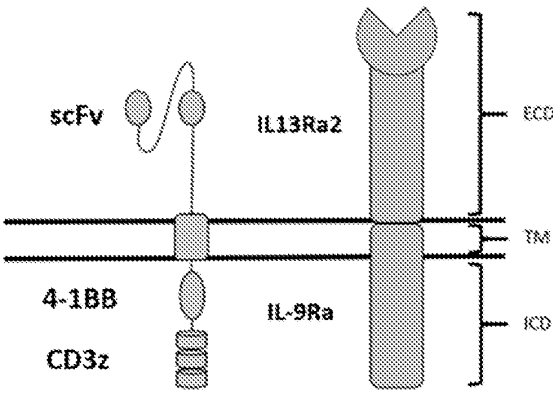


FIG. 1B

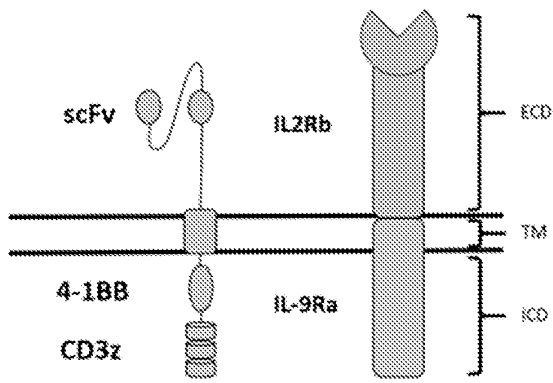


FIG. 1C

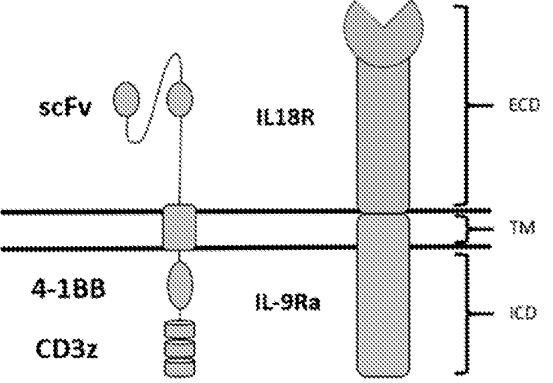


FIG. 1D

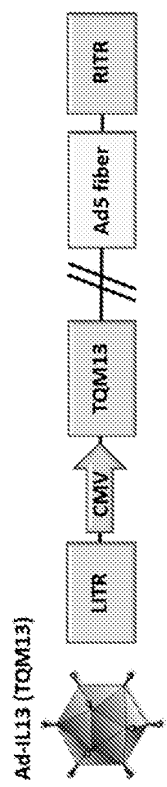


FIG. 2D

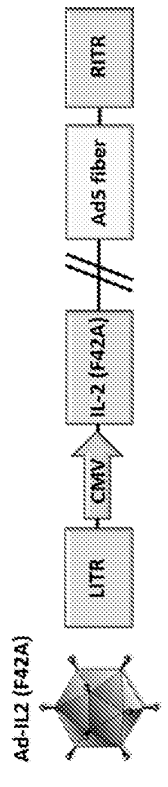


FIG. 2E

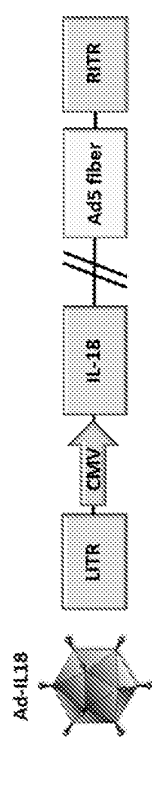


FIG. 2F

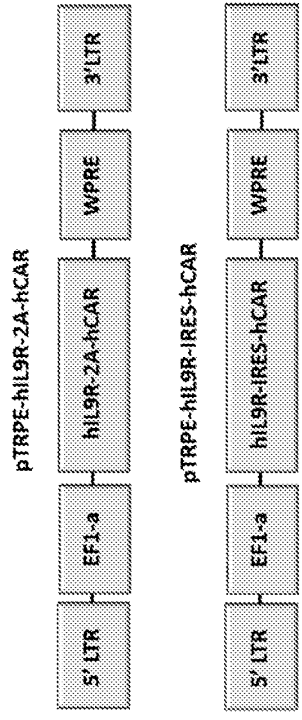


FIG. 2A

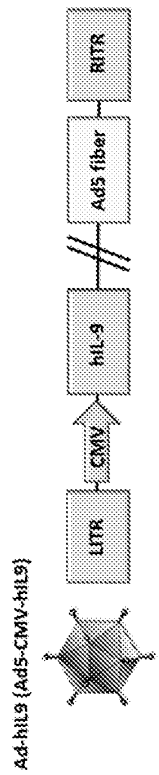


FIG. 2B

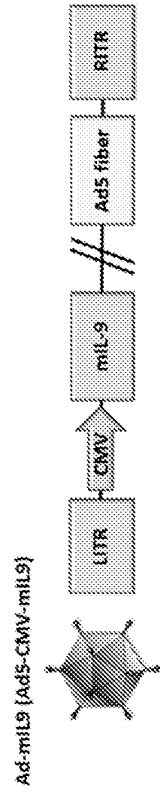


FIG. 2C

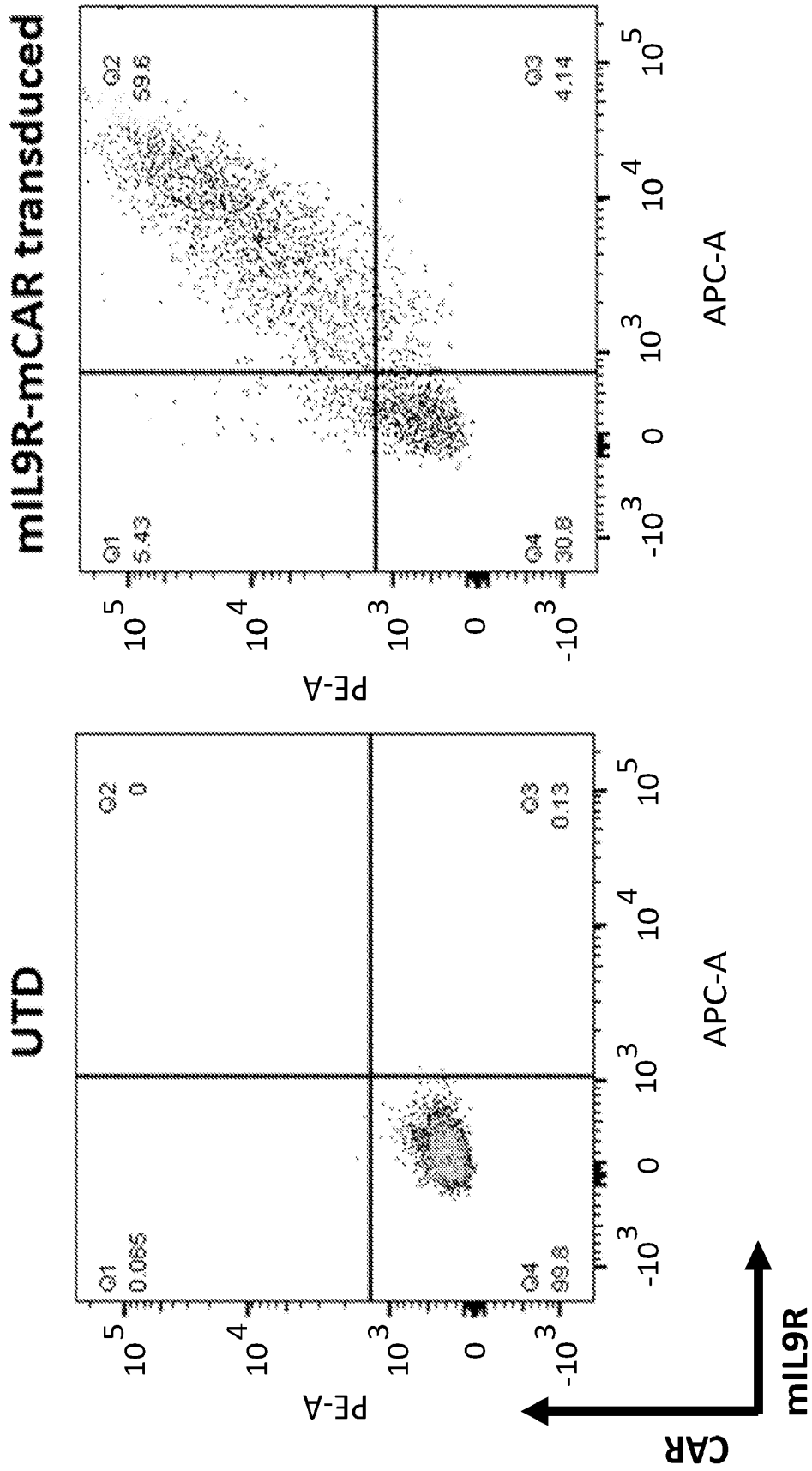


FIG. 3A

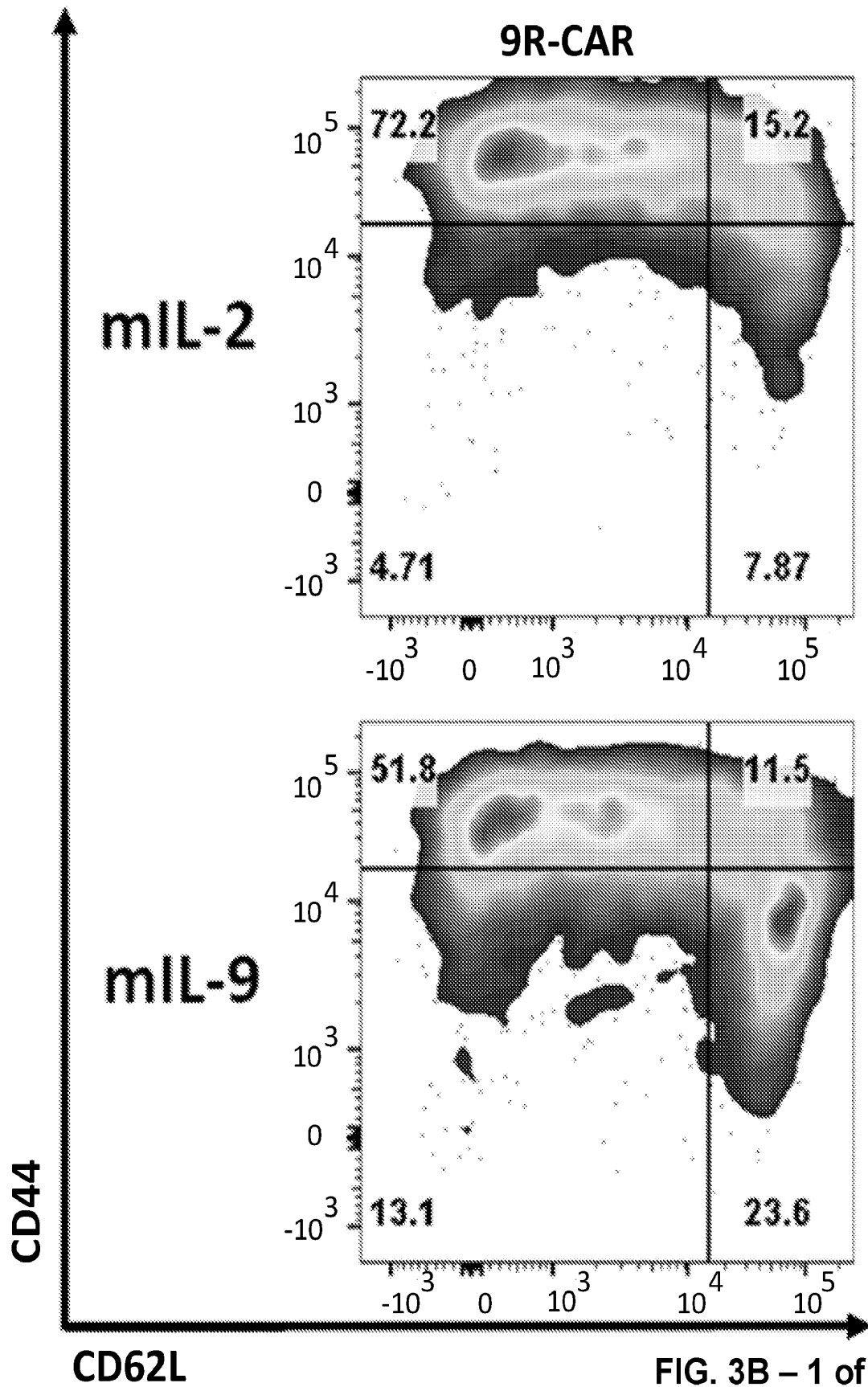


FIG. 3B – 1 of 2

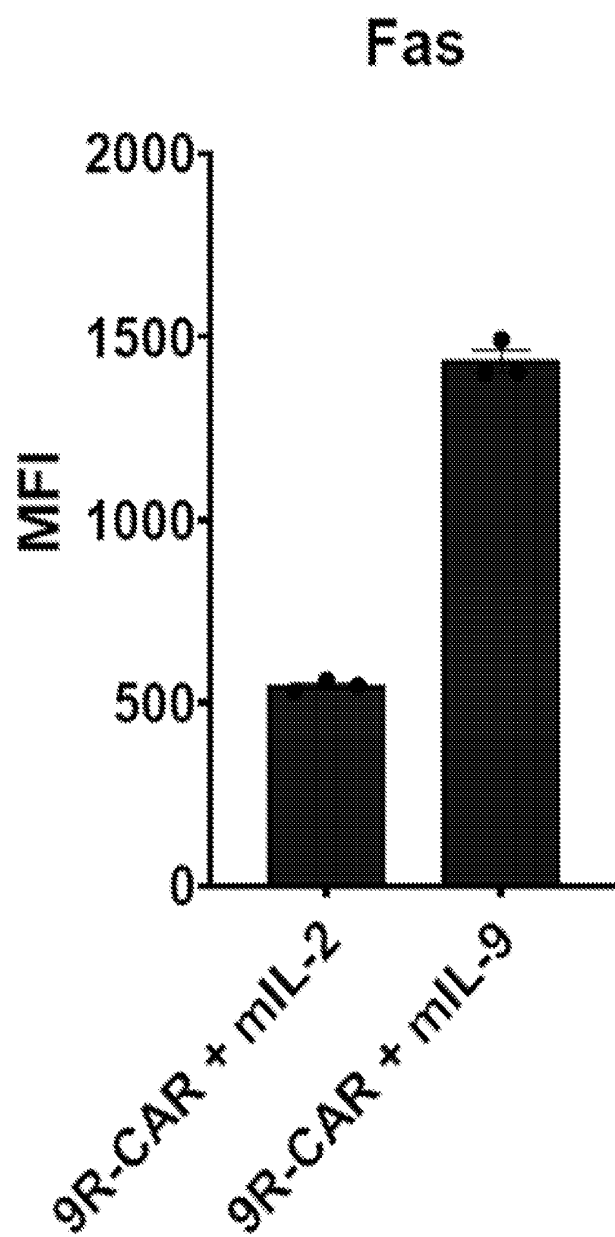
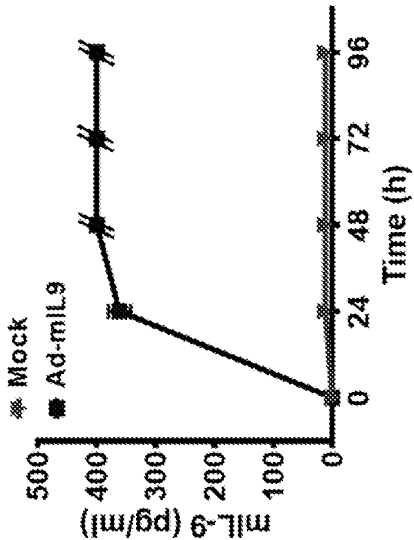
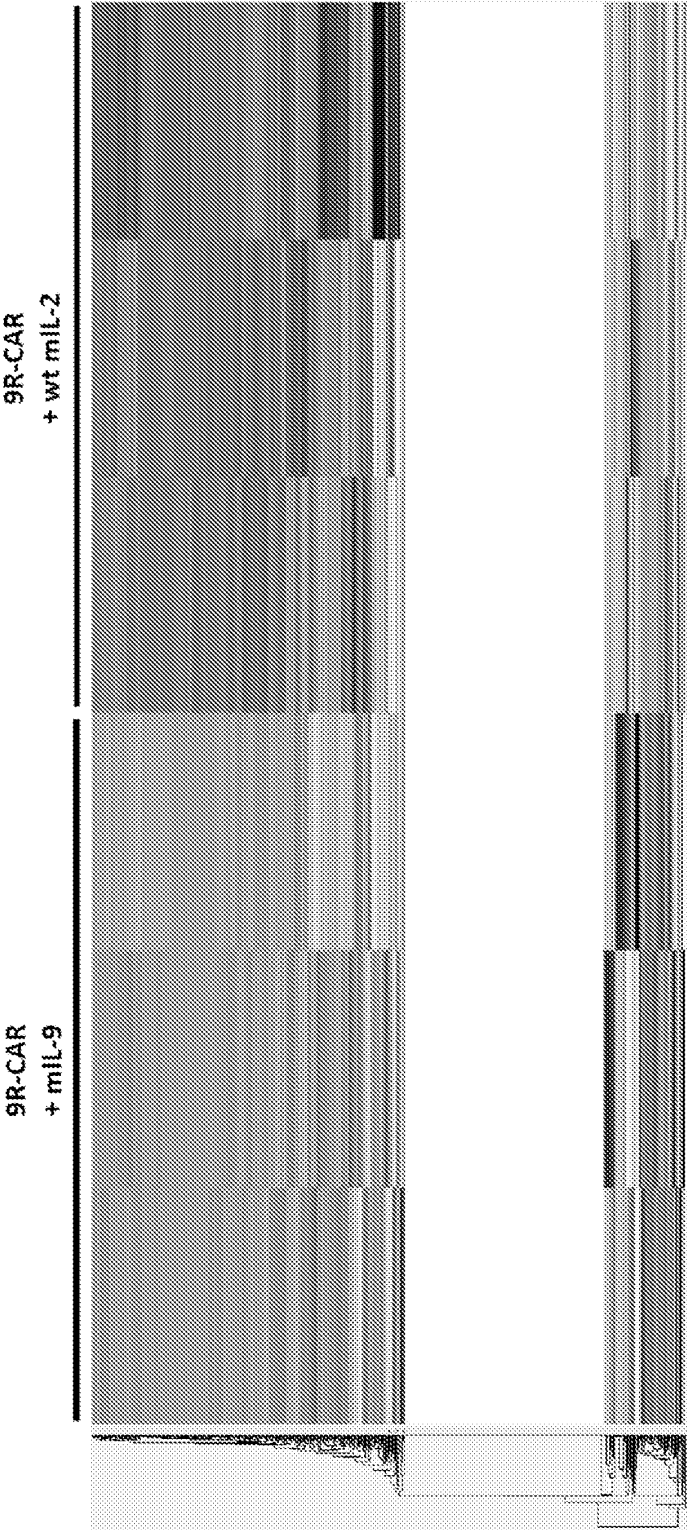


FIG. 3B – 2 of 2



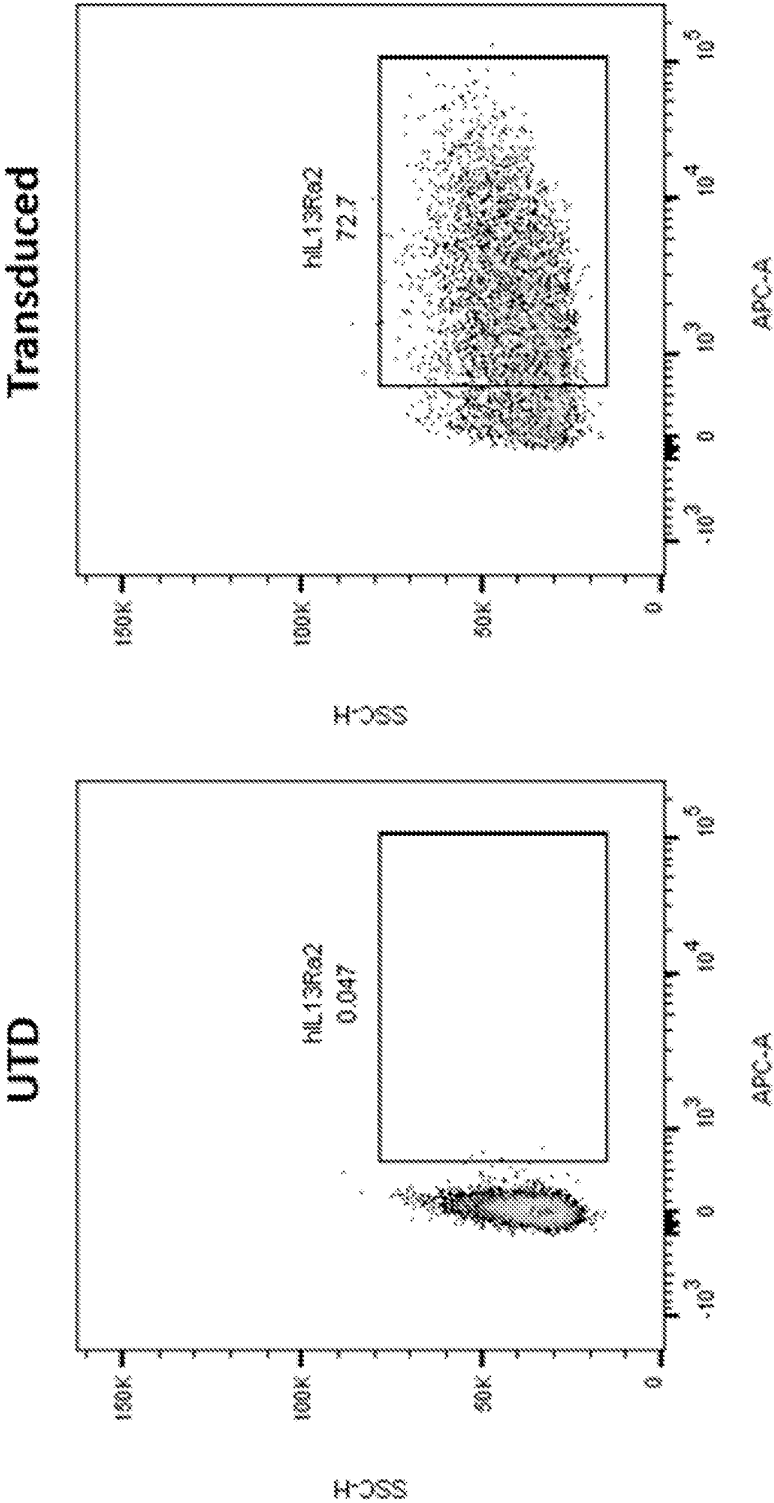


FIG. 4A

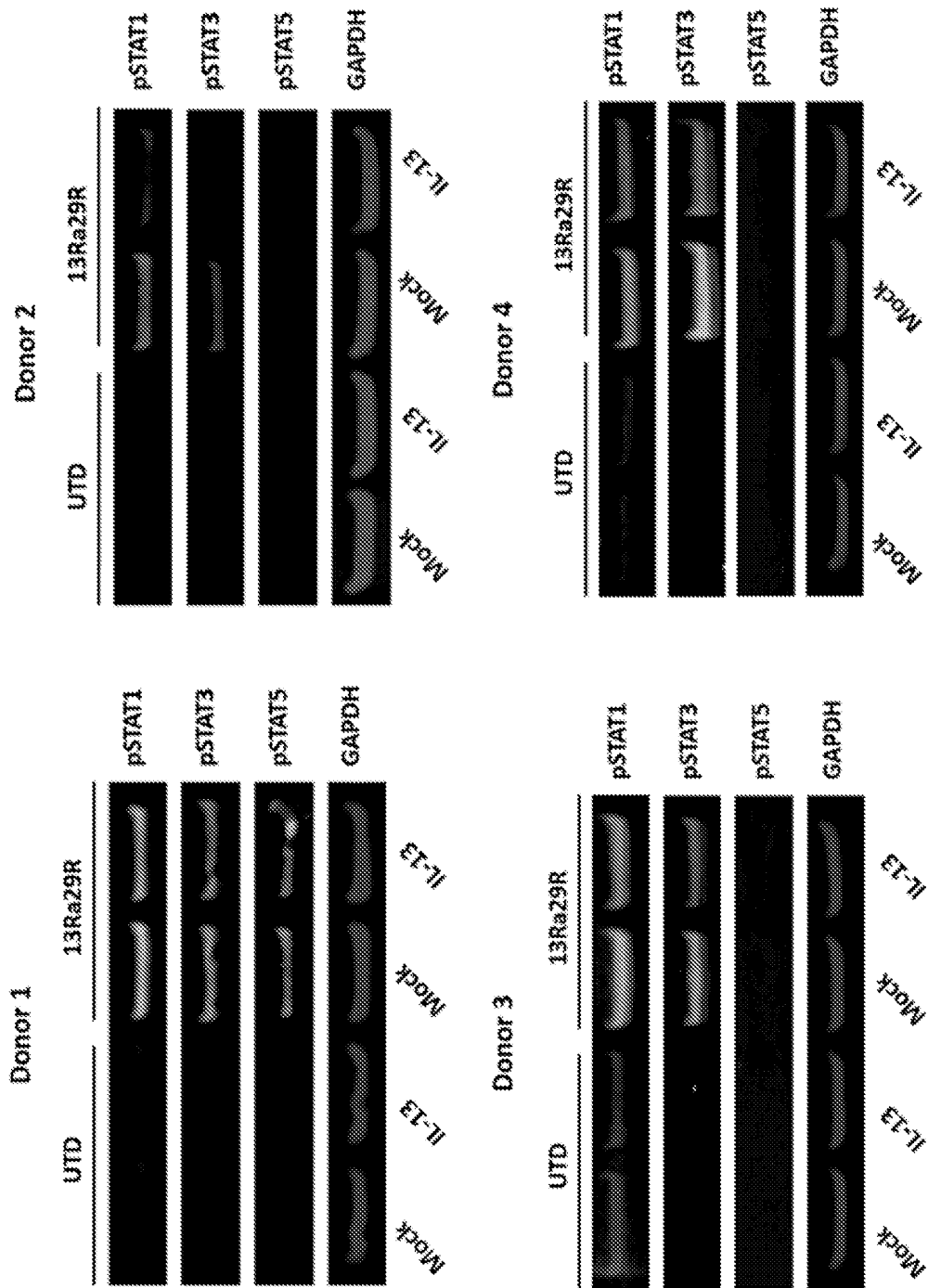


FIG. 4B

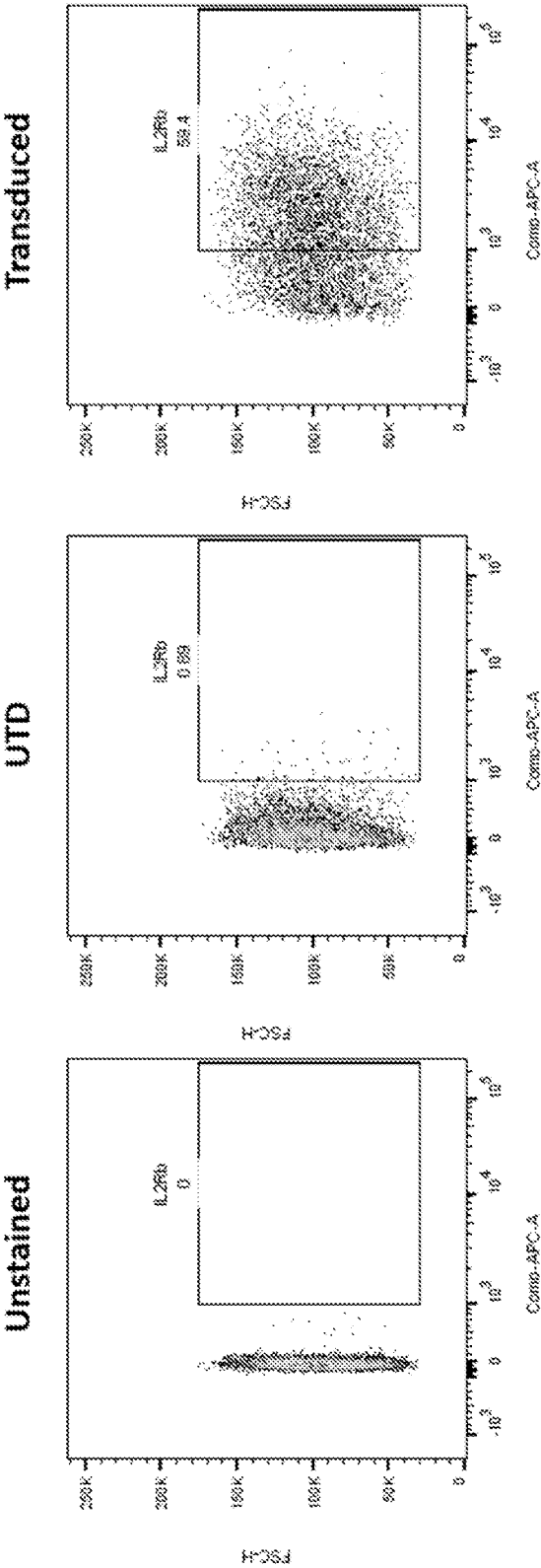


FIG. 5

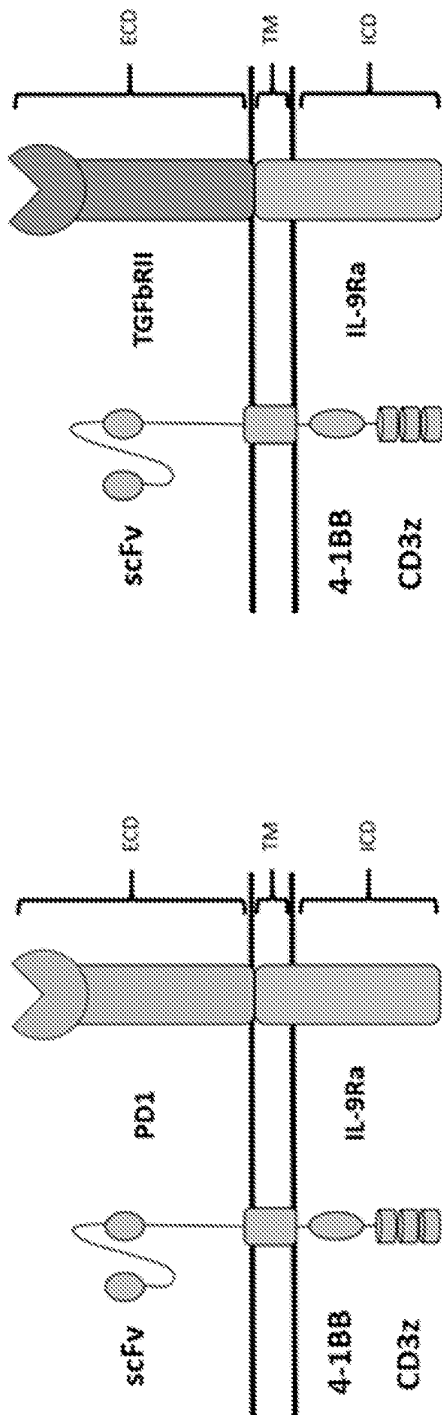


FIG. 6A

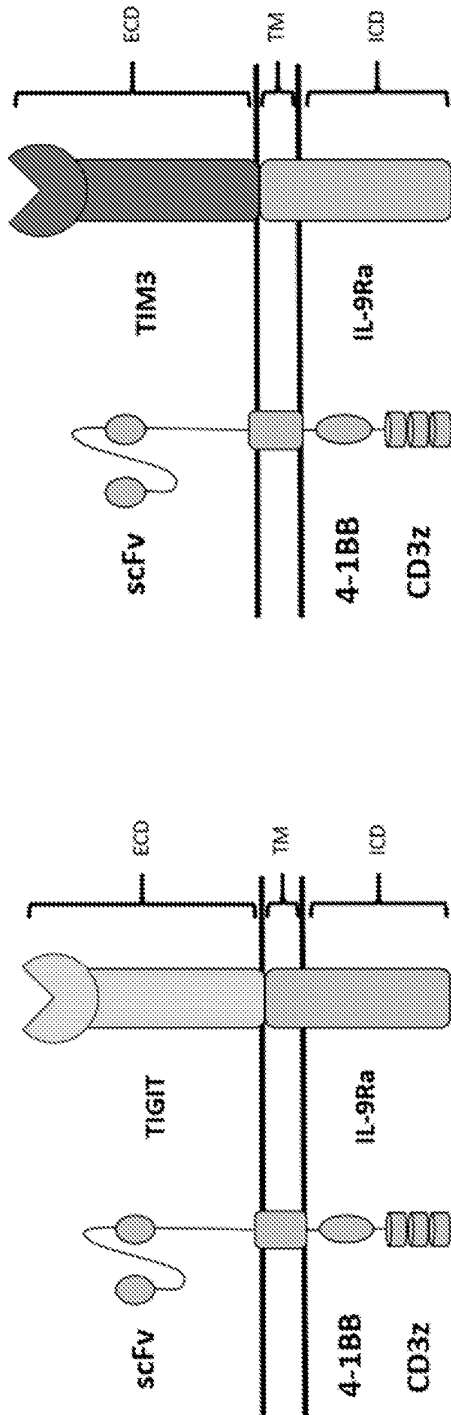


FIG. 6B

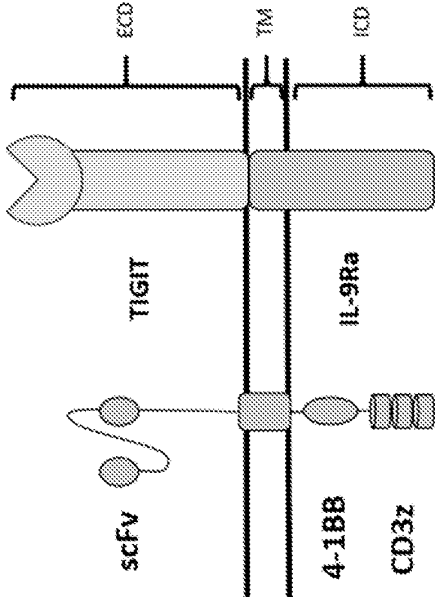


FIG. 6C

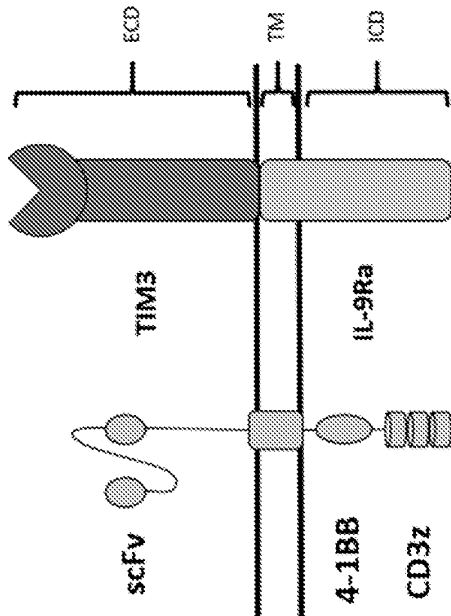


FIG. 6D

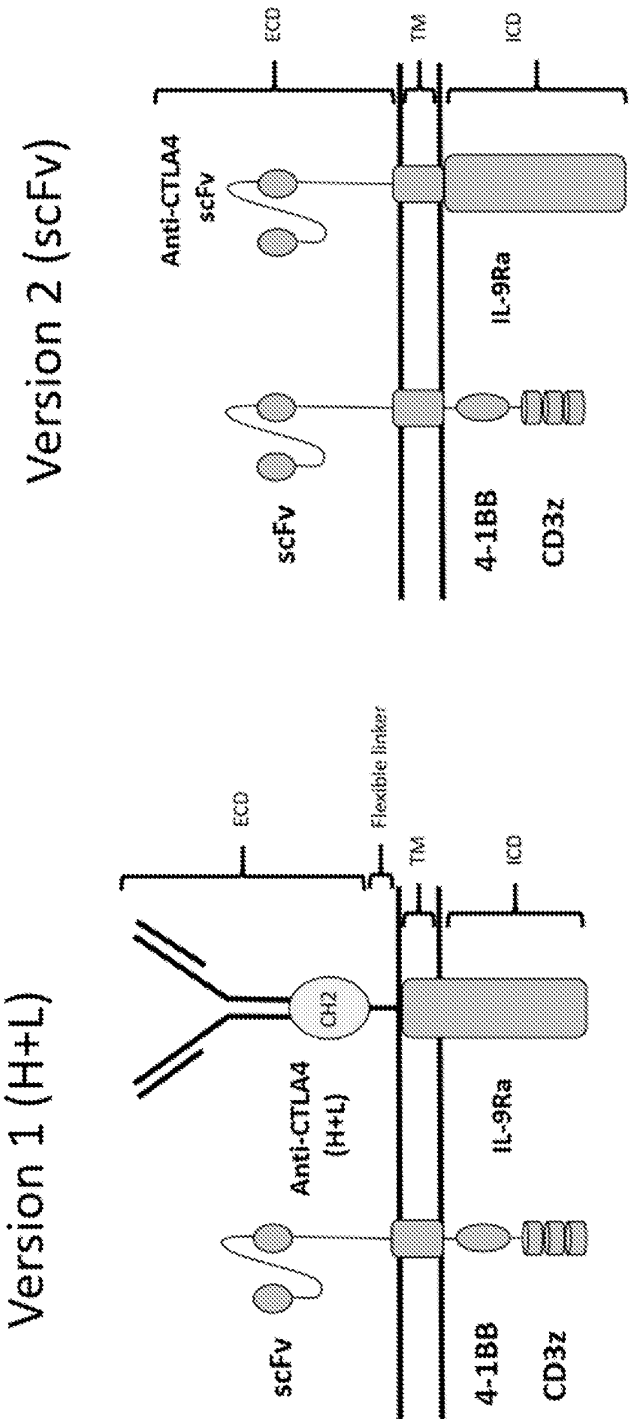


FIG. 6E

FIG. 6F

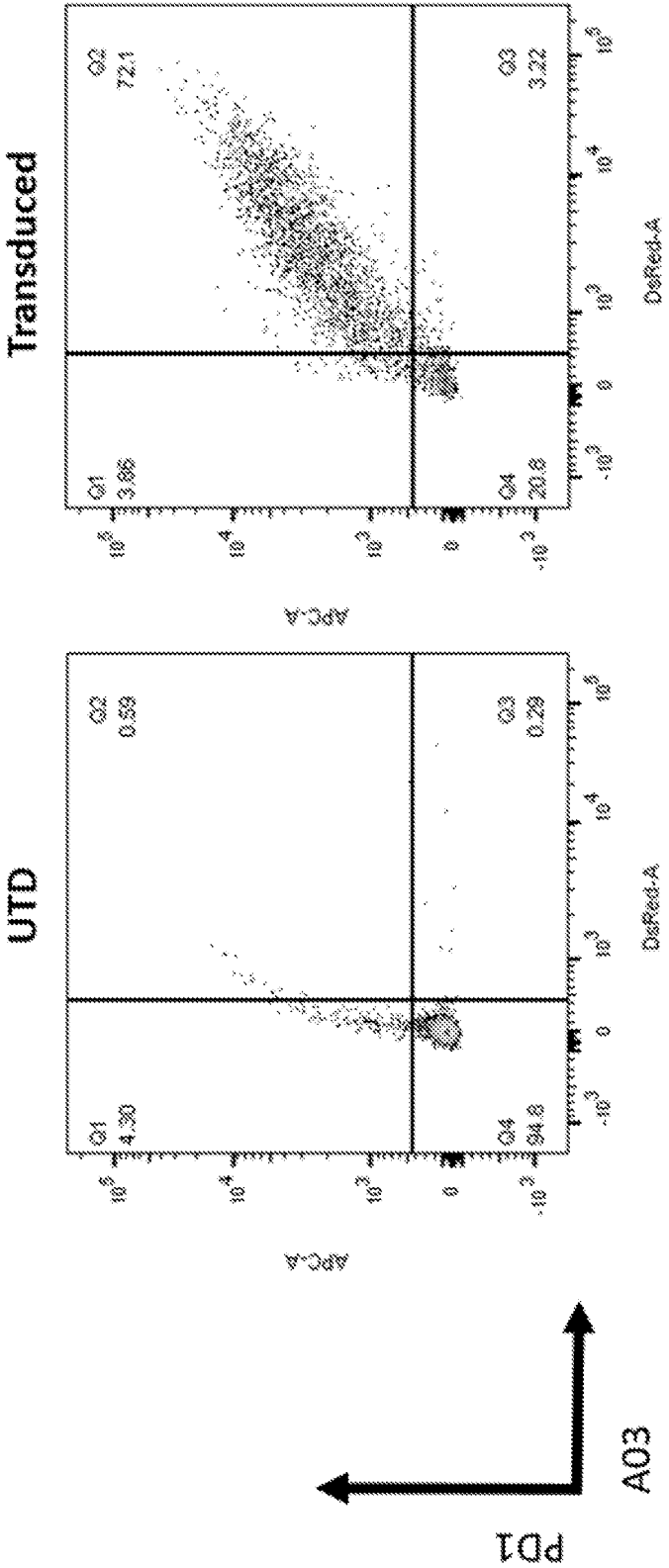


FIG. 7

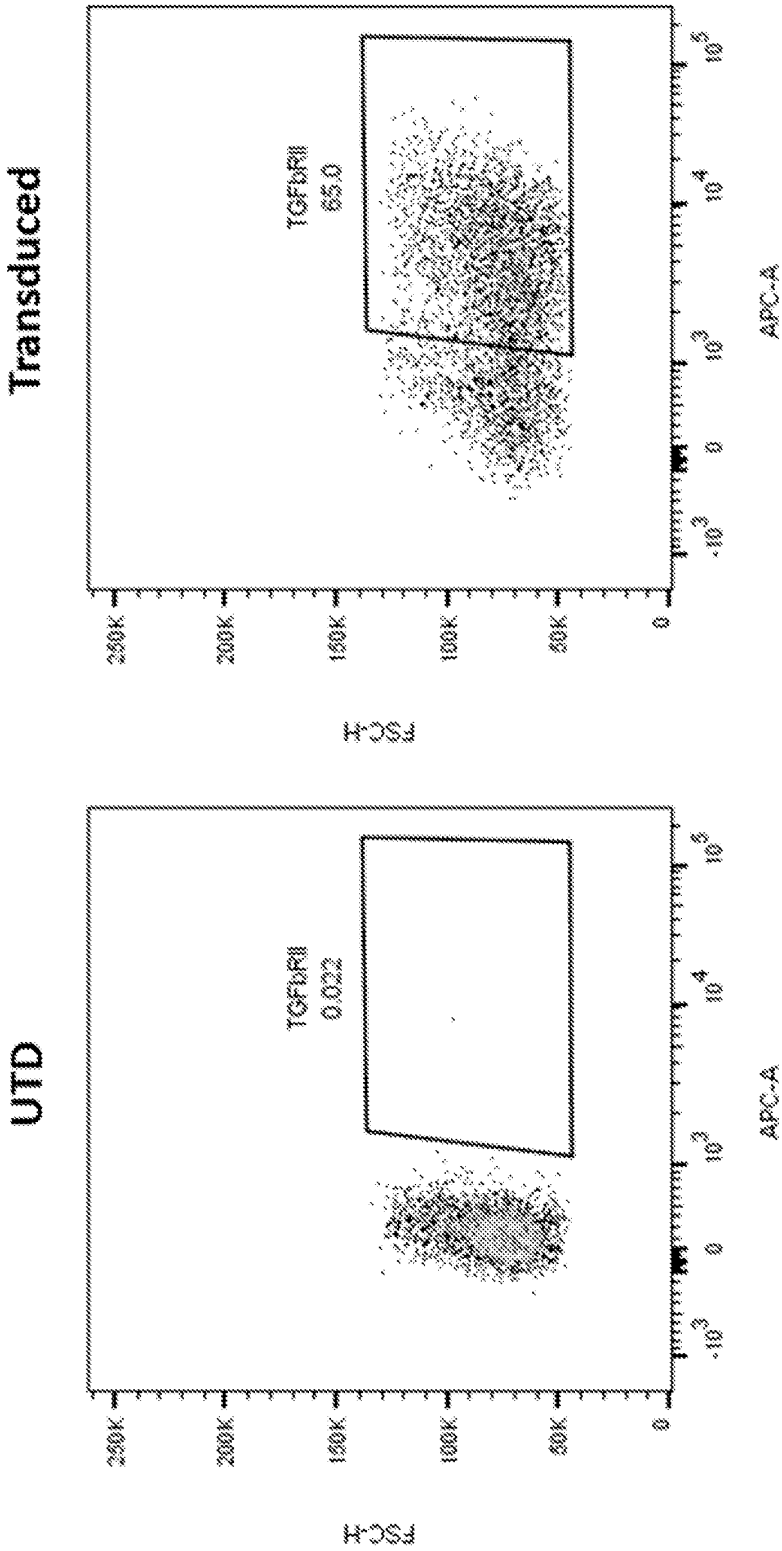


FIG. 8

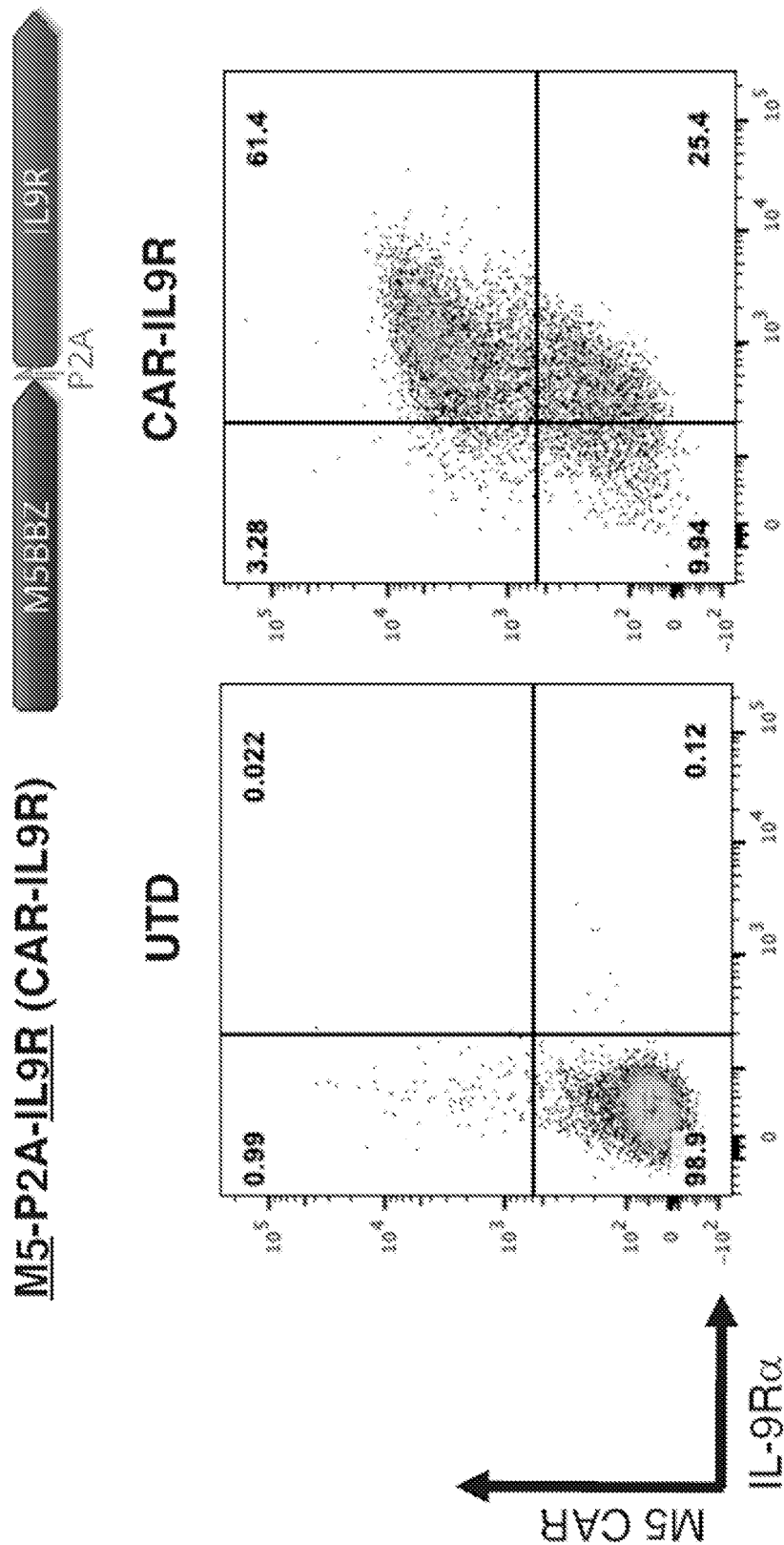


FIG. 9A

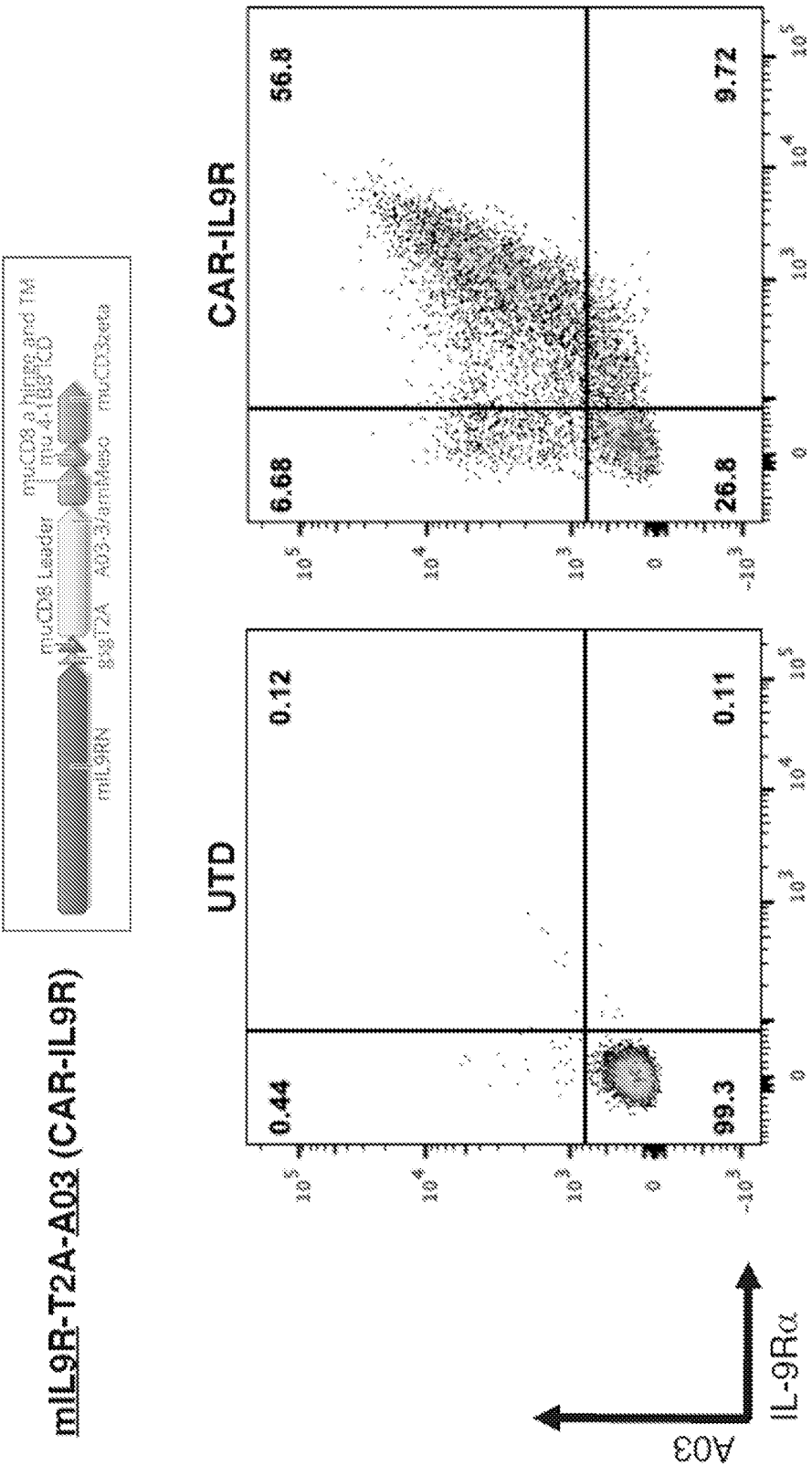
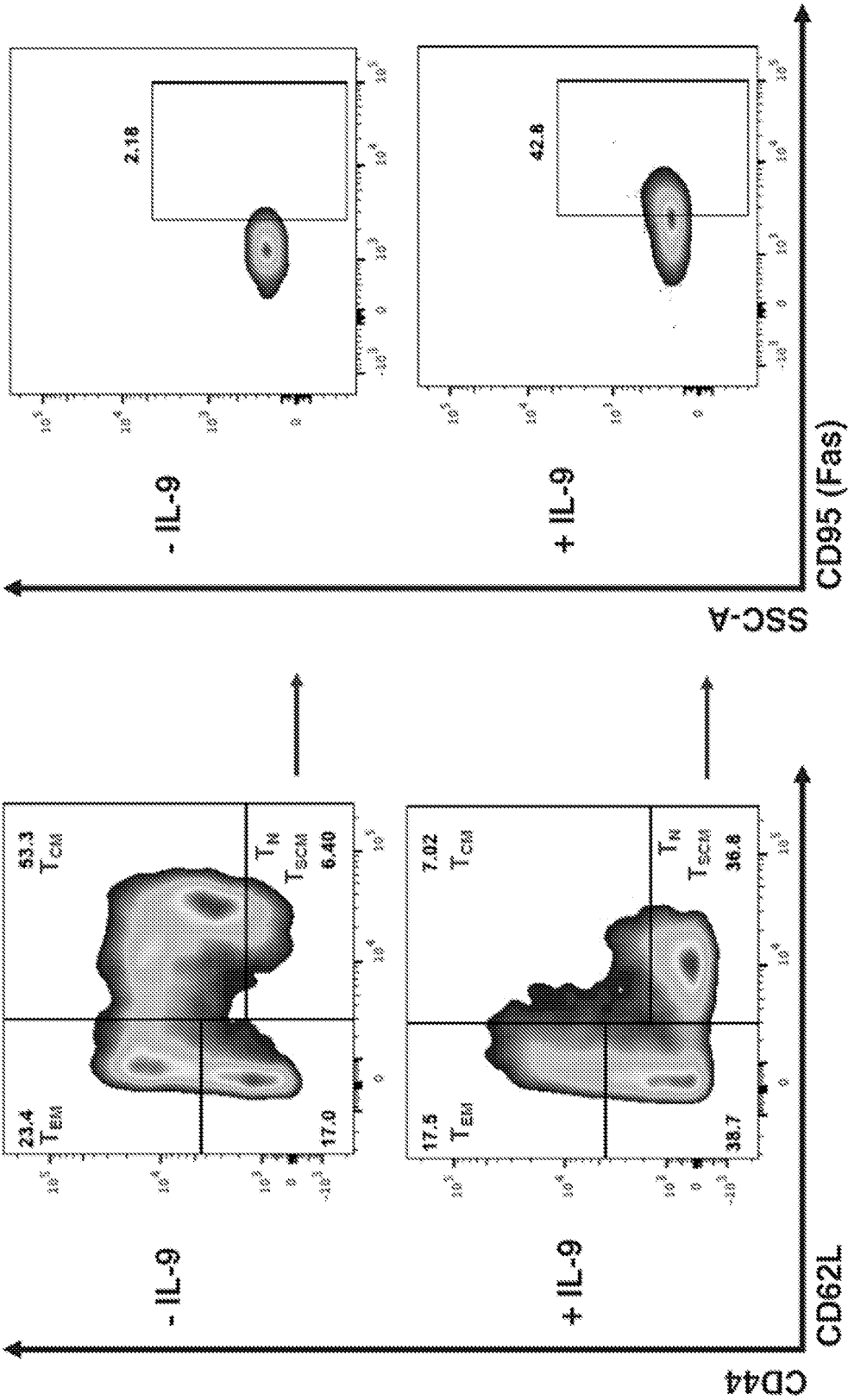


FIG. 9B

FIG. 10



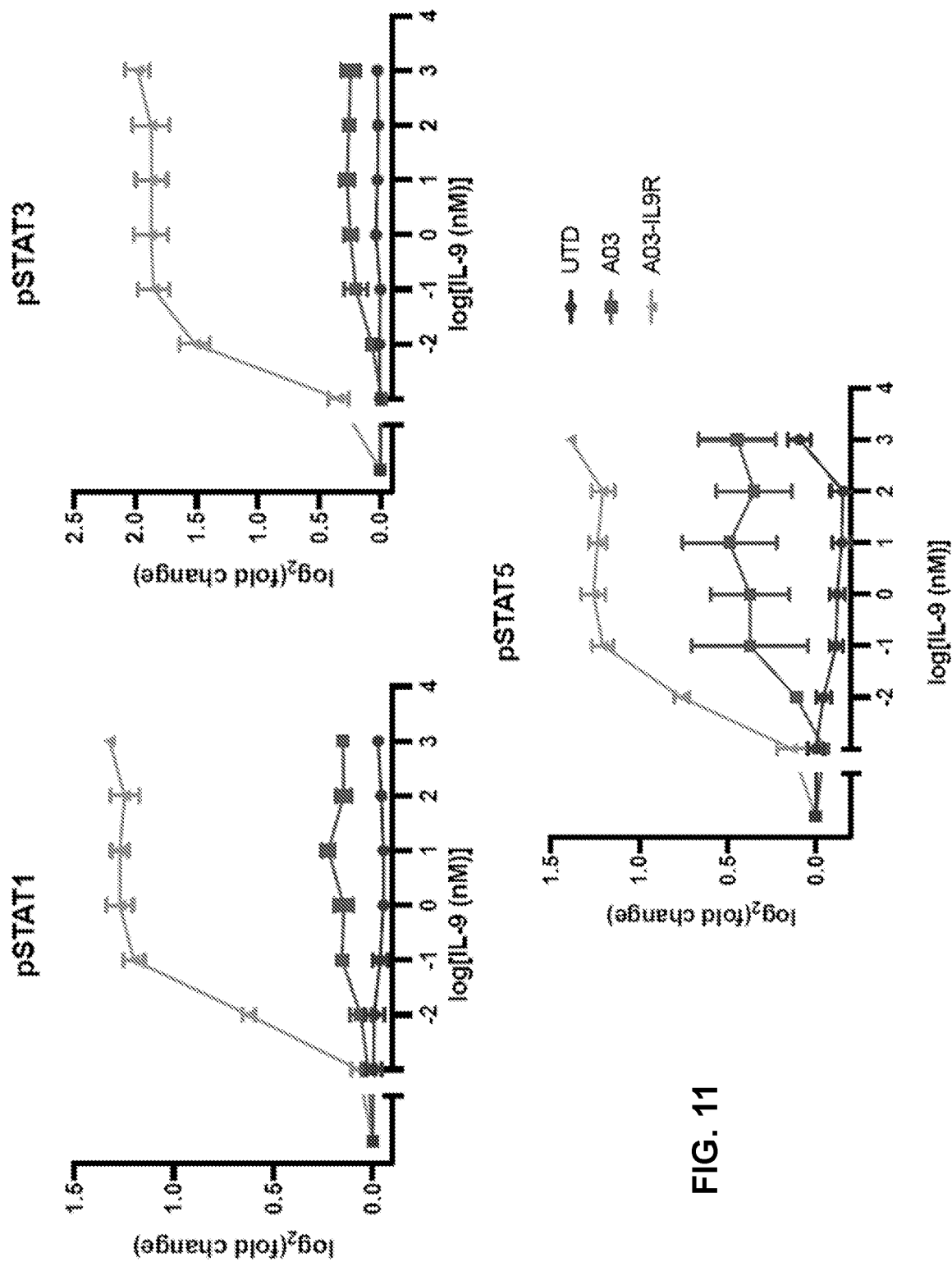


FIG. 11

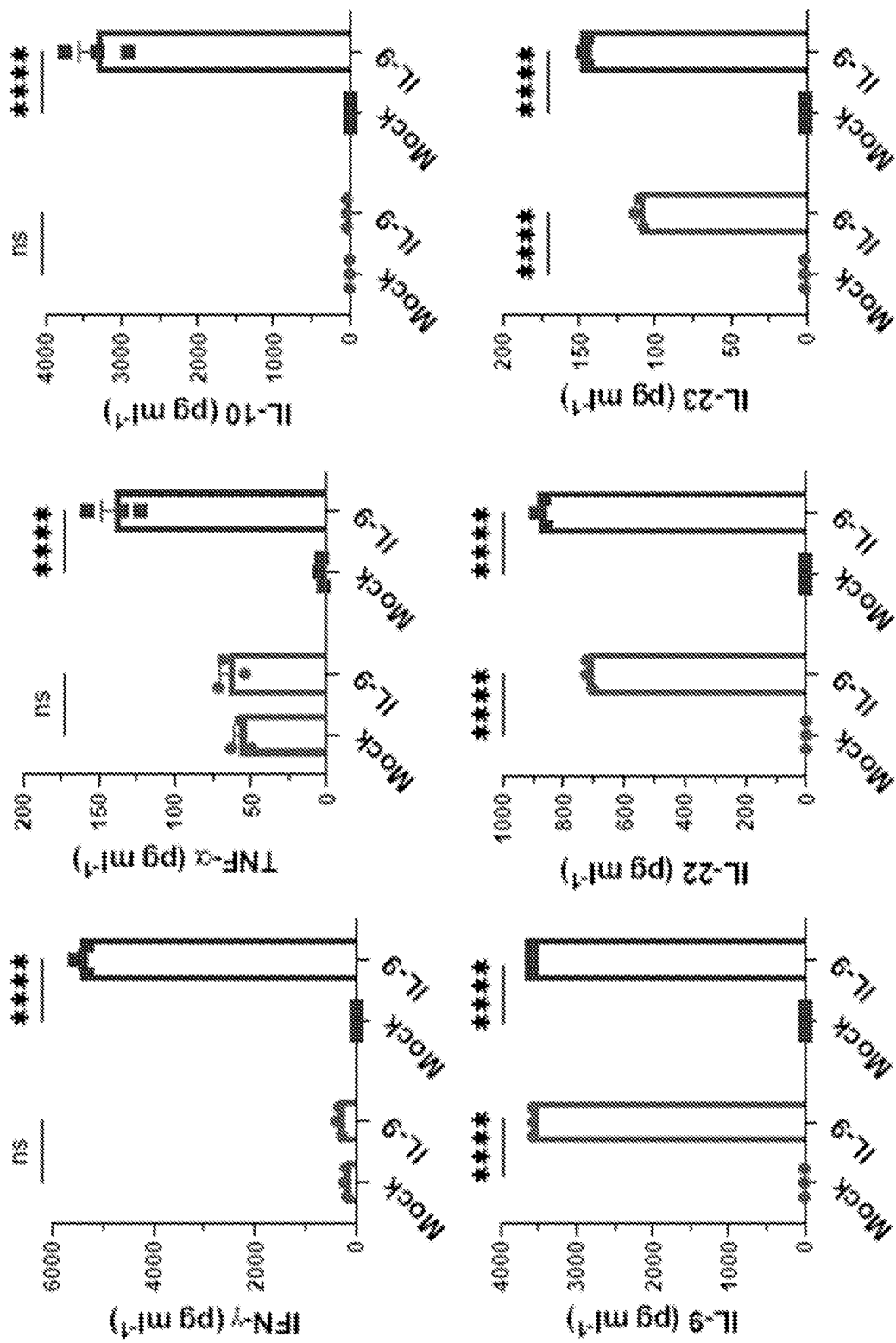


FIG. 12 – 1 of 3

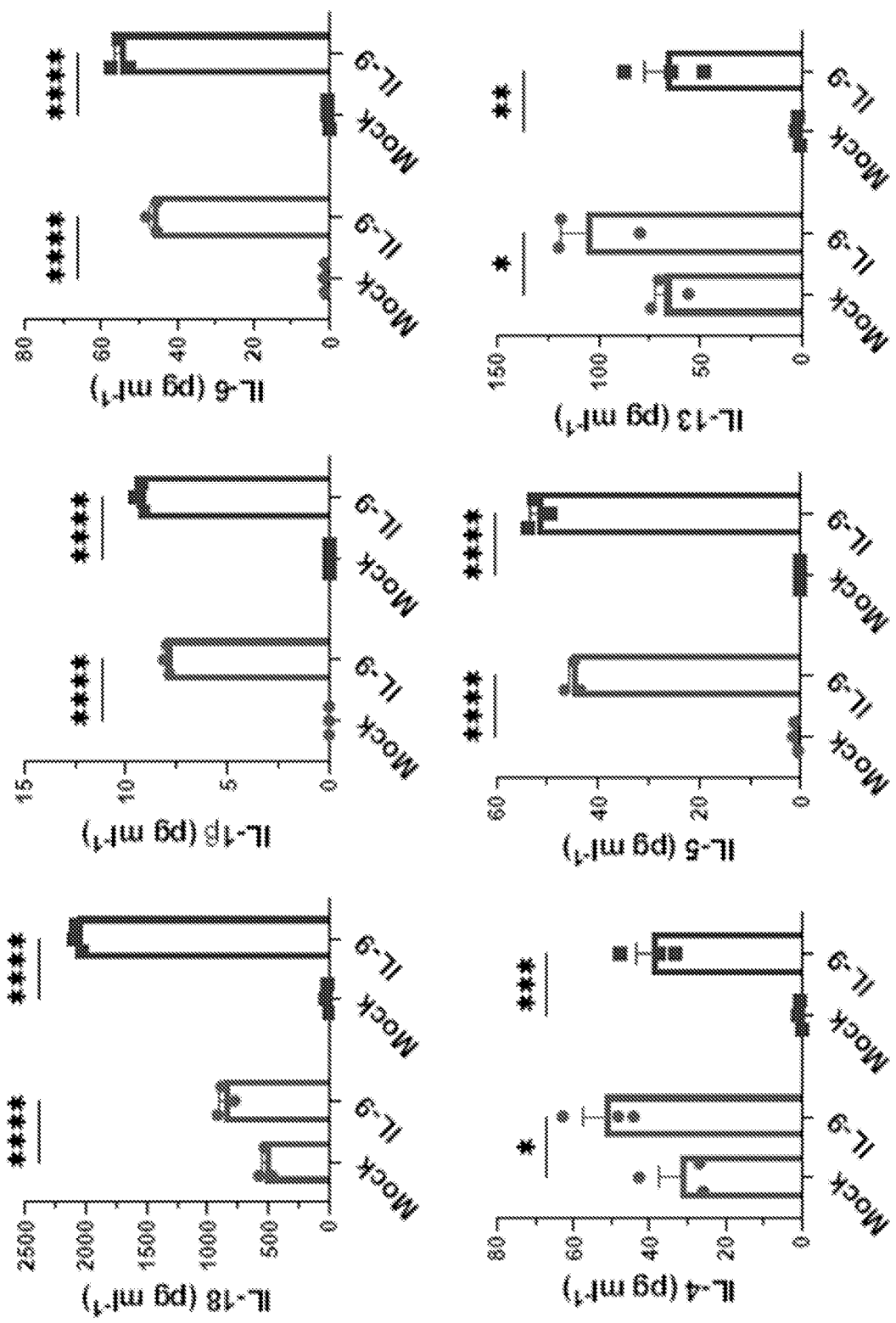


FIG. 12 – 2 of 3

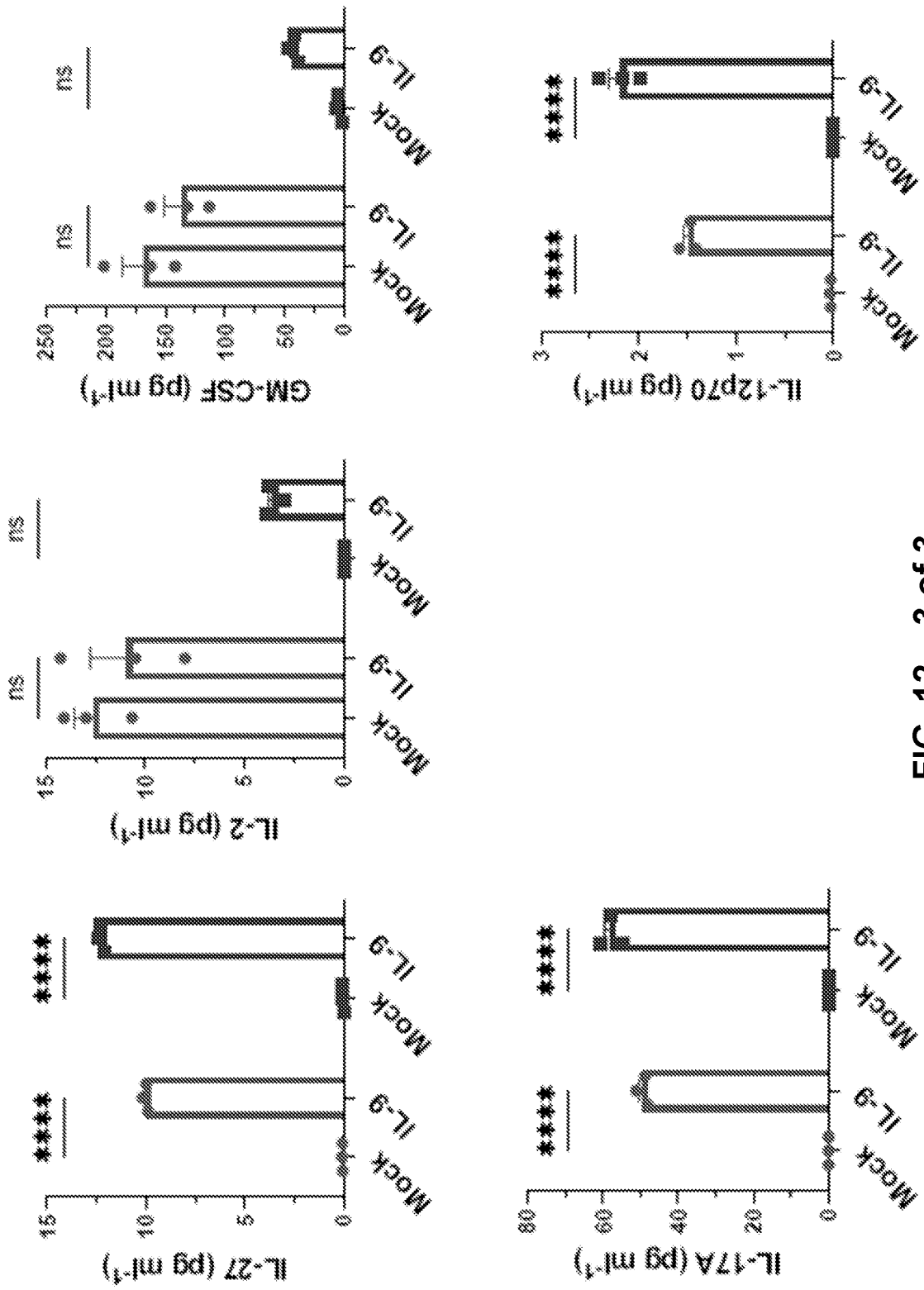


FIG. 12 – 3 of 3

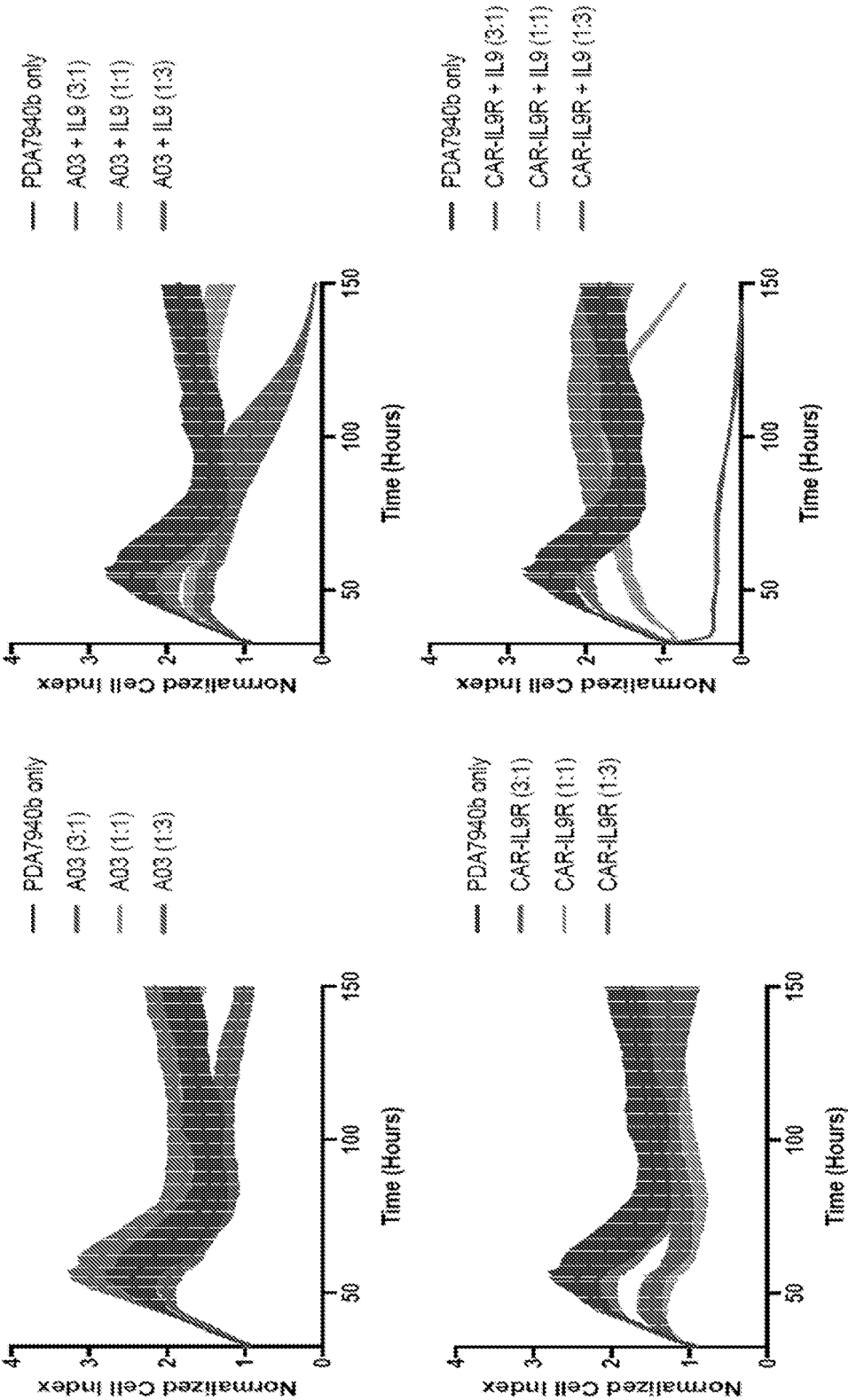


FIG. 13

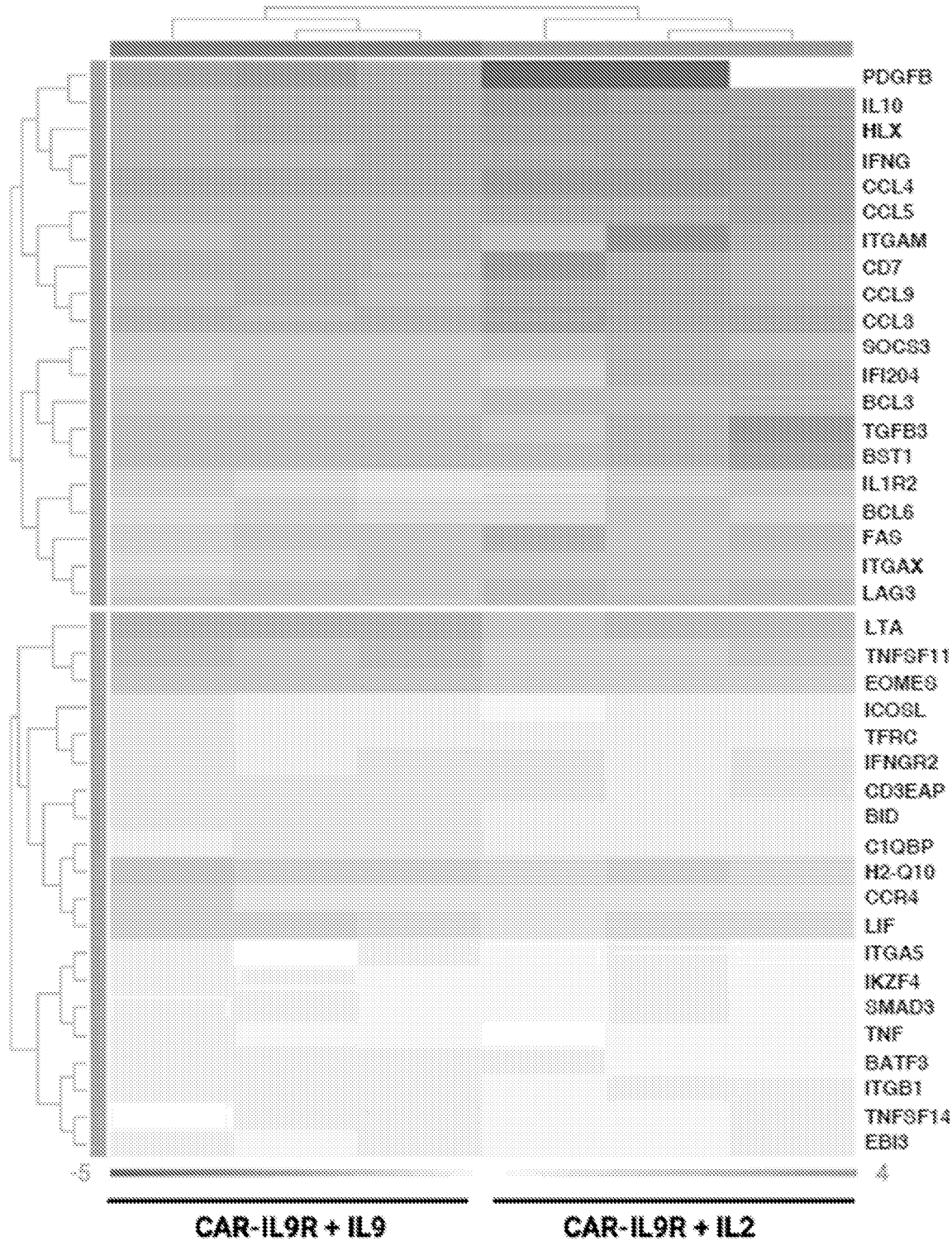


FIG. 14A

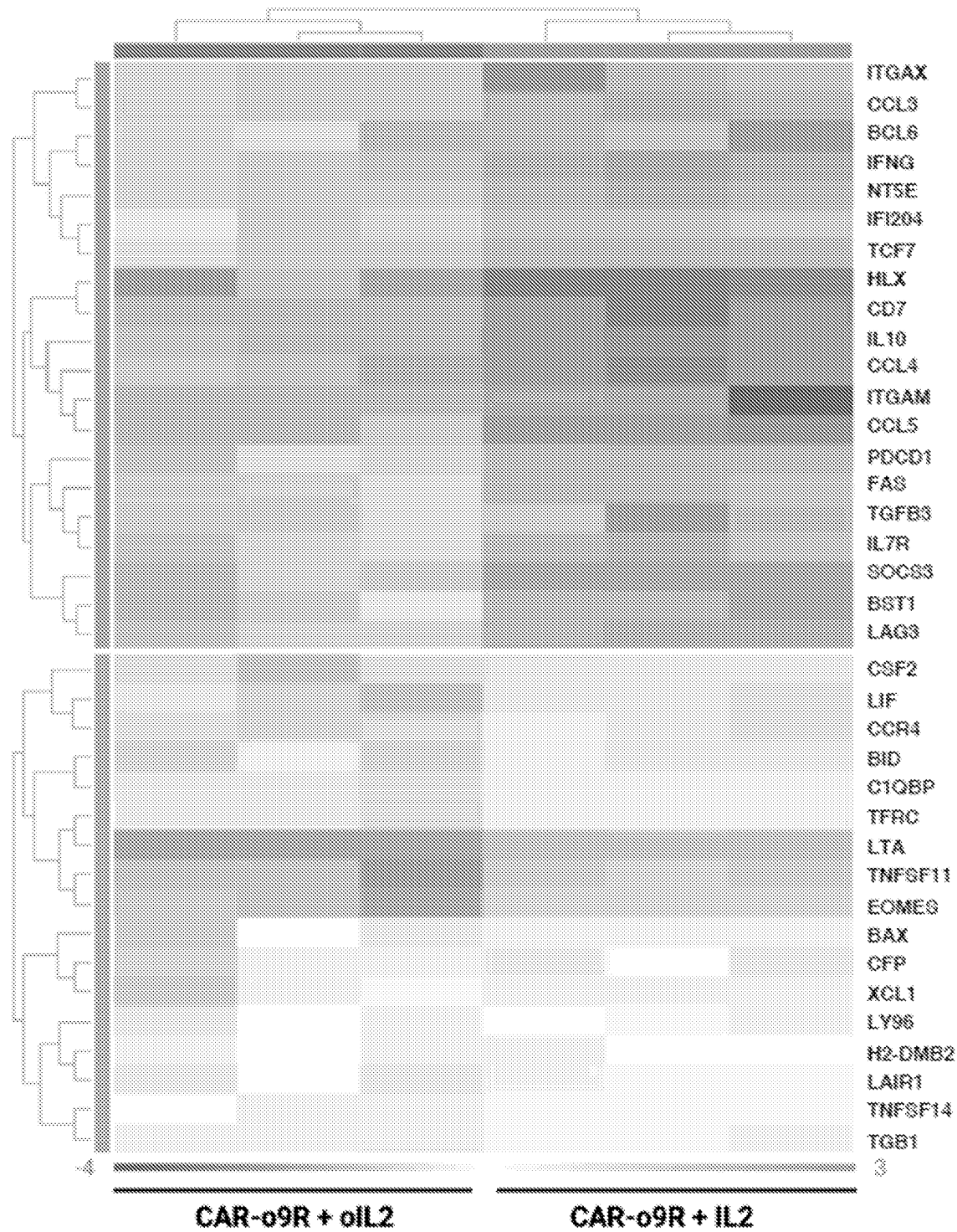


FIG. 14B

Up	Down
ITGAM	LTA
HLX	TNFSF11
CD7	EOMES
CCL4	LIF
IL10	CCR4
IFNG	C1QBP
BST1	BID
CCL5	TFRC
CCL3	TNFSF14
IFI204	ITGB1
ITGAX	
SOCS3	
BCL6	
FAS	
LAG3	

FIG. 14C

FIG. 15A – 1 of 2

CAR-IL9R

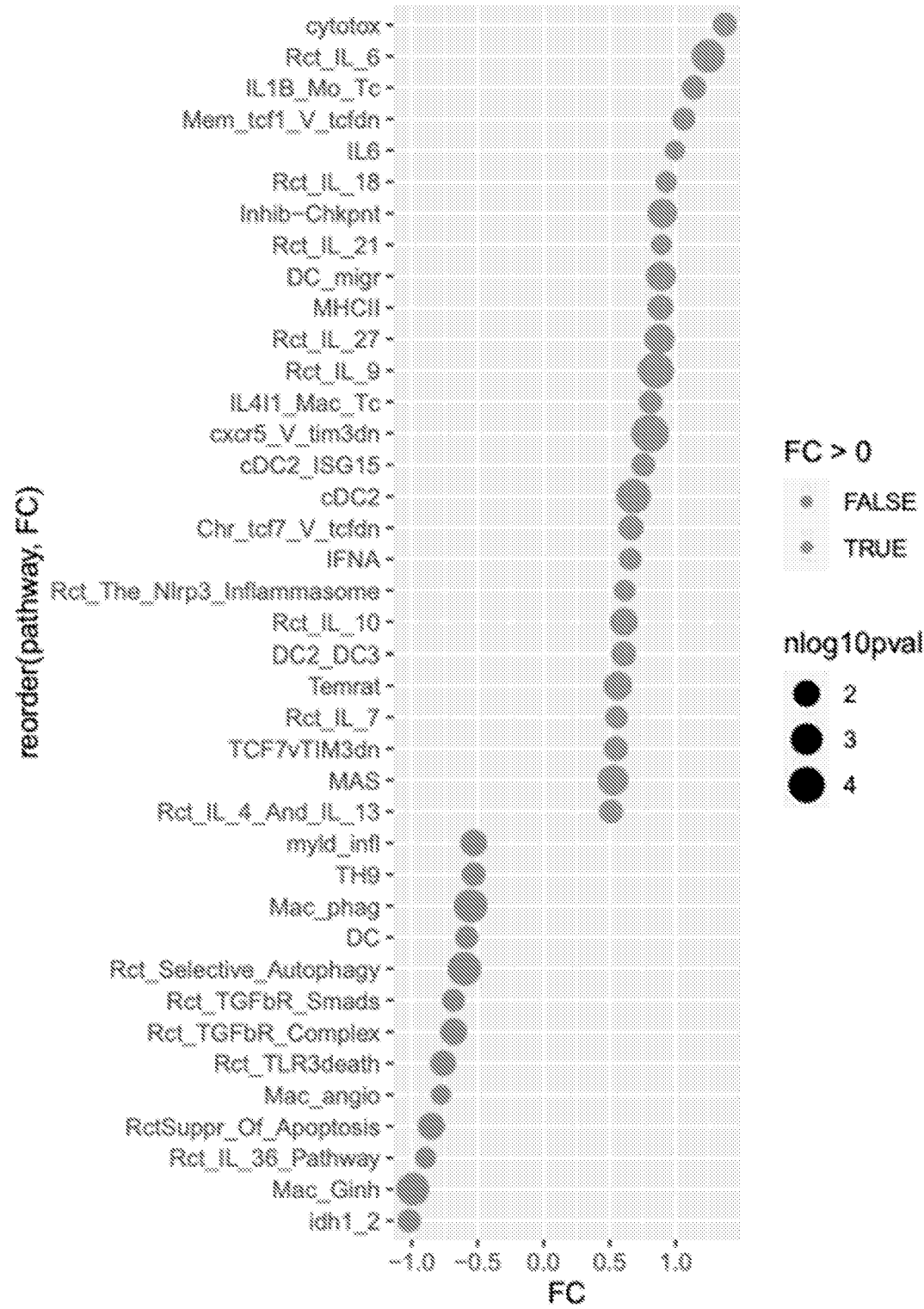
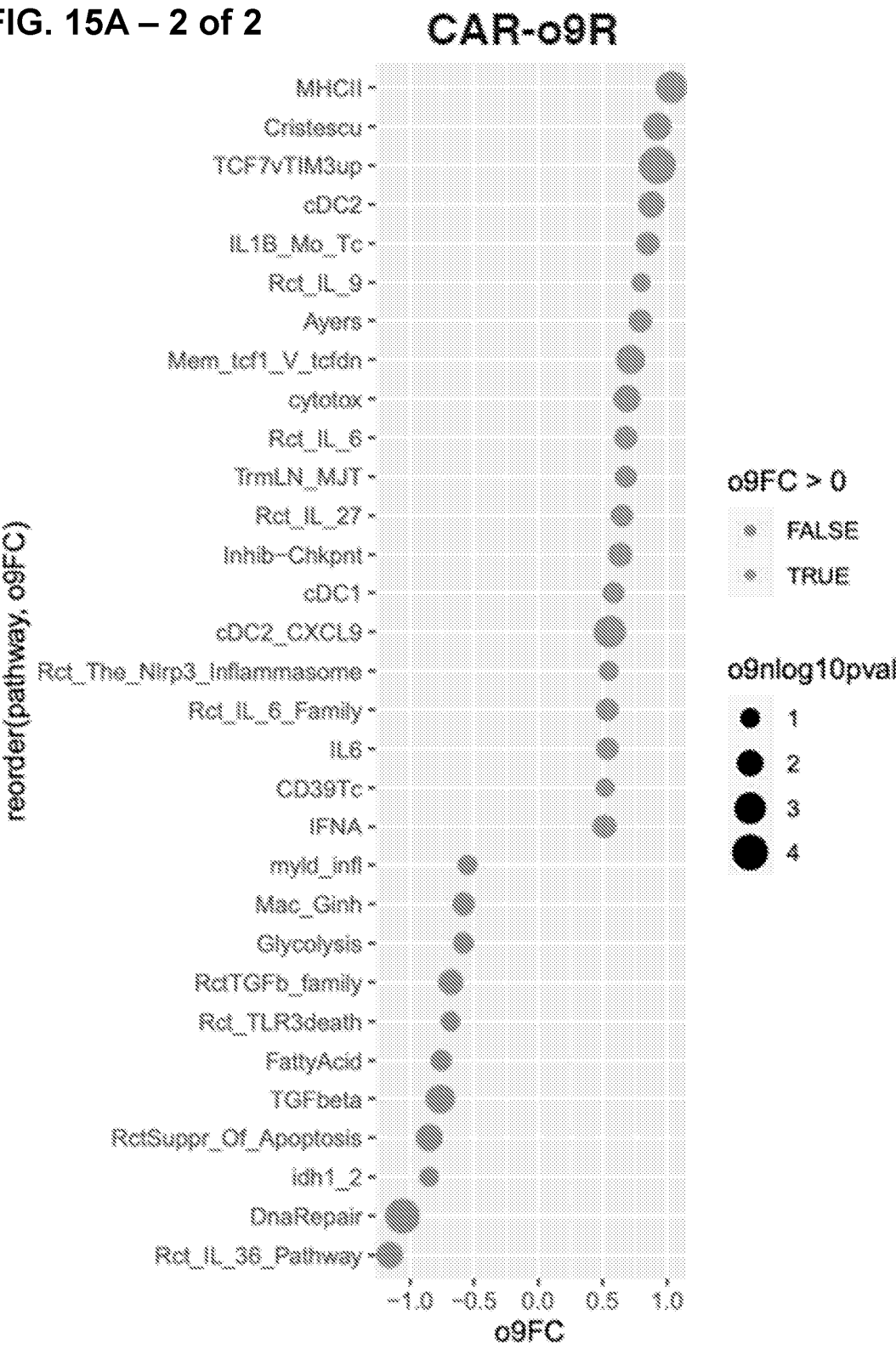


FIG. 15A – 2 of 2



Pathways enriched in CAR-IL9R T cells stimulated with IL-9 vs IL2					
NAME	ES	NES	NOM p-val	FDR q-val	
HALLMARK_INTERFERON_GAMMA_RESPONSE	0.535	1.715	0.000	0.025	
HALLMARK_INTERFERON_ALPHA_RESPONSE	0.592	1.589	0.017	0.068	
HALLMARK_ALLOGRAFT_REJECTION	0.440	1.476	0.006	0.124	
HALLMARK_COMPLEMENT	0.466	1.407	0.047	0.175	
HALLMARK_TNFA_SIGNALING_VIA_NFKB	0.426	1.317	0.073	0.254	
HALLMARK_IL6_JAK_STAT3_SIGNALING	0.401	1.249	0.118	0.312	
HALLMARK_INFLAMMATORY_RESPONSE	0.370	1.219	0.137	0.323	
Pathways enriched in CAR-09R T cells stimulated with oil2 vs IL2					
NAME	ES	NES	NOM p-val	FDR q-val	
HALLMARK_TNFA_SIGNALING_VIA_NFKB	0.483	1.597	0.007	0.115	
HALLMARK_INTERFERON_ALPHA_RESPONSE	0.566	1.571	0.019	0.085	
HALLMARK_ALLOGRAFT_REJECTION	0.451	1.566	0.004	0.059	
HALLMARK_INTERFERON_GAMMA_RESPONSE	0.454	1.517	0.009	0.068	
HALLMARK_INFLAMMATORY_RESPONSE	0.436	1.462	0.016	0.090	
HALLMARK_COMPLEMENT	0.442	1.365	0.069	0.158	
HALLMARK_IL6_JAK_STAT3_SIGNALING	0.398	1.268	0.131	0.262	

ES: Enrichment Score
NES: Normalized Enrichment Score
NOM p-val: Nominal p-value
FDR q-val: False Discovery Rate q-value

FIG. 15B

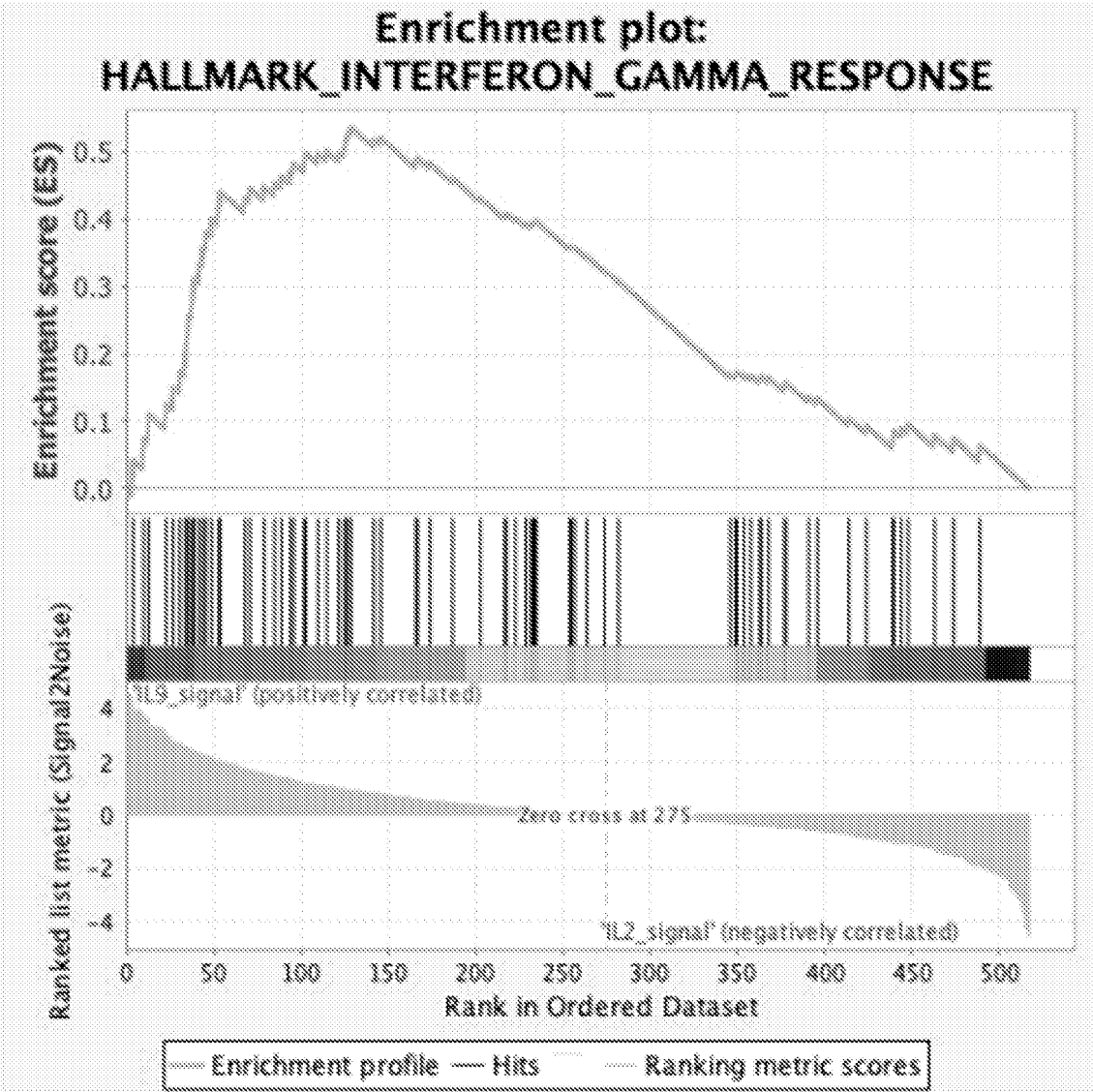


FIG. 15C – 1 of 2

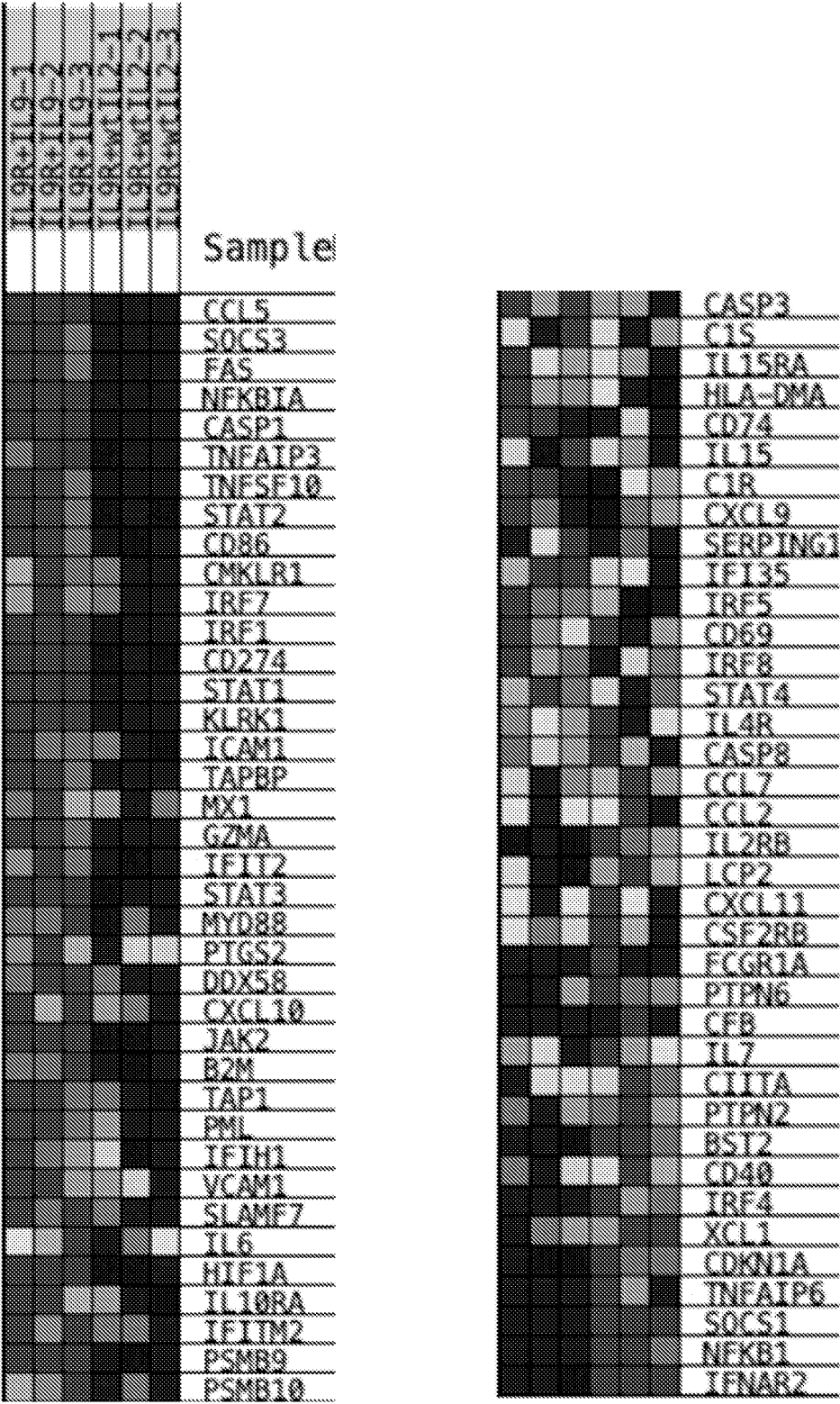


FIG. 15C – 2 of 2

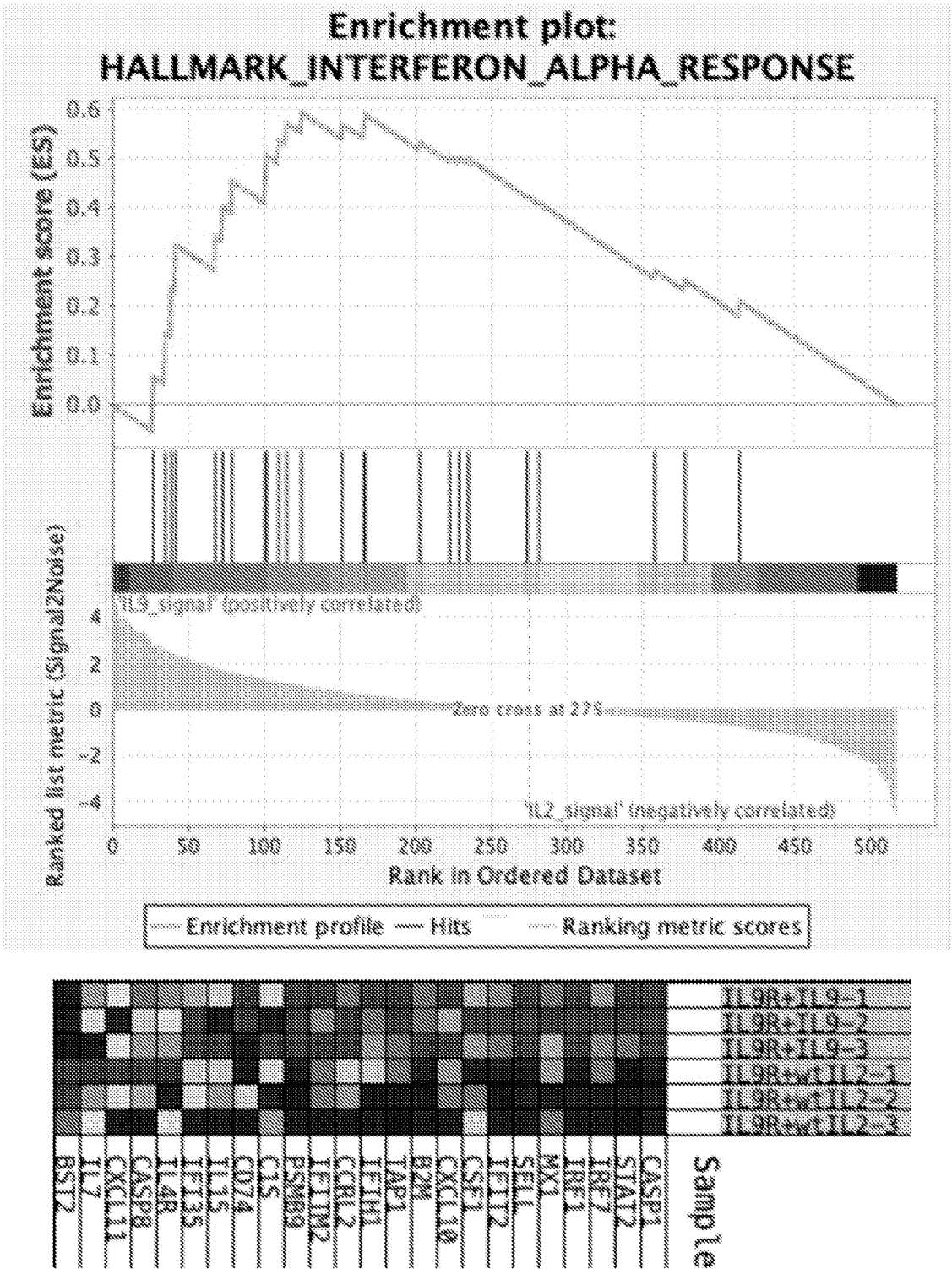


FIG. 15D

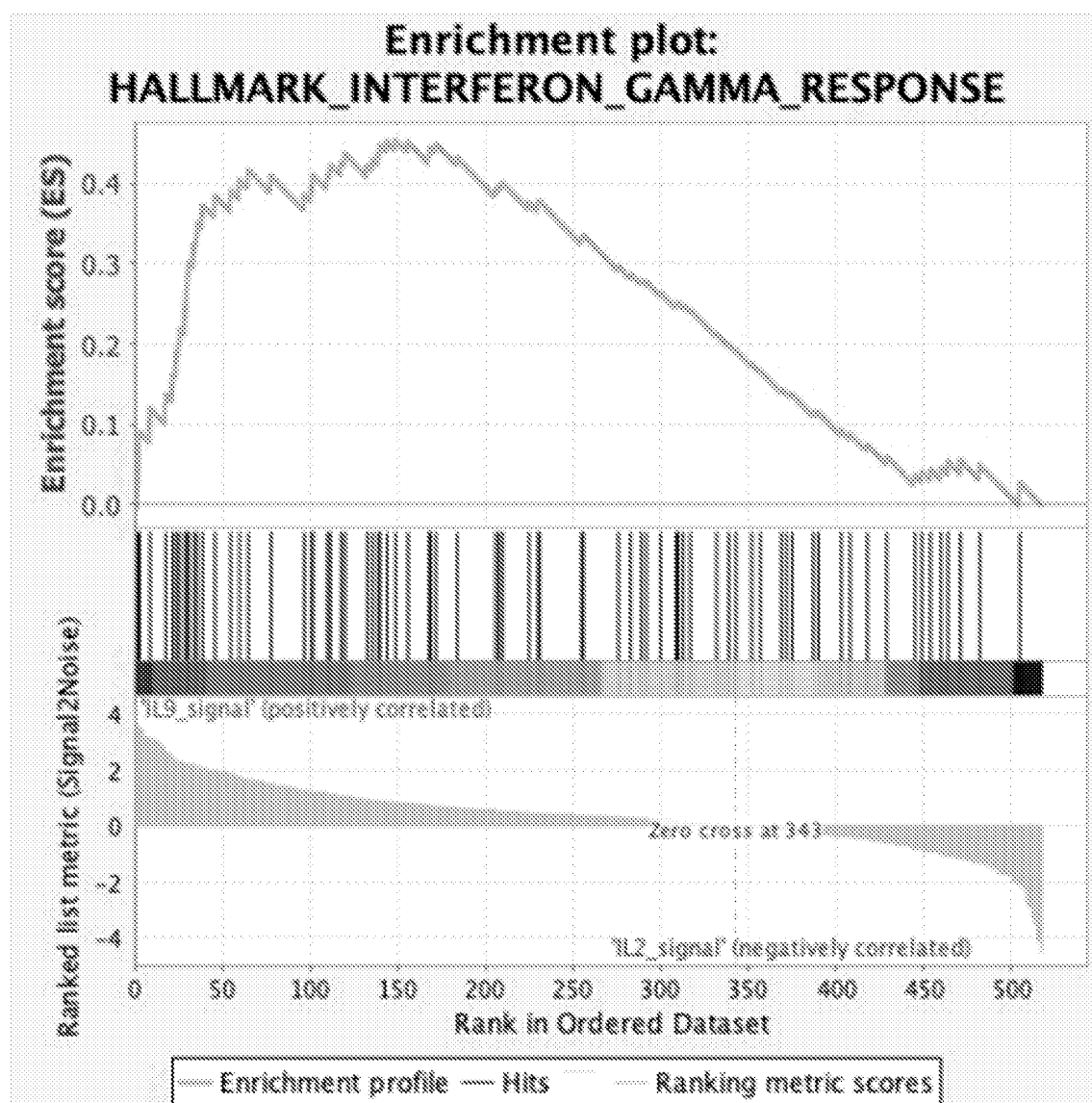


FIG. 15E – 1 of 2

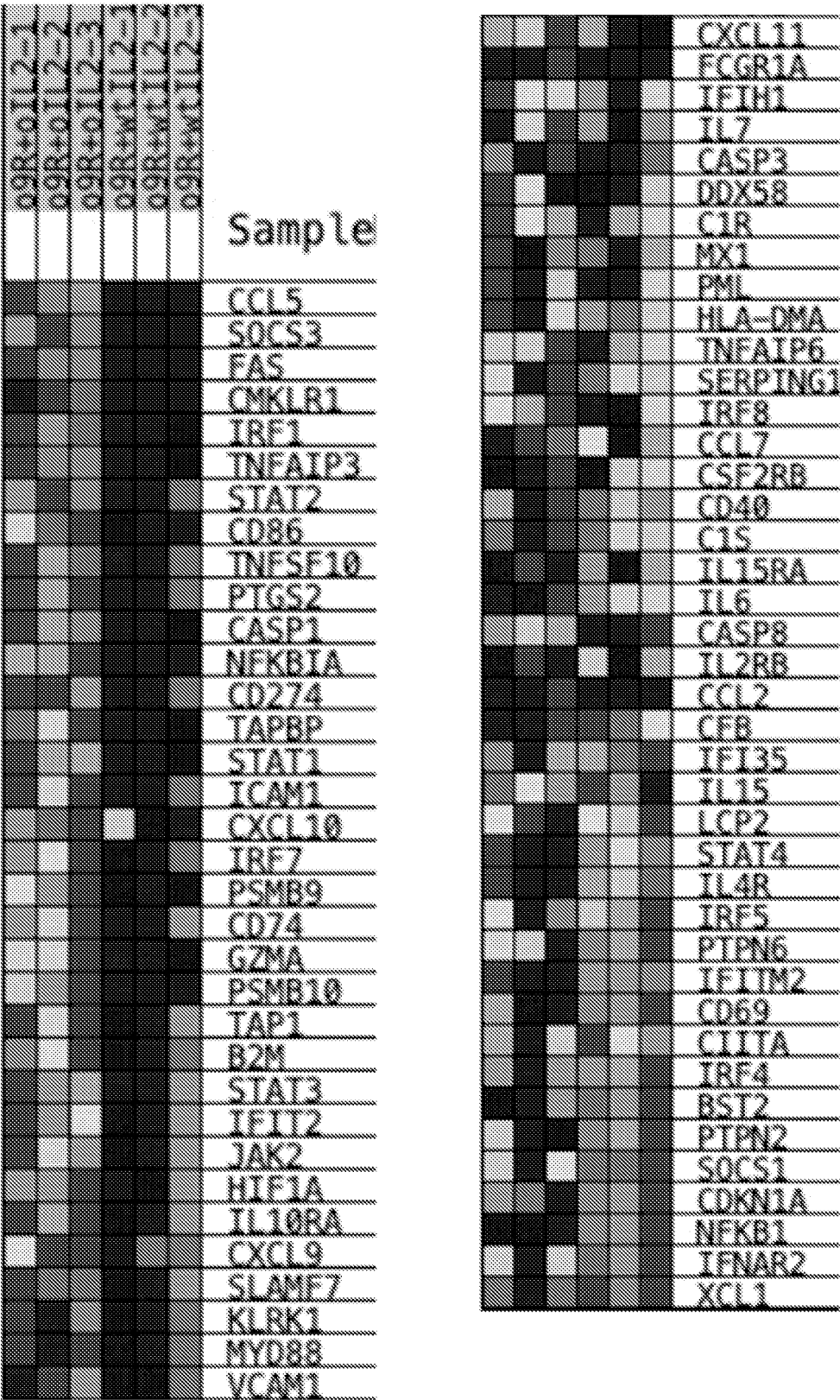


FIG. 15E – 2 of 2

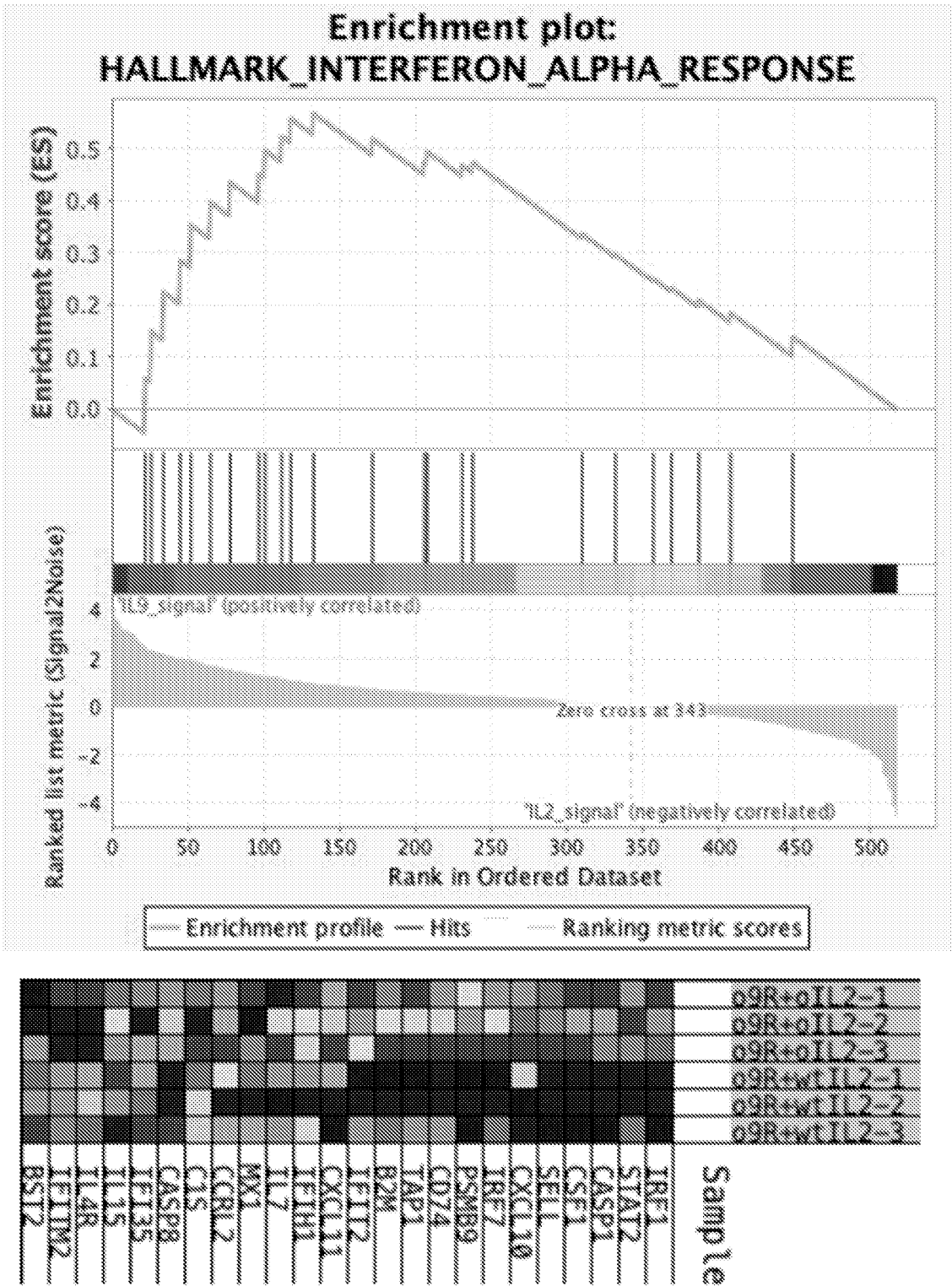


FIG. 15F

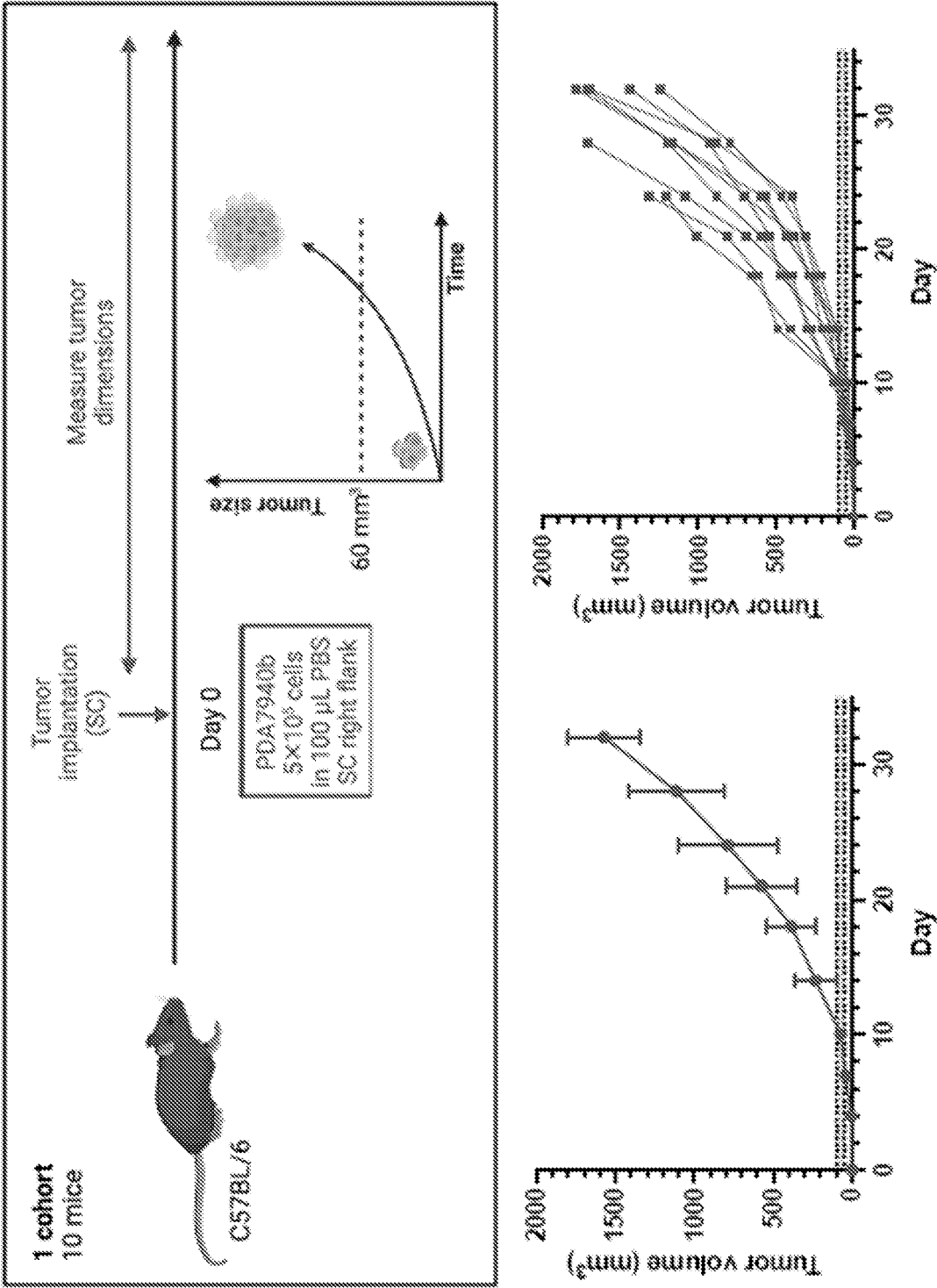


FIG. 16A – 1 of 2

PDA7940b cells: Mesothelin expression

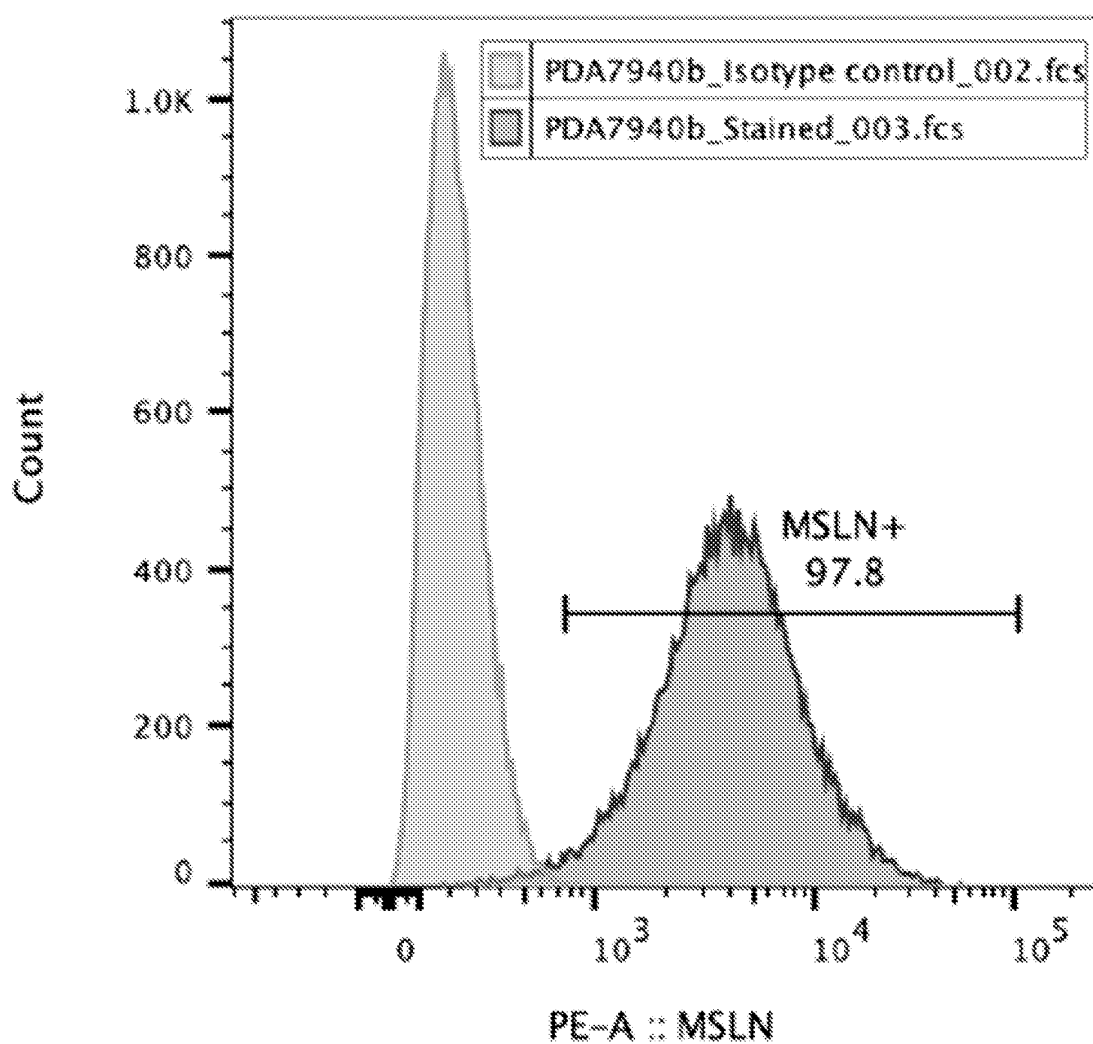
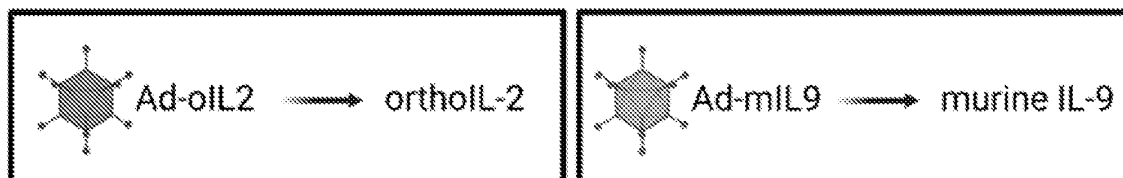
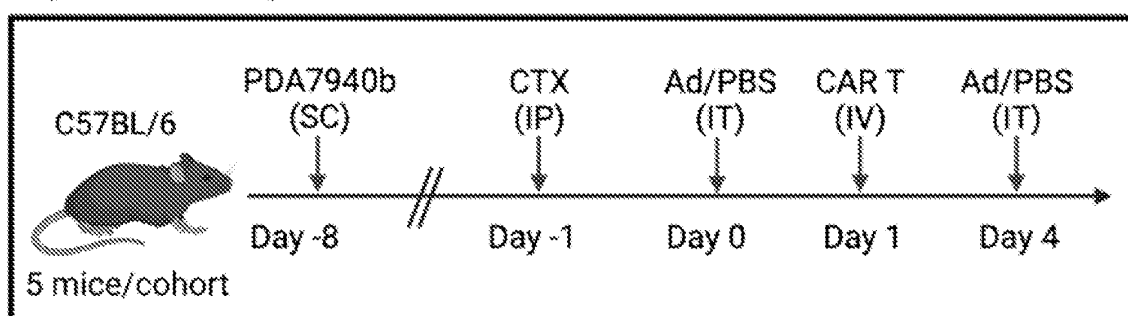
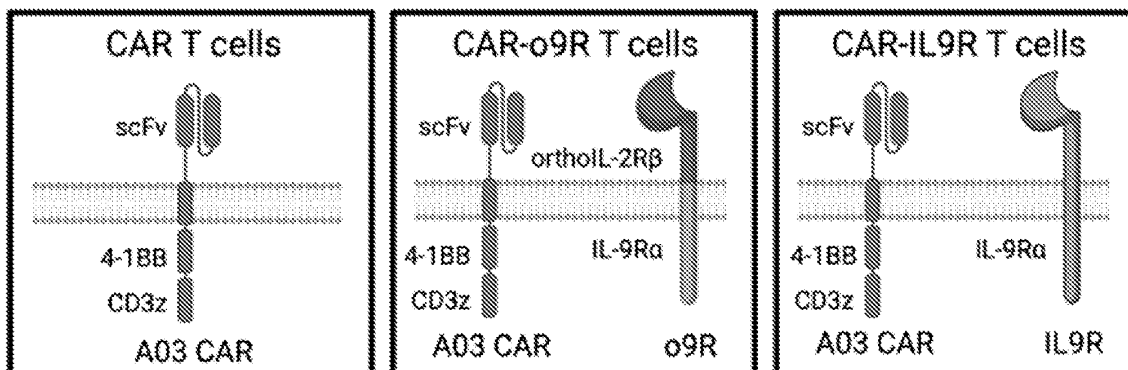
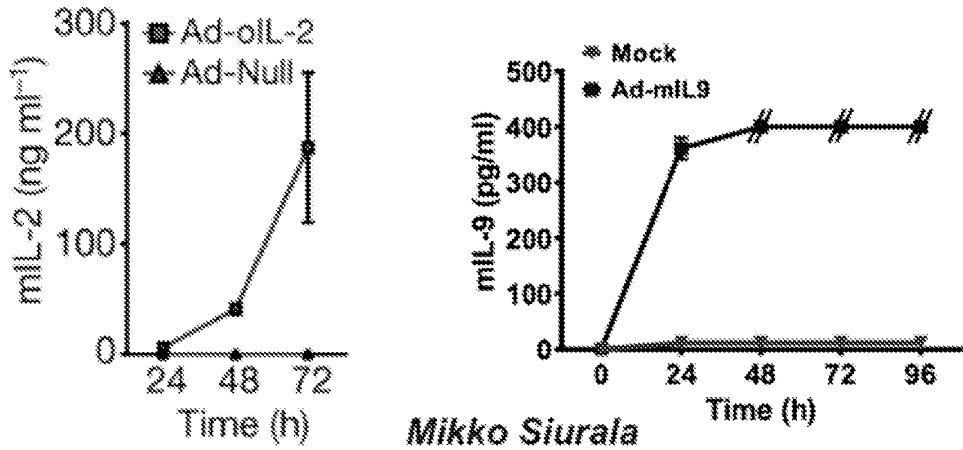


FIG. 16A – 2 of 2

Adenoviruses:**Experimental layout:****Constructs for CAR-T cells:****FIG. 16B – 1 of 2**



Mikko Siurala

Cohort	Comments
A03 CAR + PBS	Negative control
CAR-IL9R + PBS	Negative control
CAR-o9R + Ad-oIL2 1e9 VP	Positive control
CAR-IL9R + Ad-IL9 0.3e9 VP	Test group
CAR-IL9R + Ad-IL9 0.7e9 VP	Test group
CAR-IL9R + Ad-IL9 1e9 VP	Test group
Ad-IL9 2e9 VP	Negative control

FIG. 16B – 2 of 2

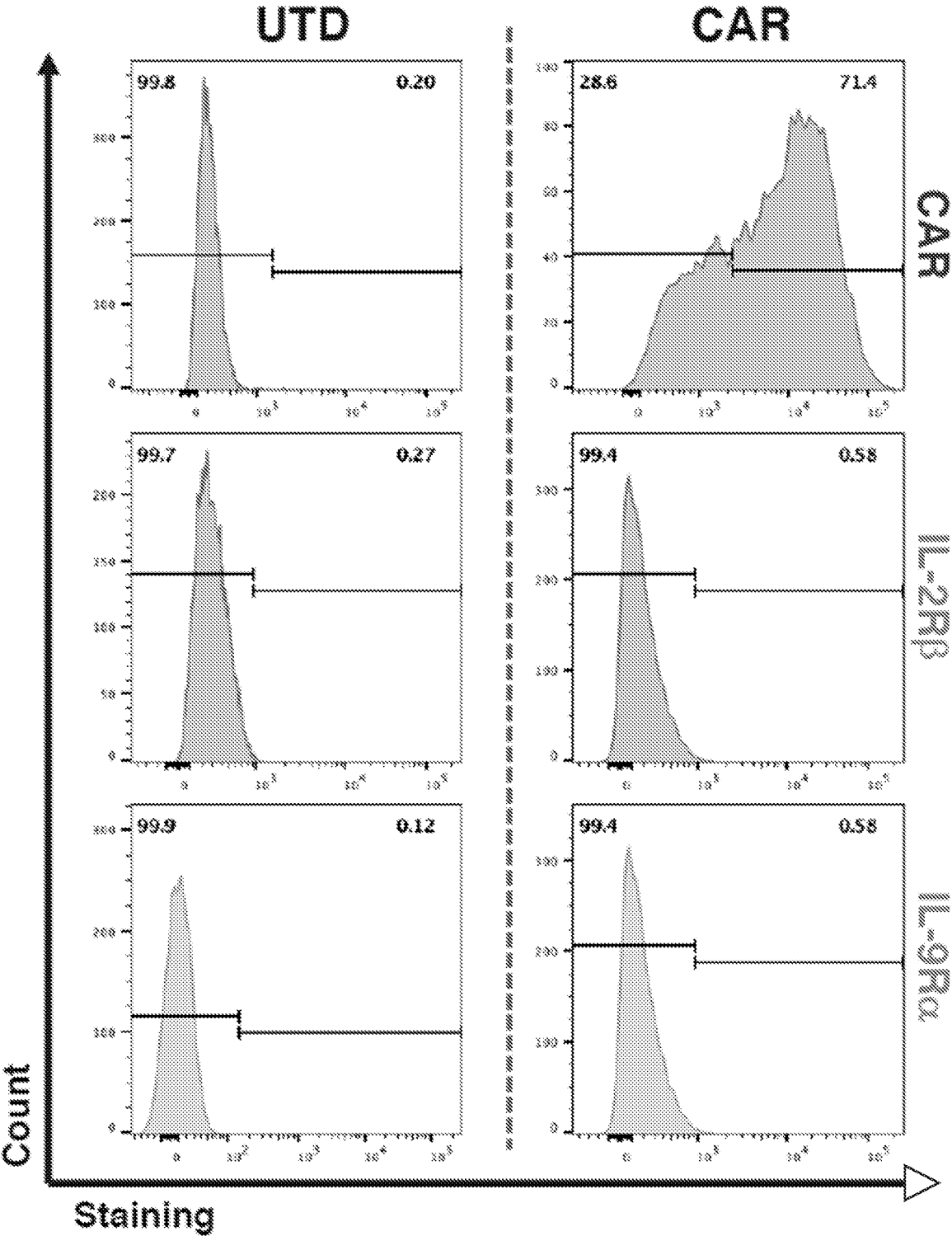


FIG. 16C – 1 of 2

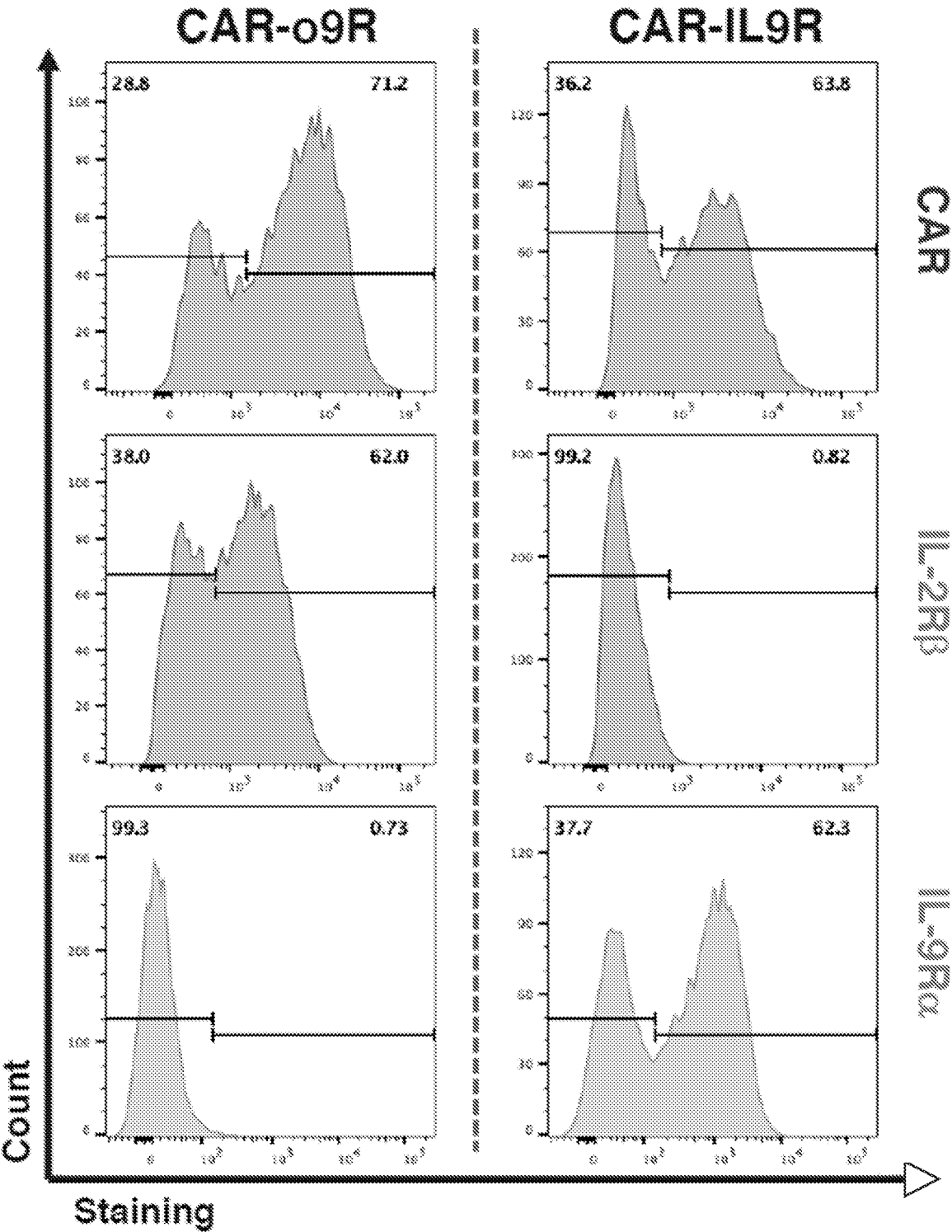


FIG. 16C – 2 of 2

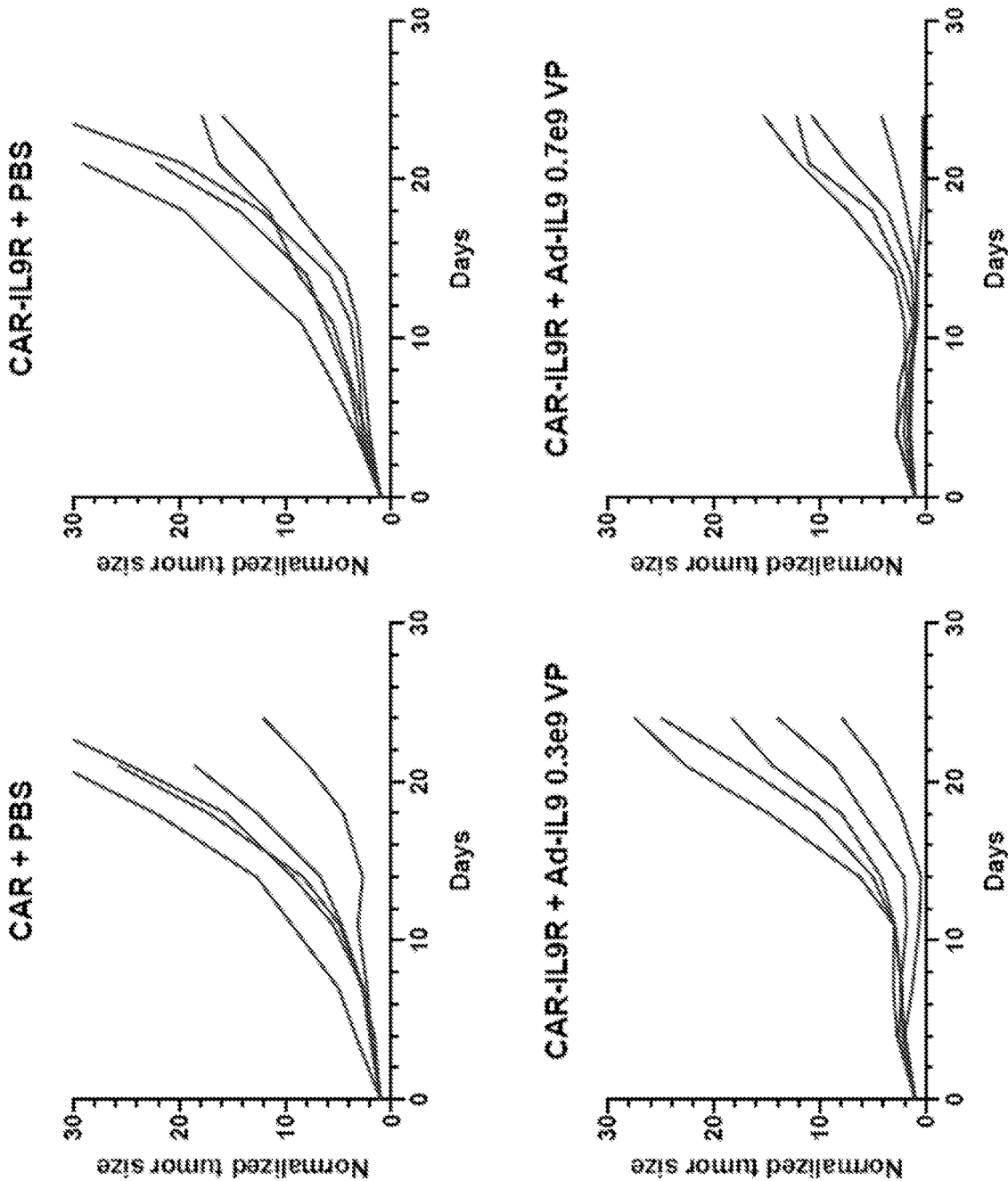


FIG. 16D – 1 of 2

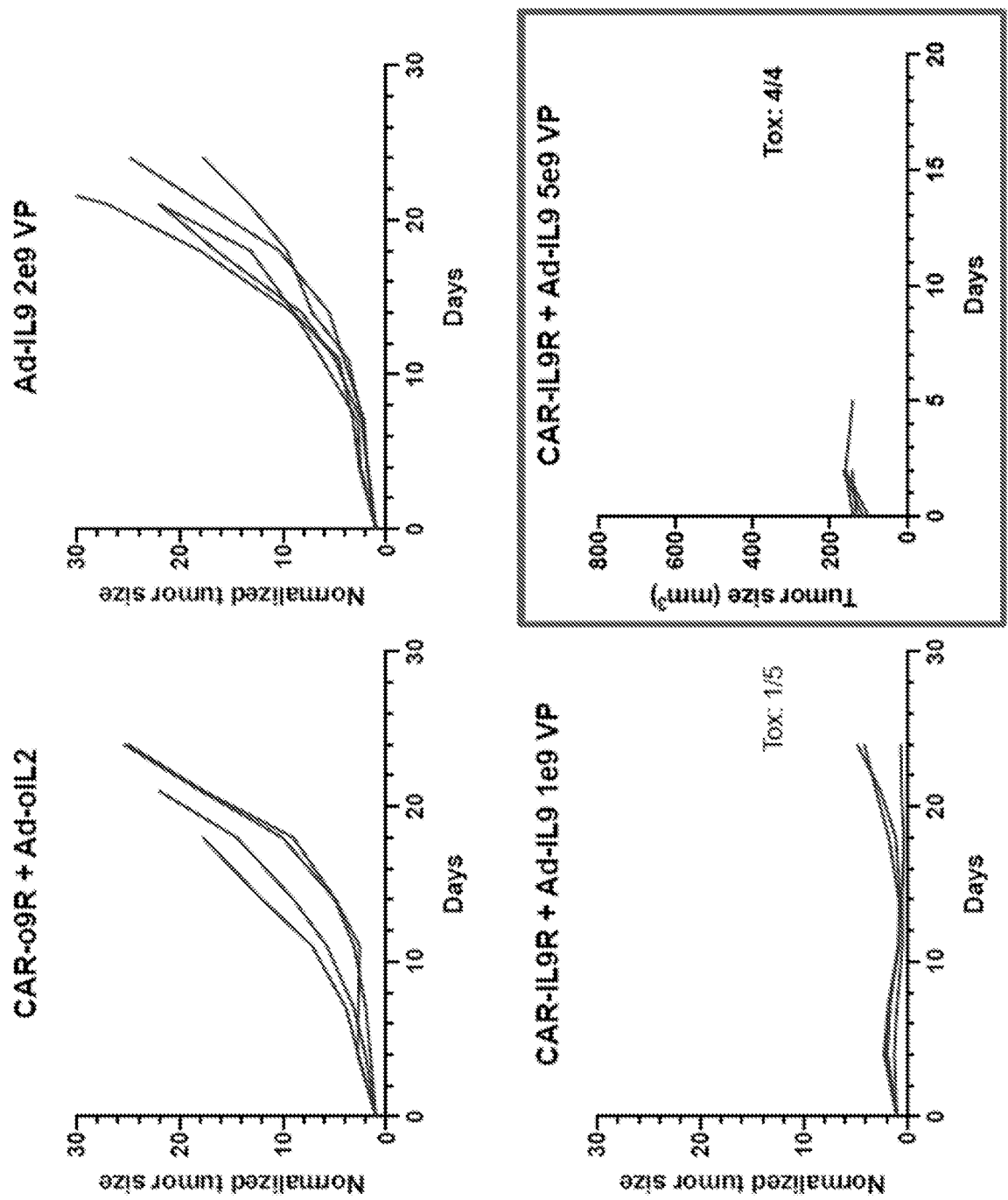


FIG. 16D – 2 of 2