

FIG. 1

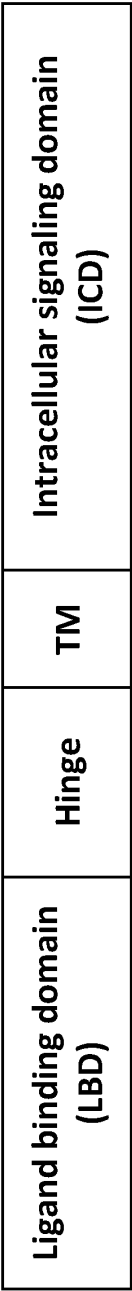


FIG. 2A

Ligand binding domain (LBD α)	Hinge	TM	Intracellular signaling domain (ICD)
Ligand binding domain (LBD β)	Hinge	TM	Intracellular signaling domain (ICD)

FIG. 2B

Ligand binding domain (LBD α)	Hinge	TM	Intracellular signaling domain (ICD)
Ligand binding domain (LBD β)			

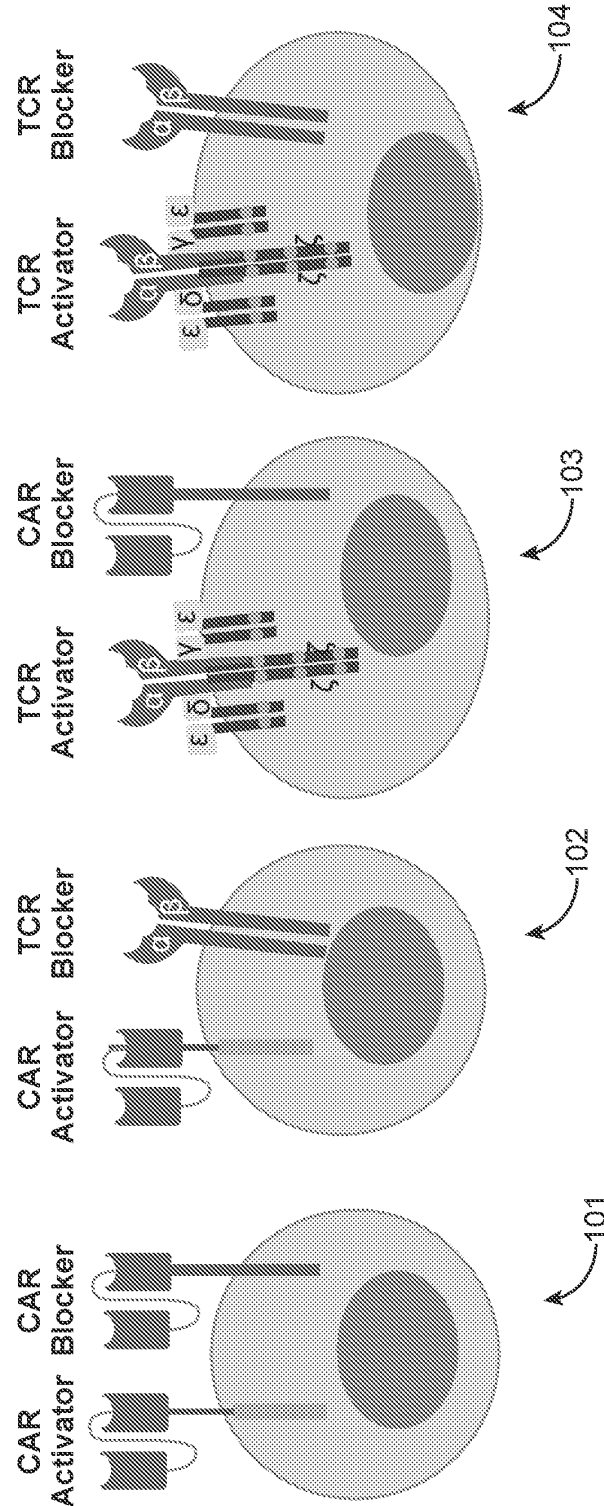


FIG. 3

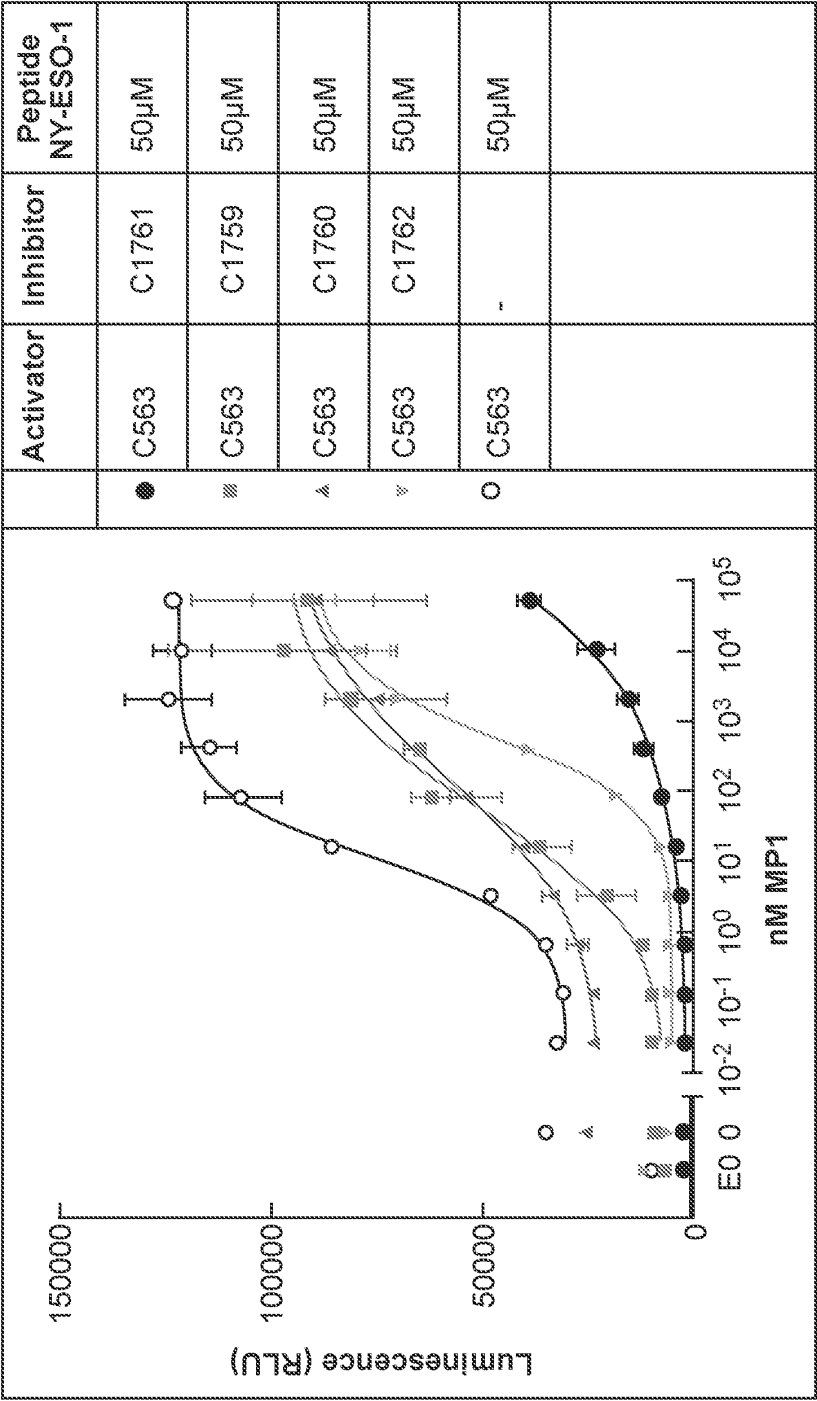


FIG. 4

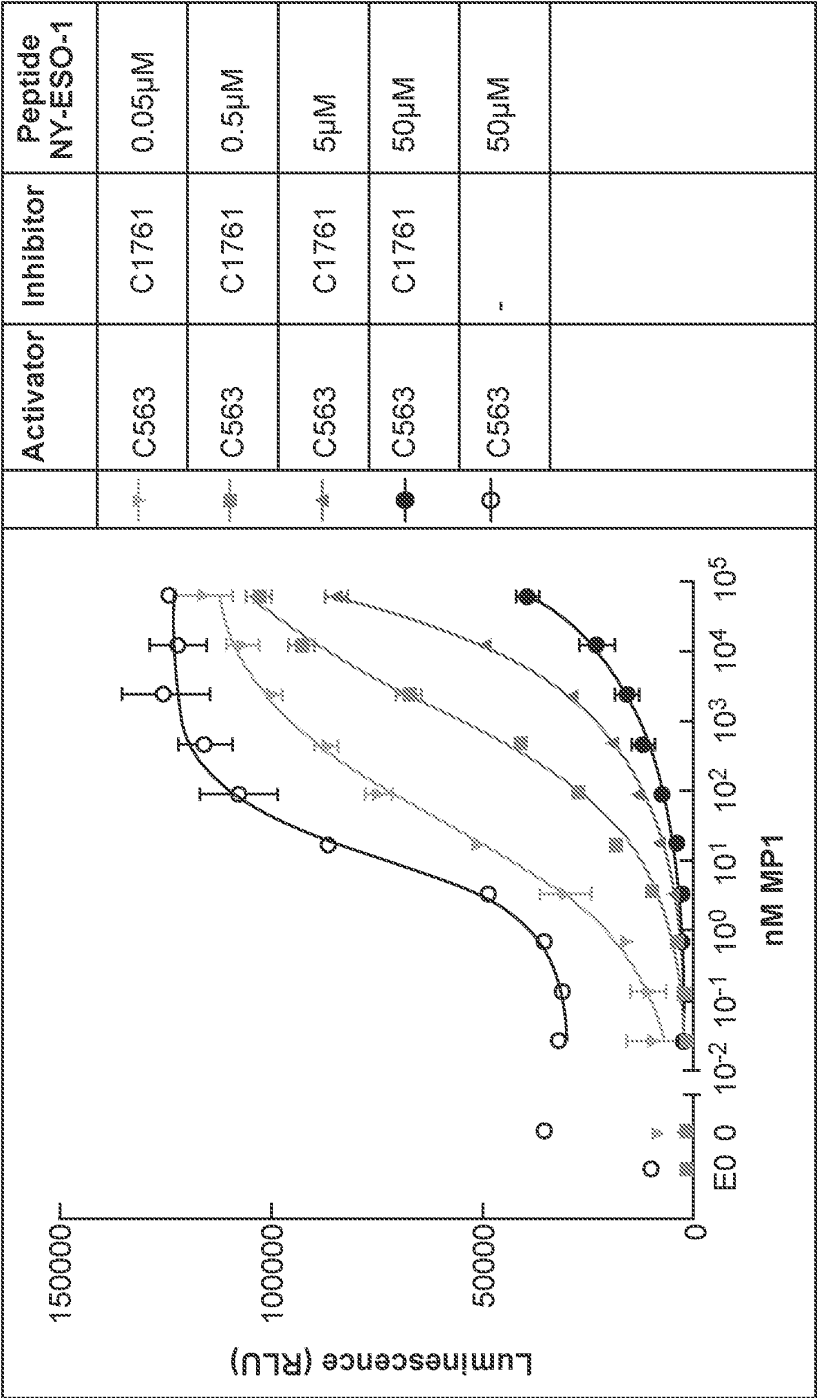


FIG. 5

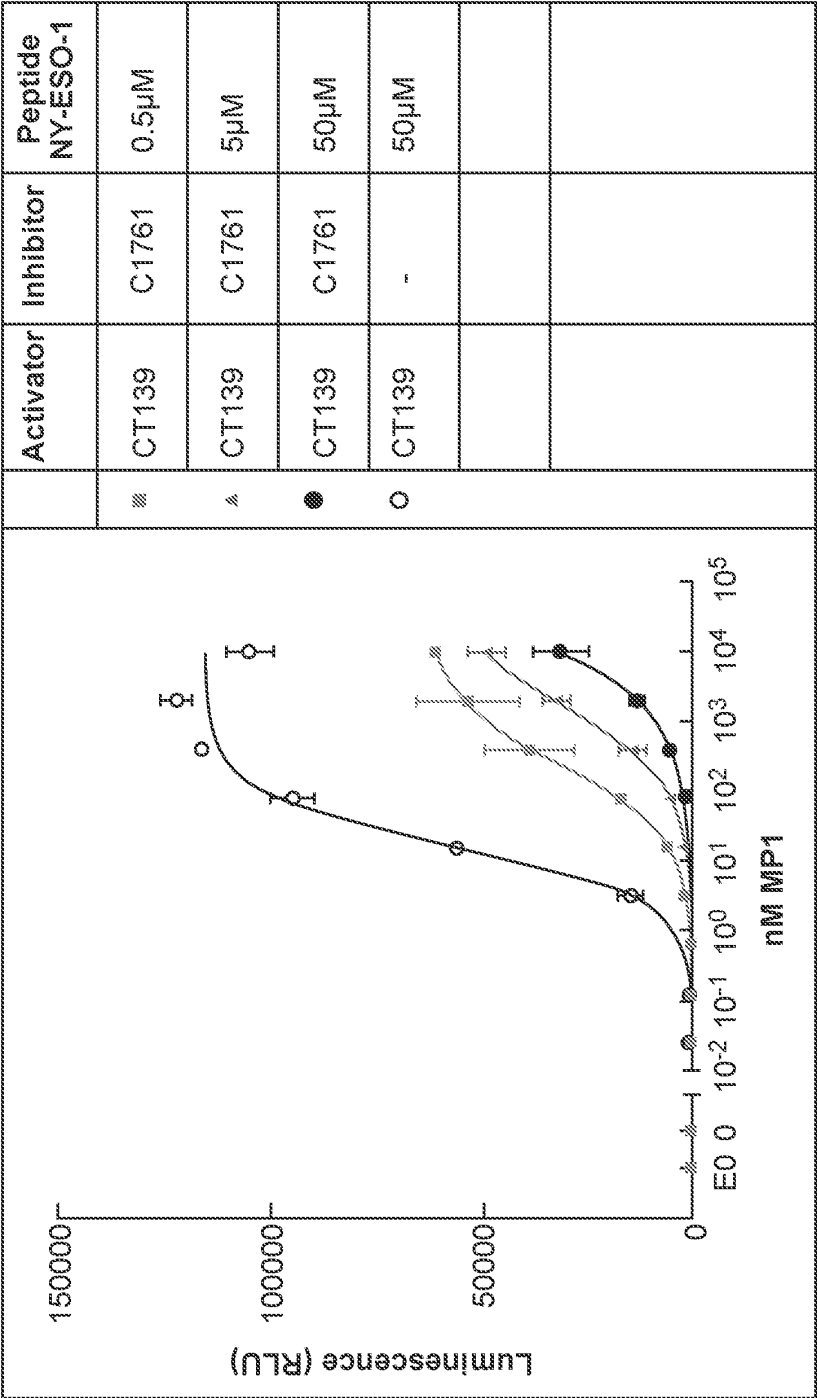


FIG. 6

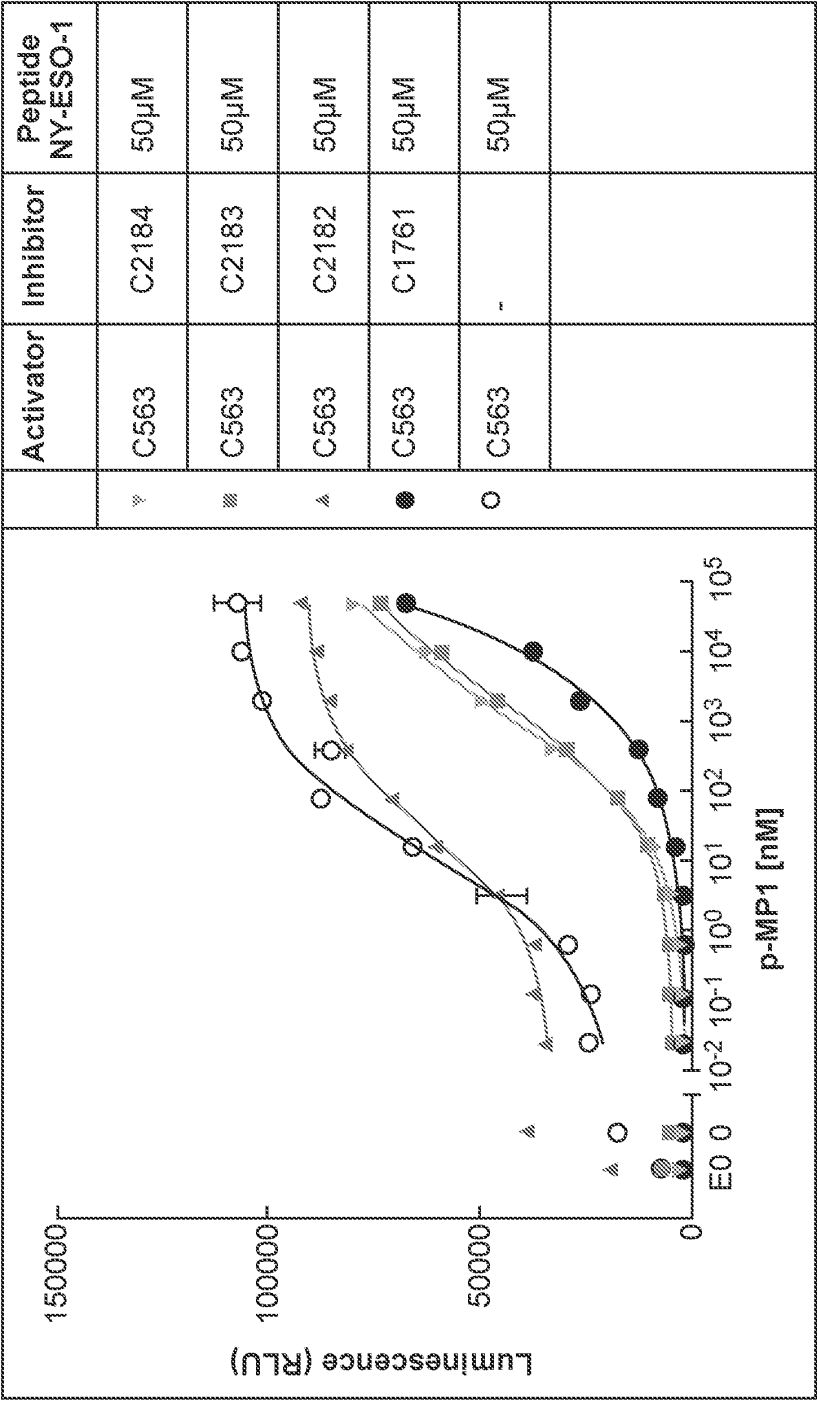


FIG. 7

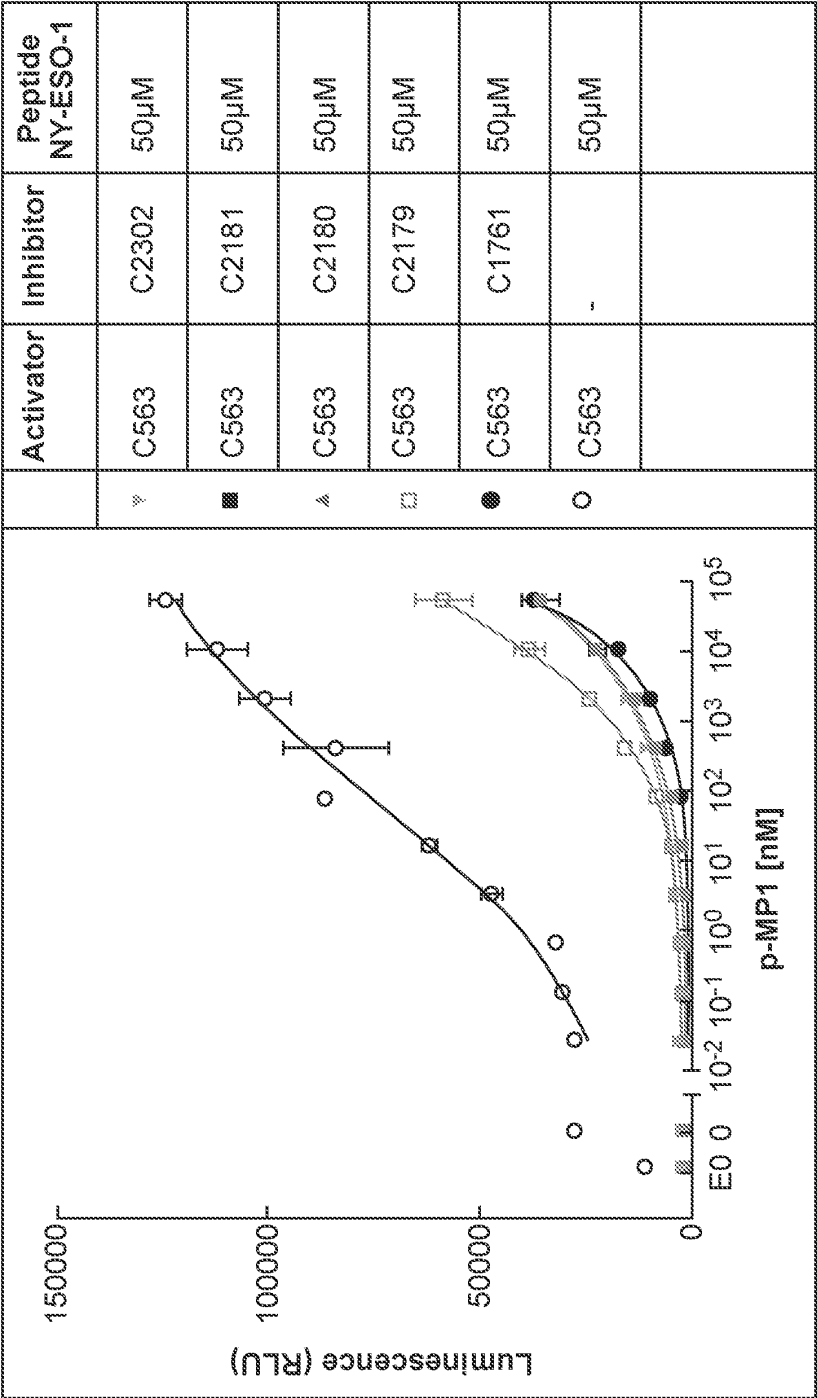


FIG. 8

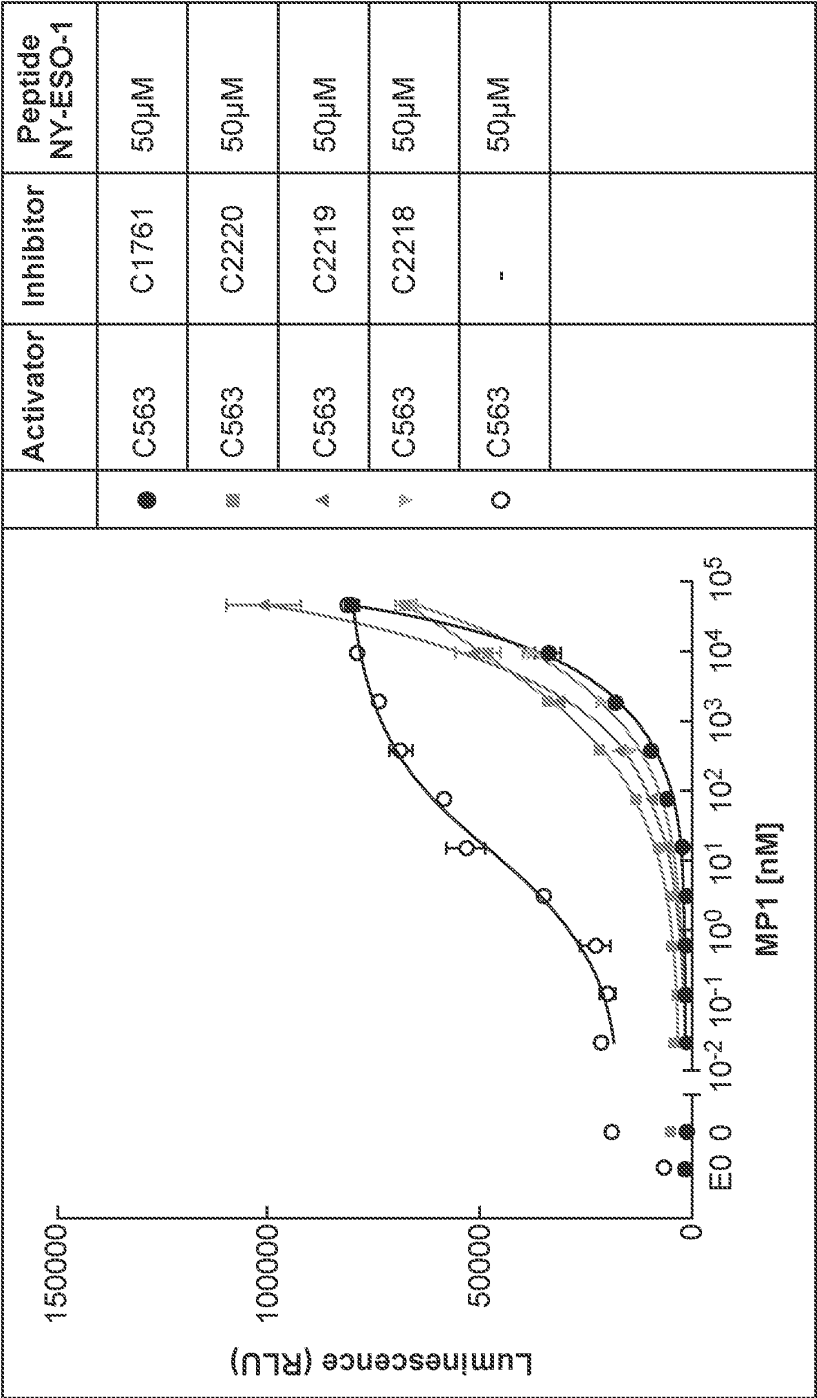


FIG. 9

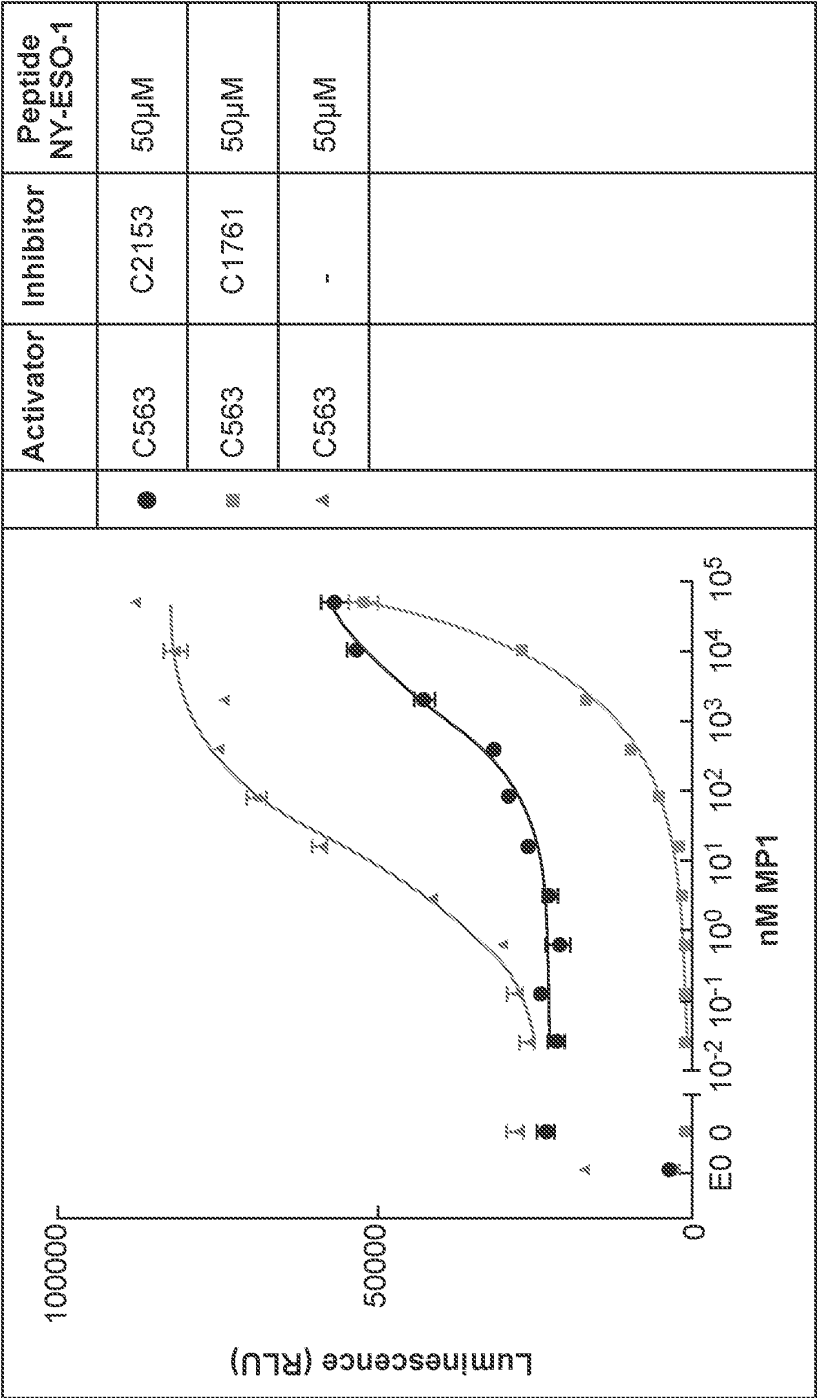


FIG. 10

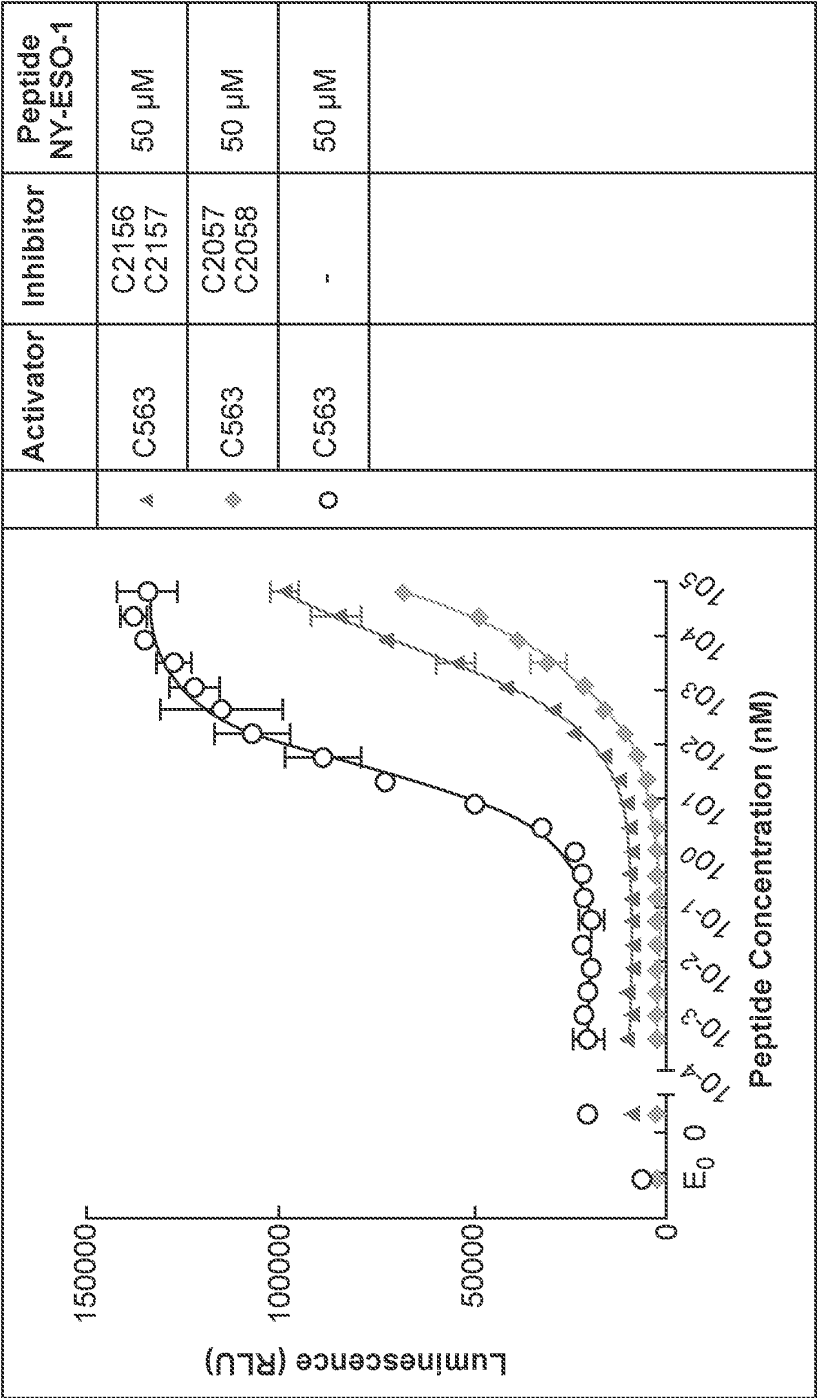


FIG. 11

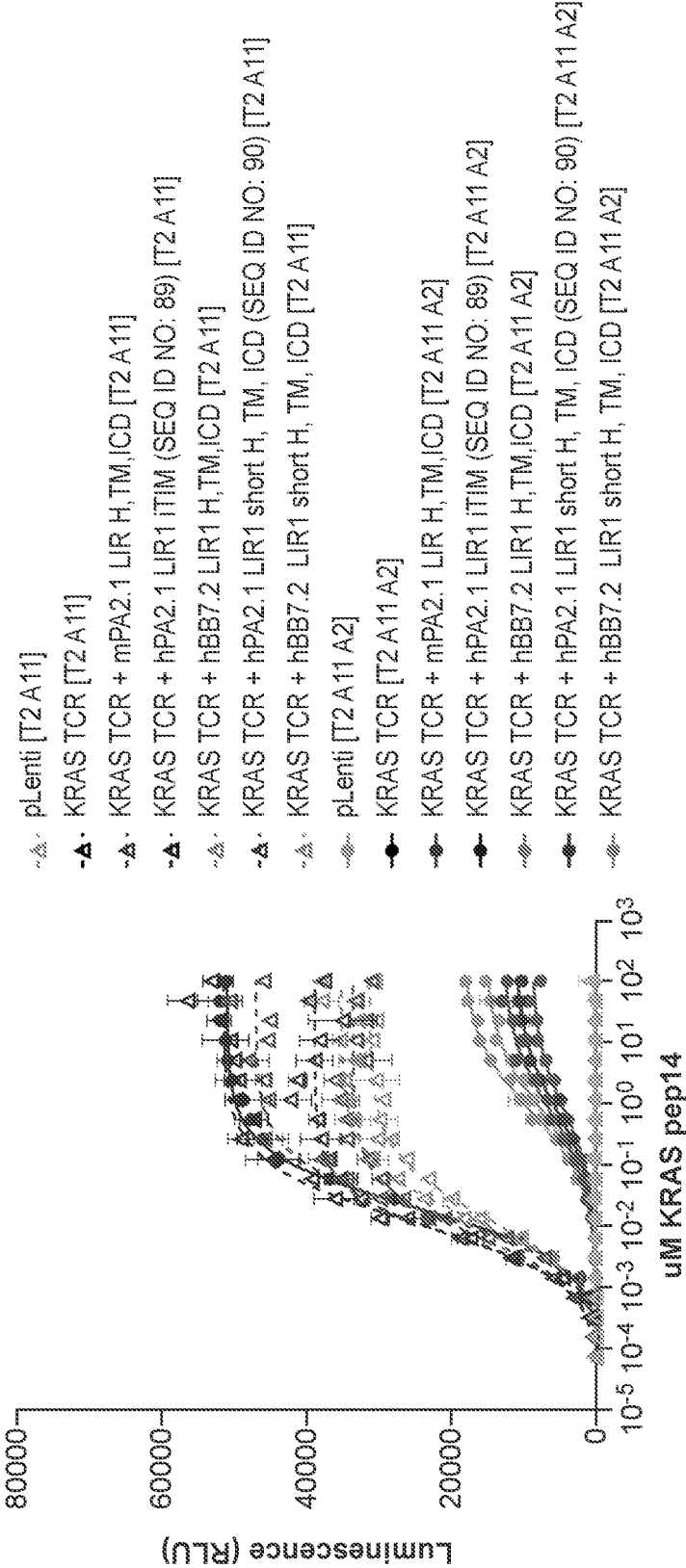


FIG. 12A

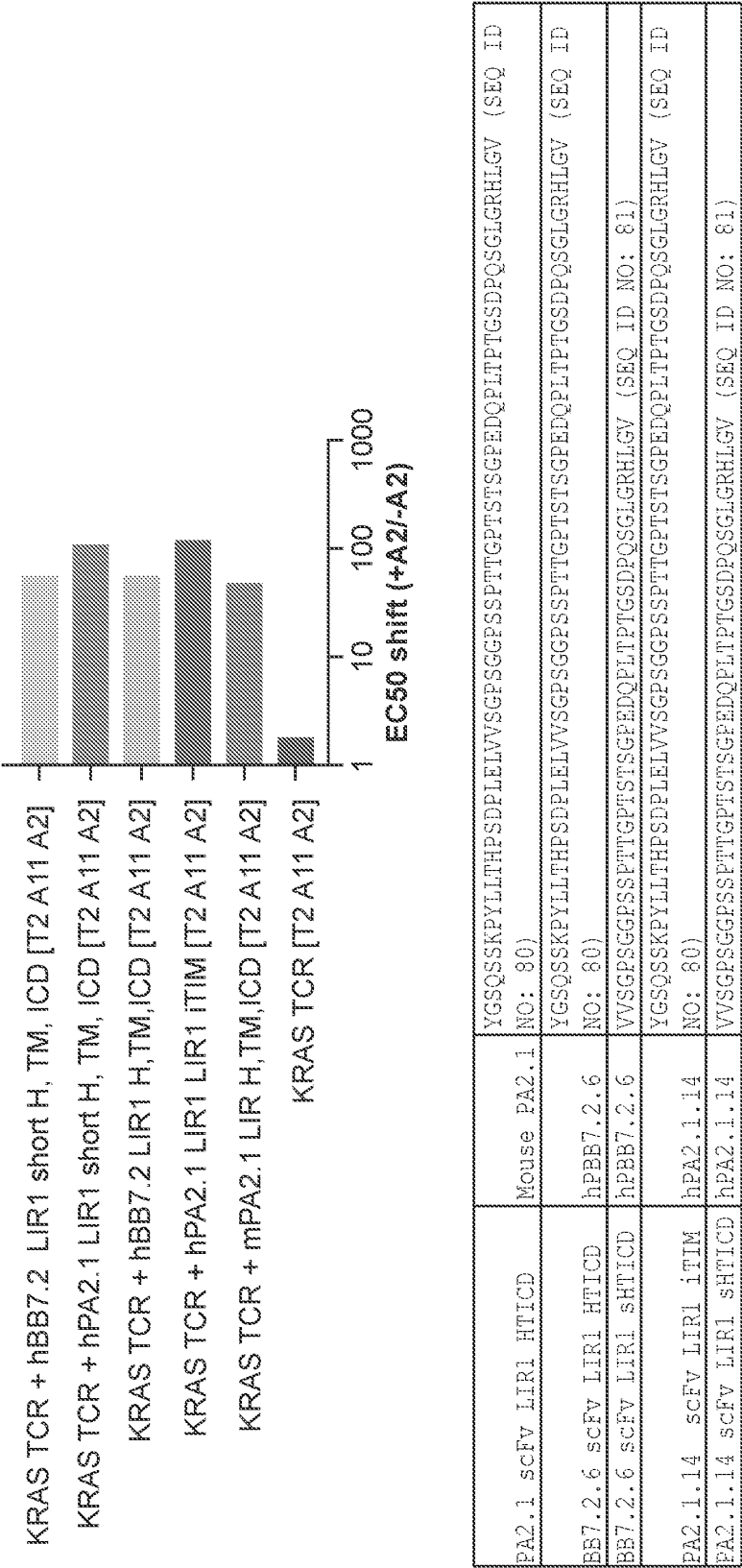


FIG. 12B

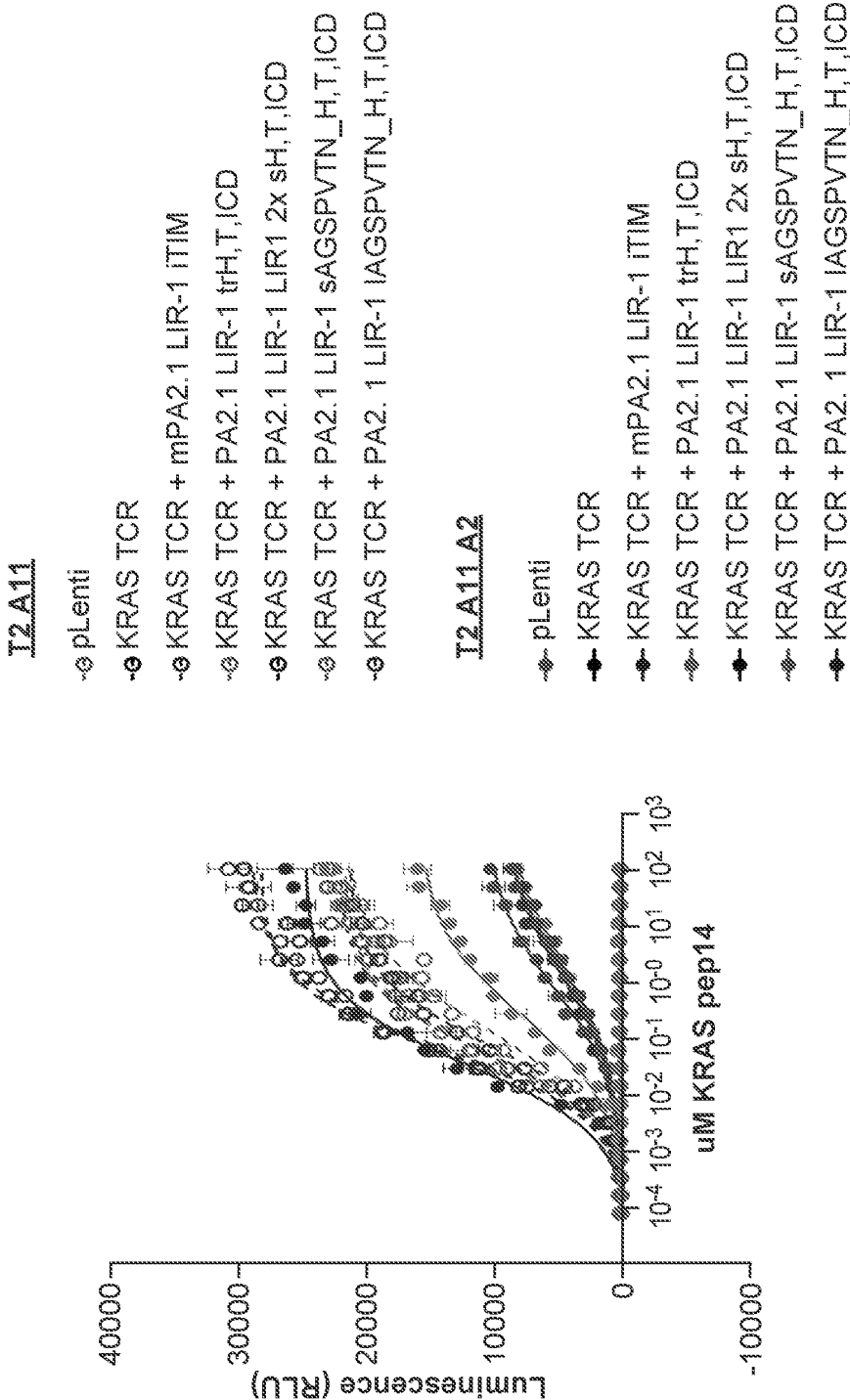
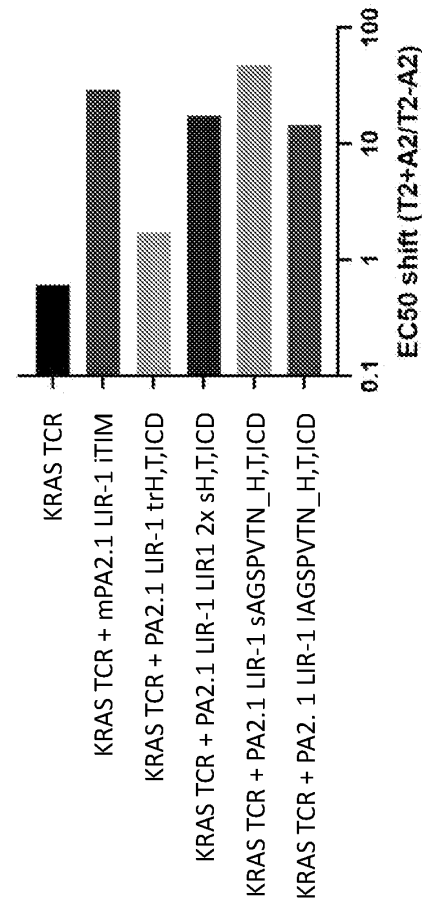


FIG. 13A

FIG. 13B



blocker	hinge	length
mPA2.1_scFv LIR1 iTIM	LIR1	64
PA2.1_scFv LIR1 trHTICD	LIR1 trunc	32
PA2.1_scFv LIR1 2x sH TICD	2x LIR1 short	85
PA2.1_scFv sAGSPVTN_H LIR1 TICD	sAGSPVTN	67
PA2.1_scFv IAGSPVTN_H LIR1 TICD	IAGSPVTN	75

mPA2.1_scFv LIR1 iTIM	SSYGSSSKPYLLTHPSDPLELVSGPSGGPSSPTTGPTSTSGPEDQPLTPTGSDPQSGLGRHLGVVIGIL (SEQ ID NO: 115)
PA2.1_scFv LIR1 trHTICD	SSTTGPTSTSGPEDQPLTPTGSDPQSGLGRHLGVVIGIL (SEQ ID NO: 116)
PA2.1_scFv sAGSPVTN_H LIR1 TICD	SSAGSGGGSGGSPVPSTPTPTSPSTPTPTSPSGSGNSSGSGSPVPSTPTPTSPSTPTPTSPSASVVIGIL (SEQ ID NO: 117)
PA2.1_scFv IAGSPVTN_H LIR1 TICD	SSAGSGGGSGGSPVPSTPTPTNSSTPTPTSPSPVPSTPTPTNSSTPTPTNSSTPTPTNSSTPTPTSPSASVVIGIL (SEQ ID NO: 118)
PA2.1_scFv LIR1 2x sH TICD	SSVWSGPSGGPSSPTTGPTSTSGPEDQPLTPTGSDPQSGLGRHWVSGPSGGPSSPTTGPTSTSGPEDQPLTPTGSDPQSGLGRHLGVVIGIL (SEQ ID NO: 119)

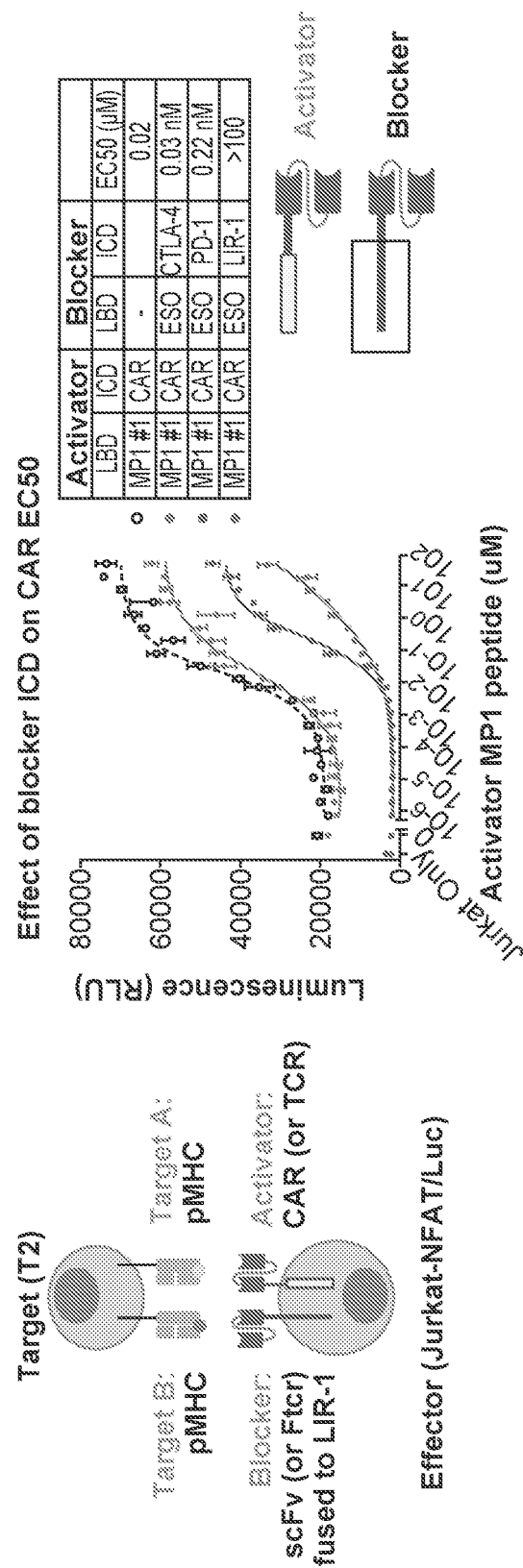


FIG. 14B

FIG. 14A

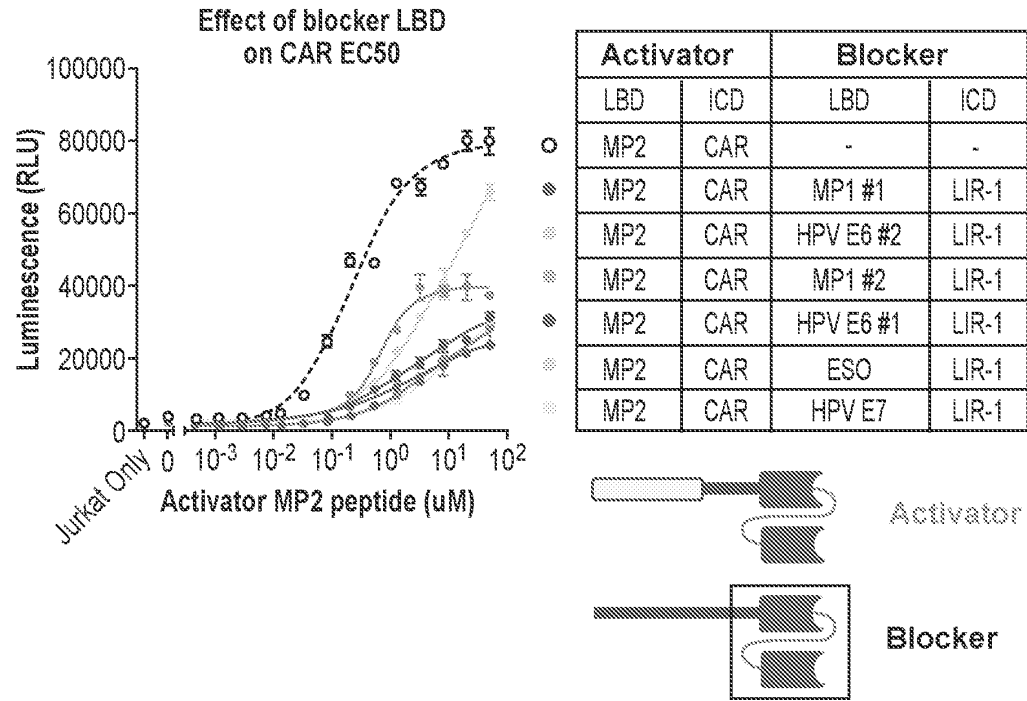


FIG. 14C

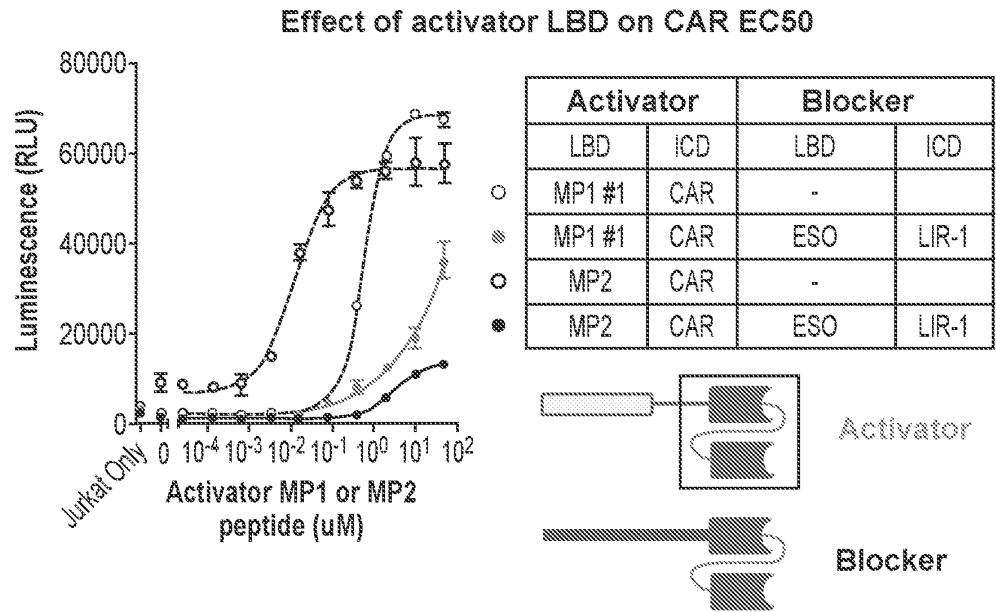


FIG. 14D

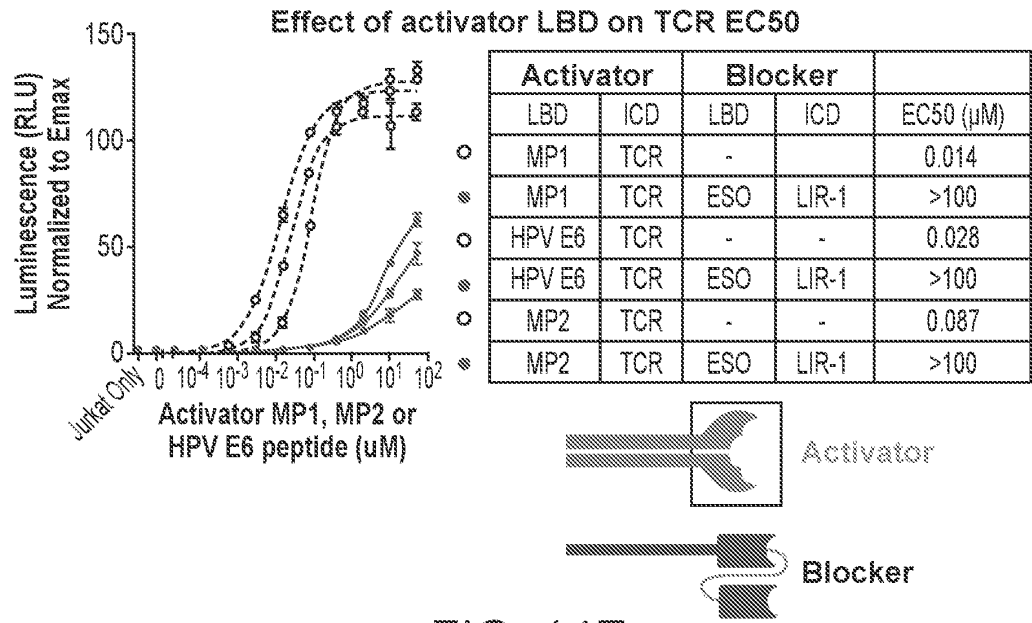


FIG. 14E

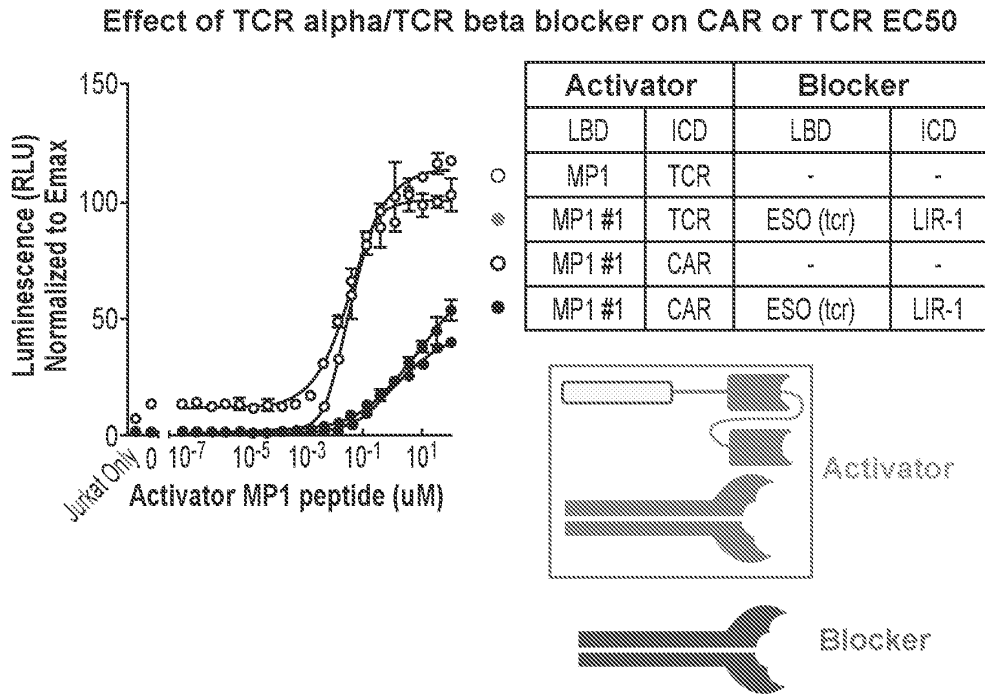


FIG. 14F

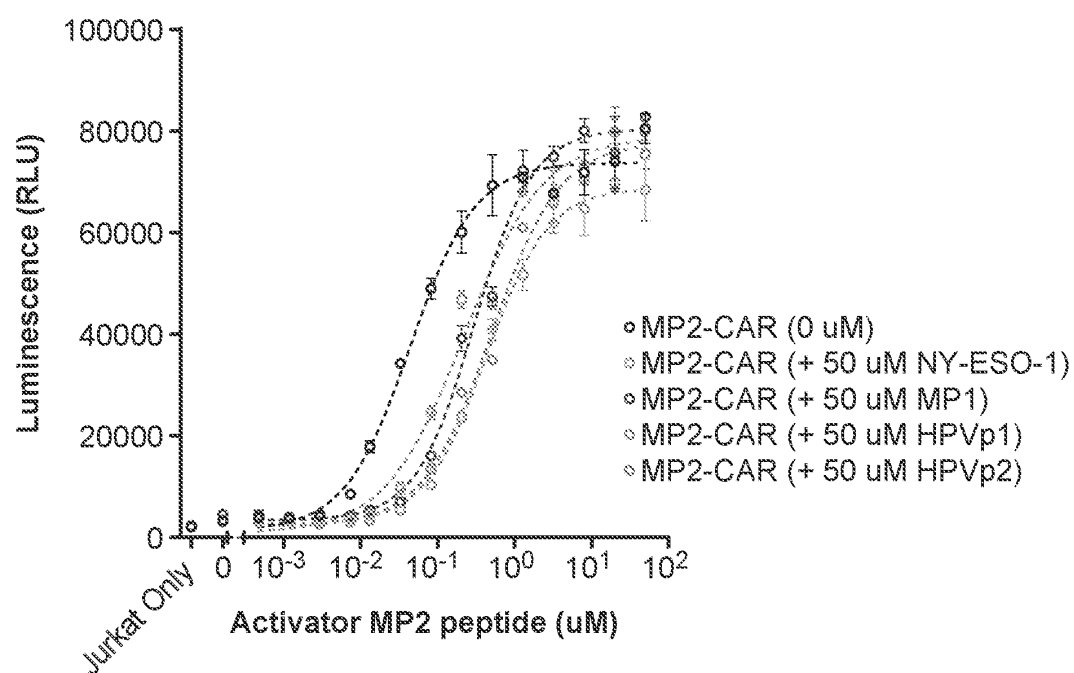
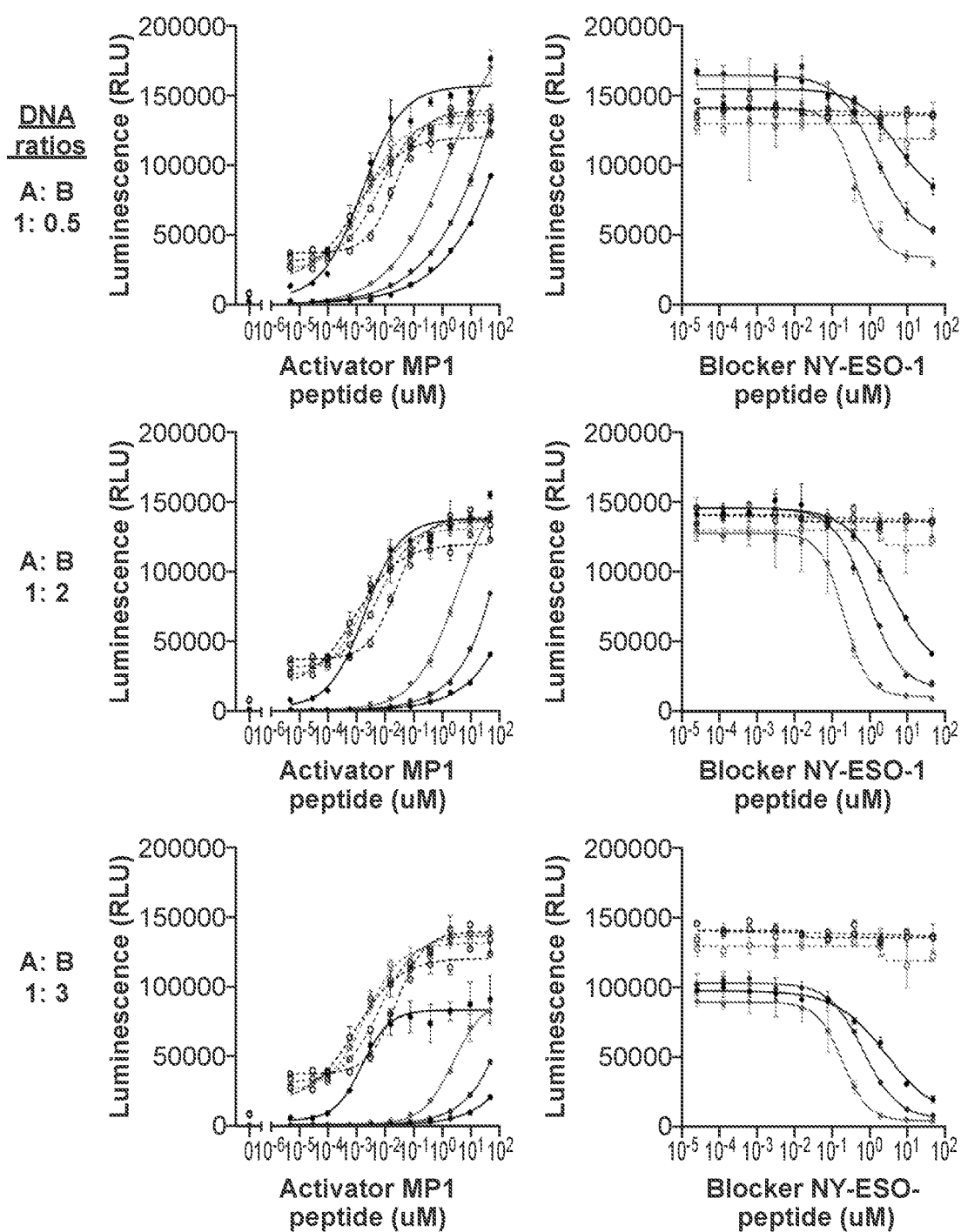


FIG. 15



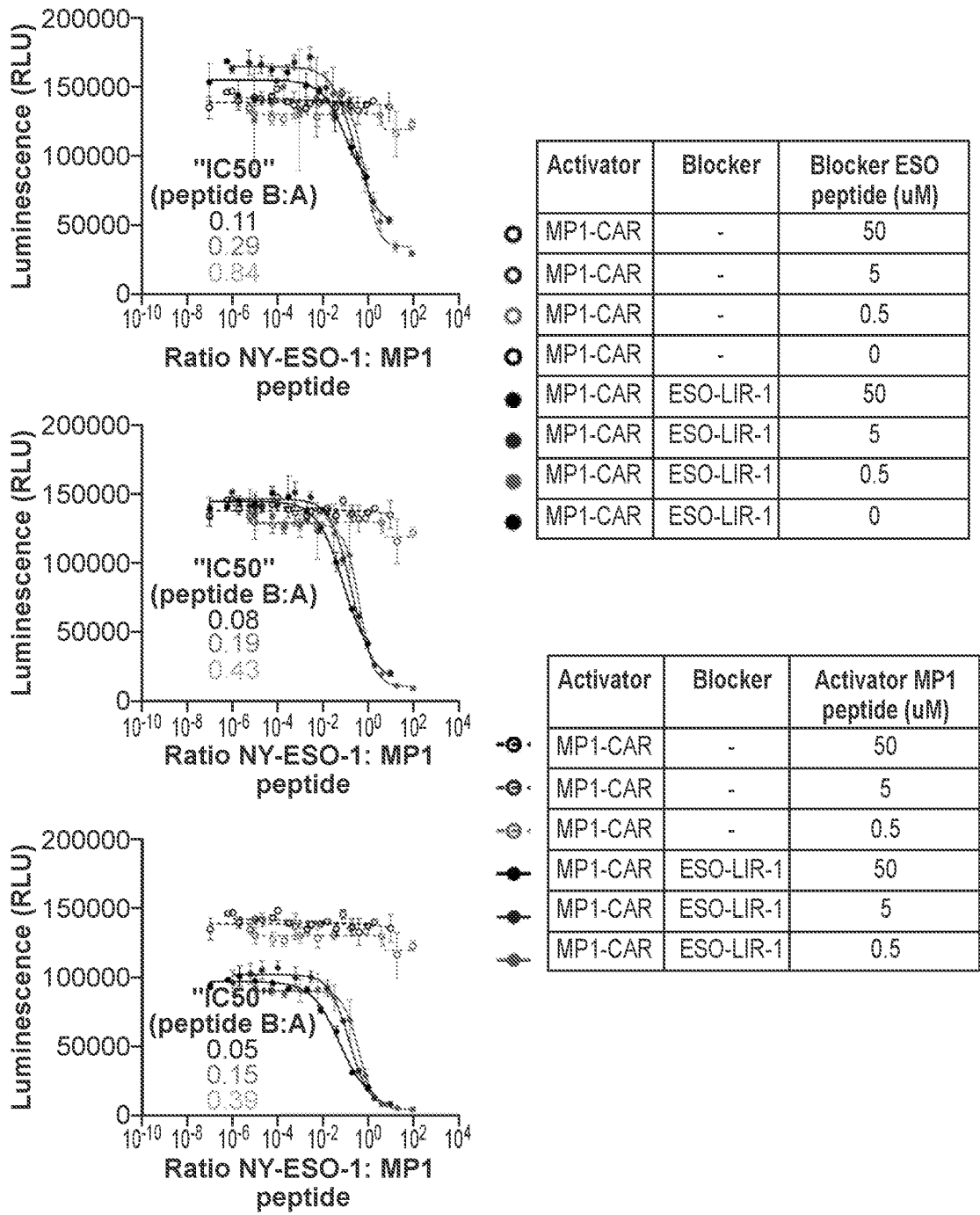


FIG. 16C

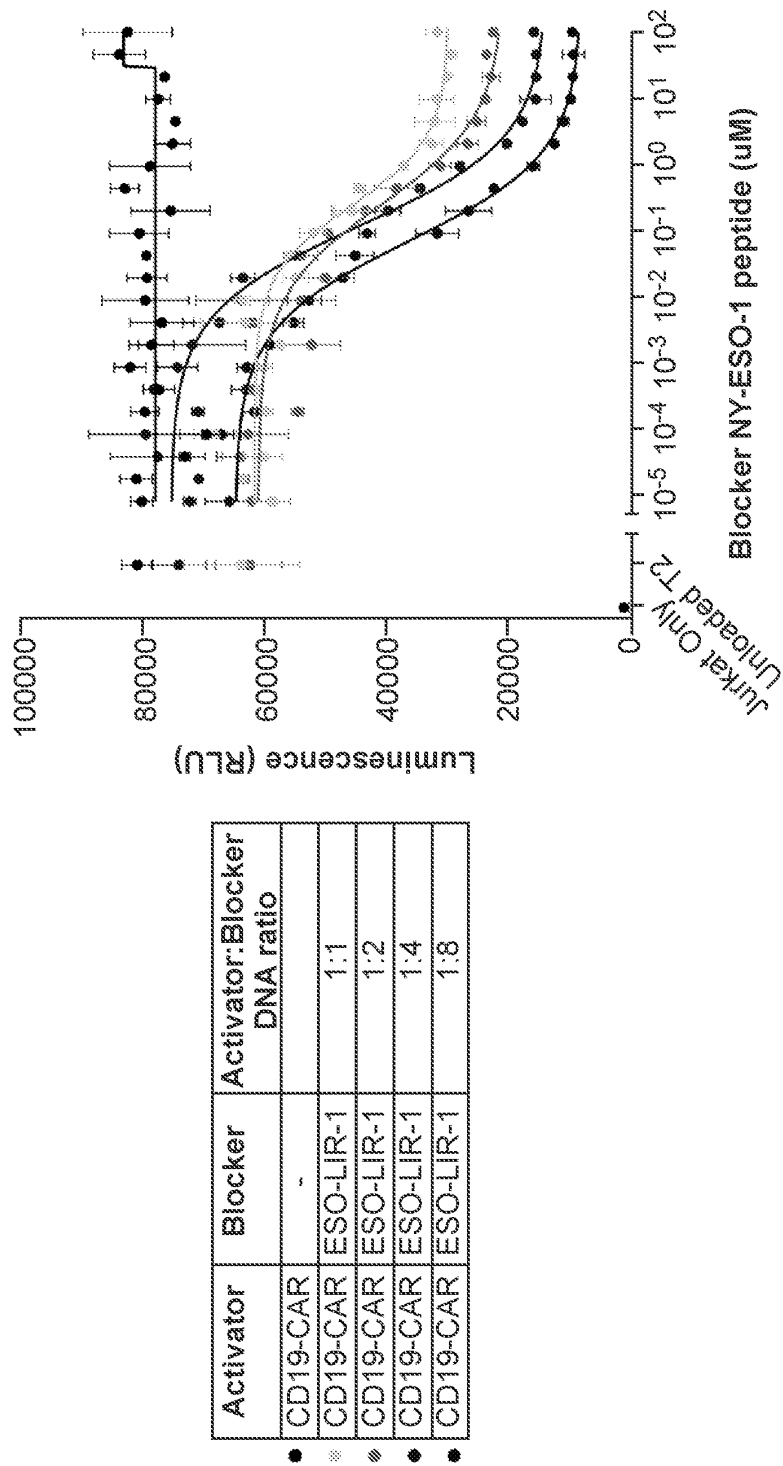
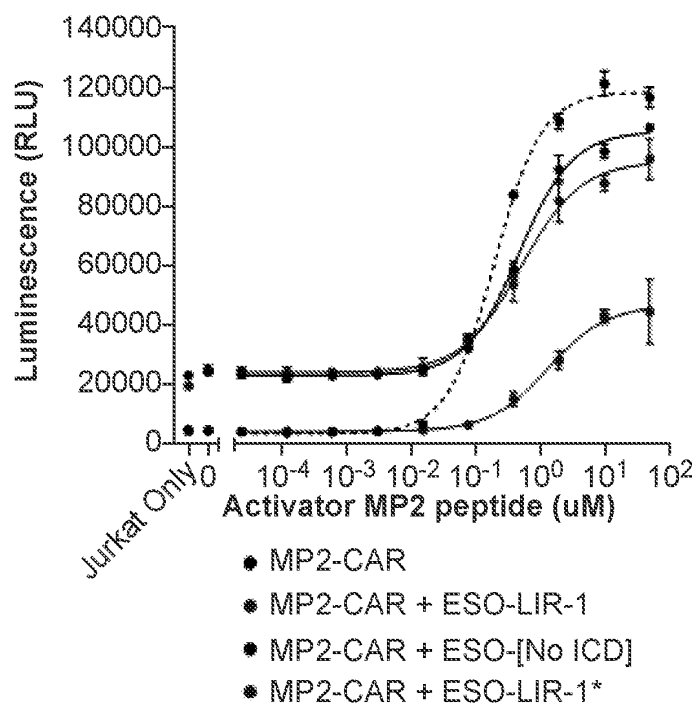
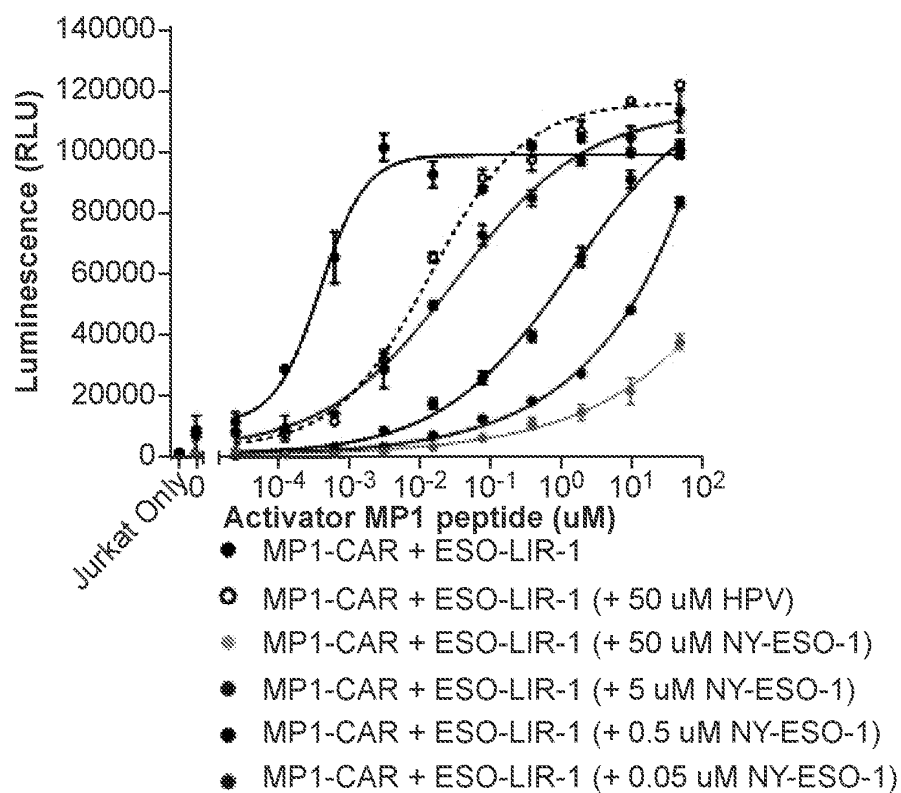


FIG. 16D



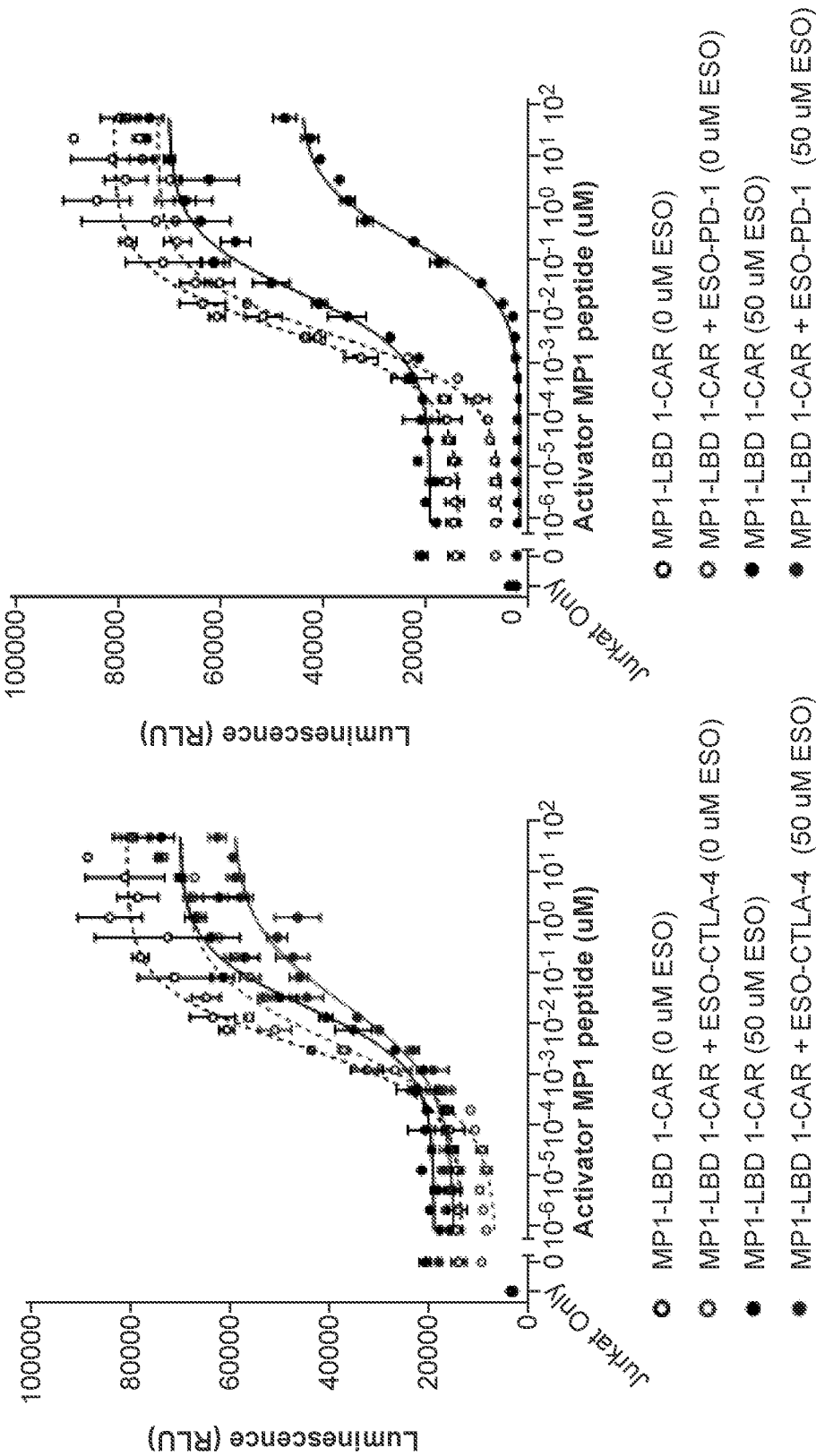


FIG. 17D

FIG. 17C

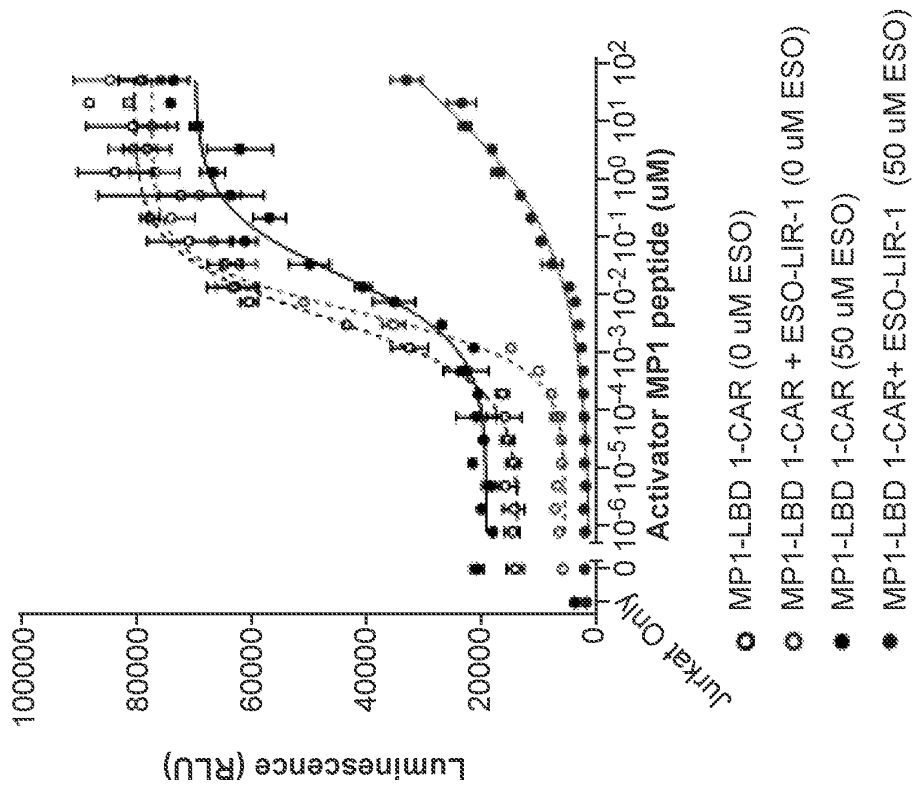
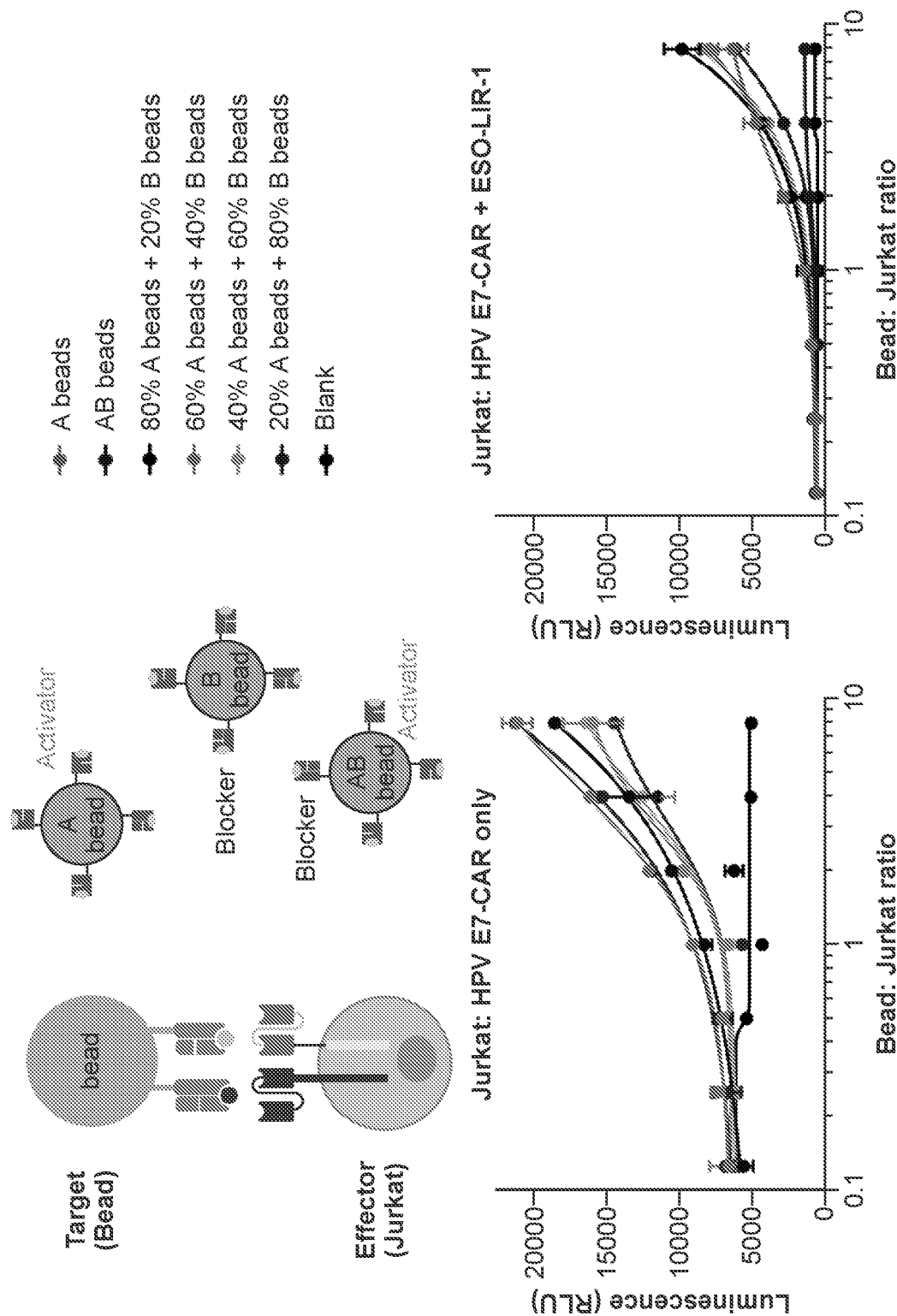


FIG. 17E



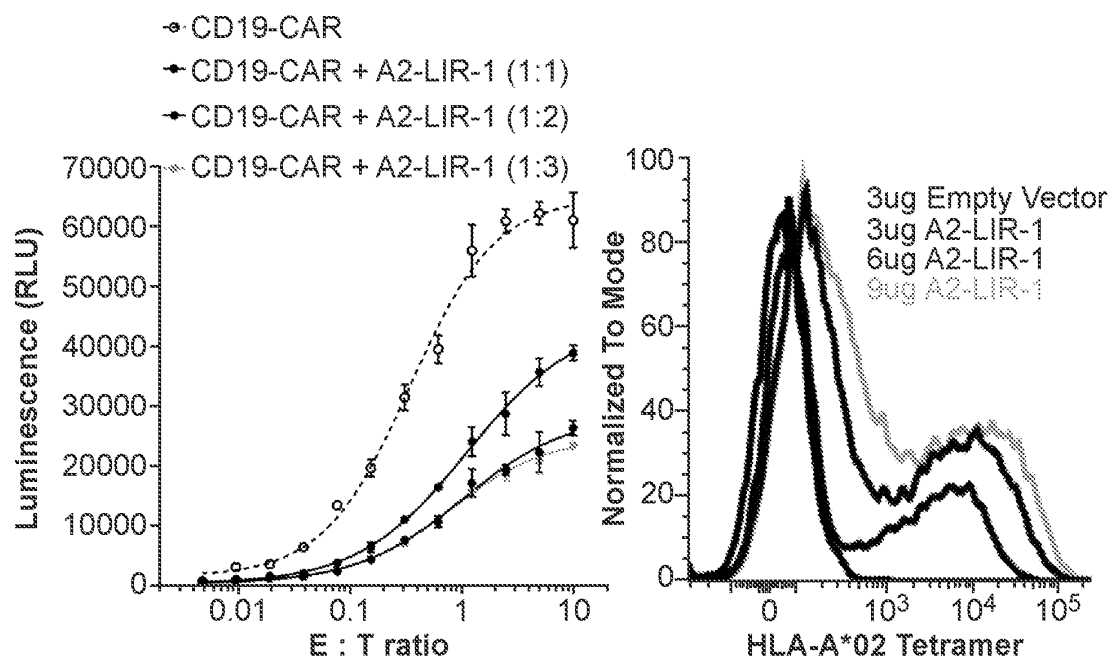


FIG. 18B

FIG. 18C

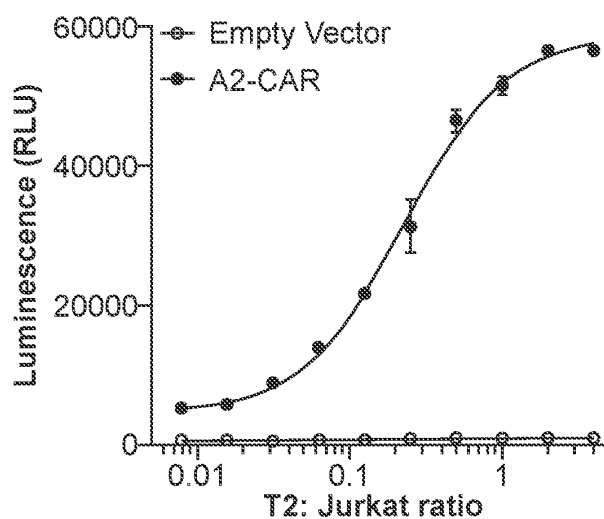


FIG. 18D

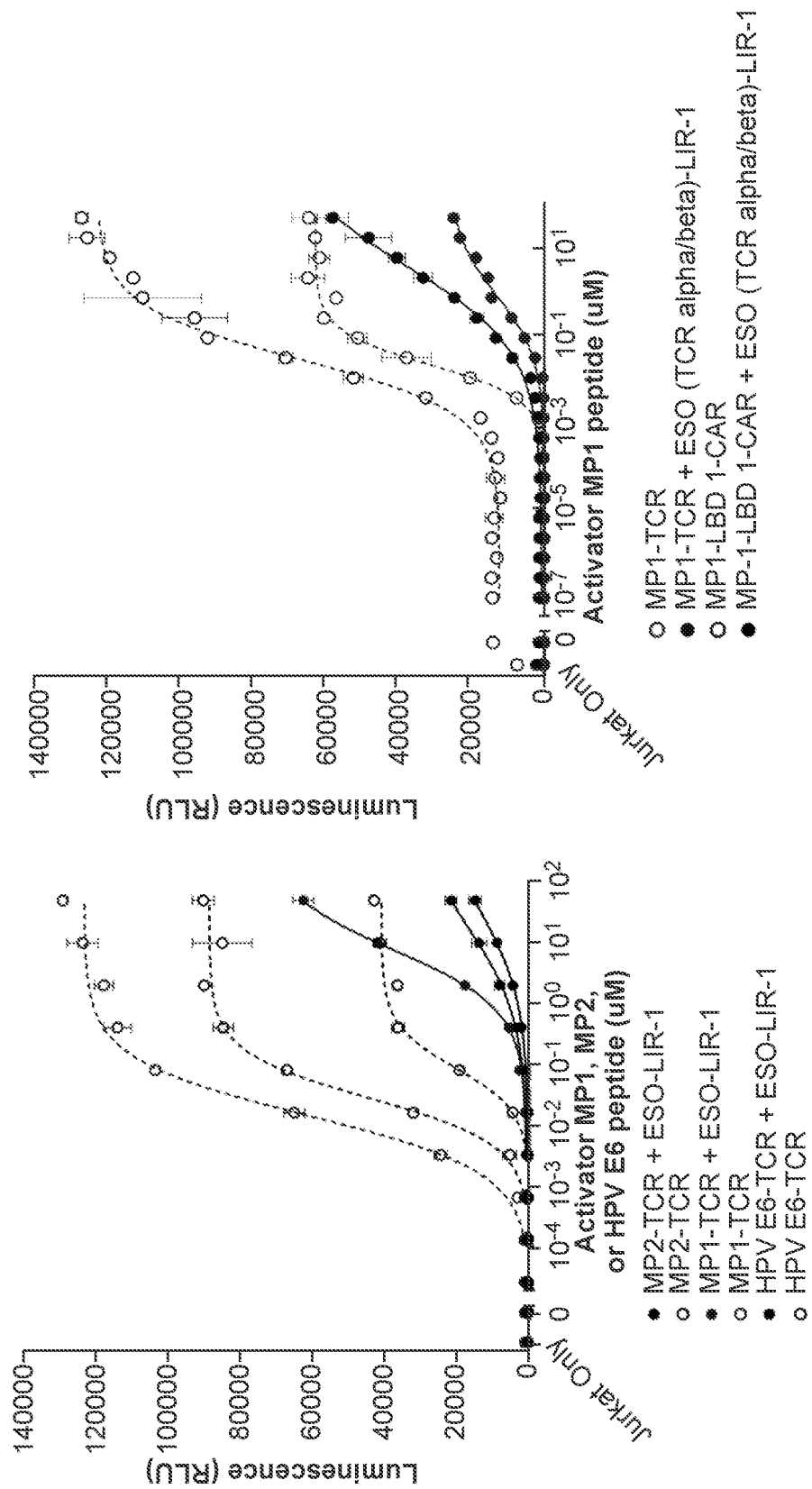


FIG. 19B

FIG. 19A

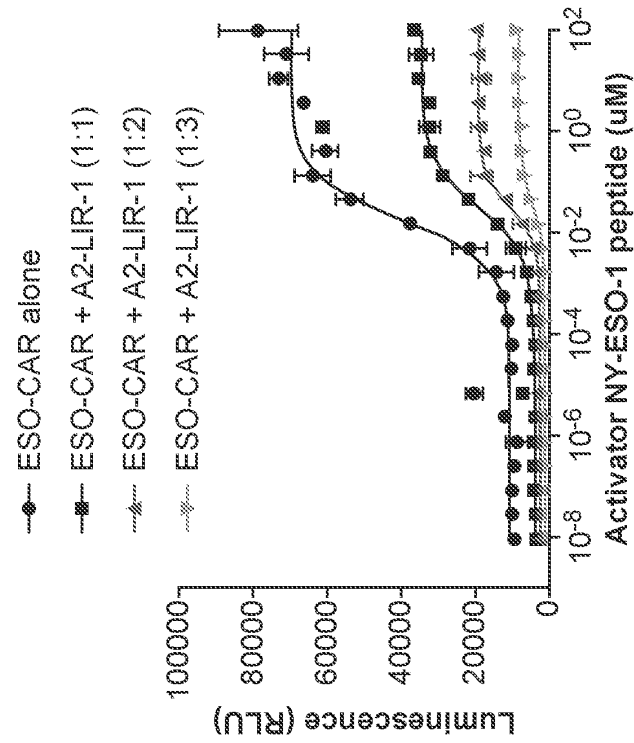


FIG. 20A

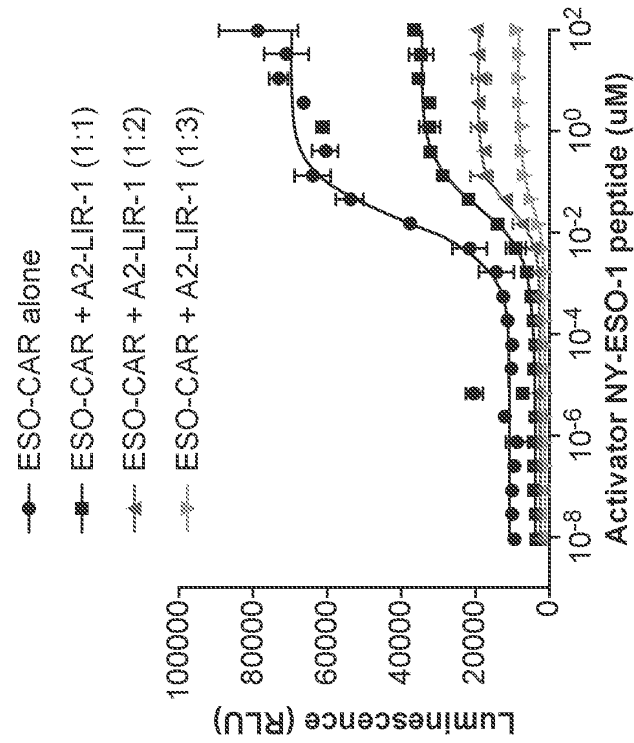


FIG. 20B

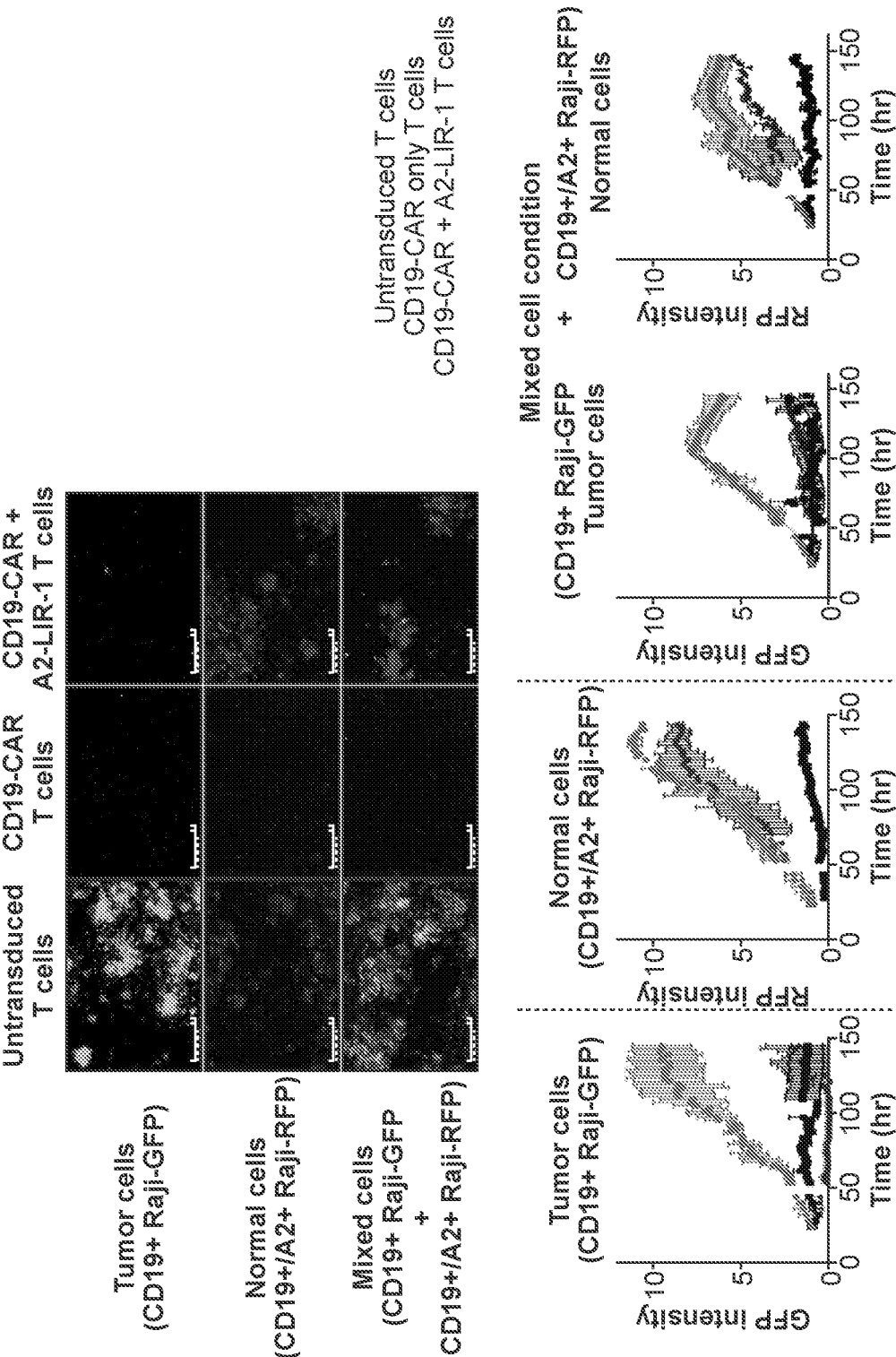


FIG. 21A

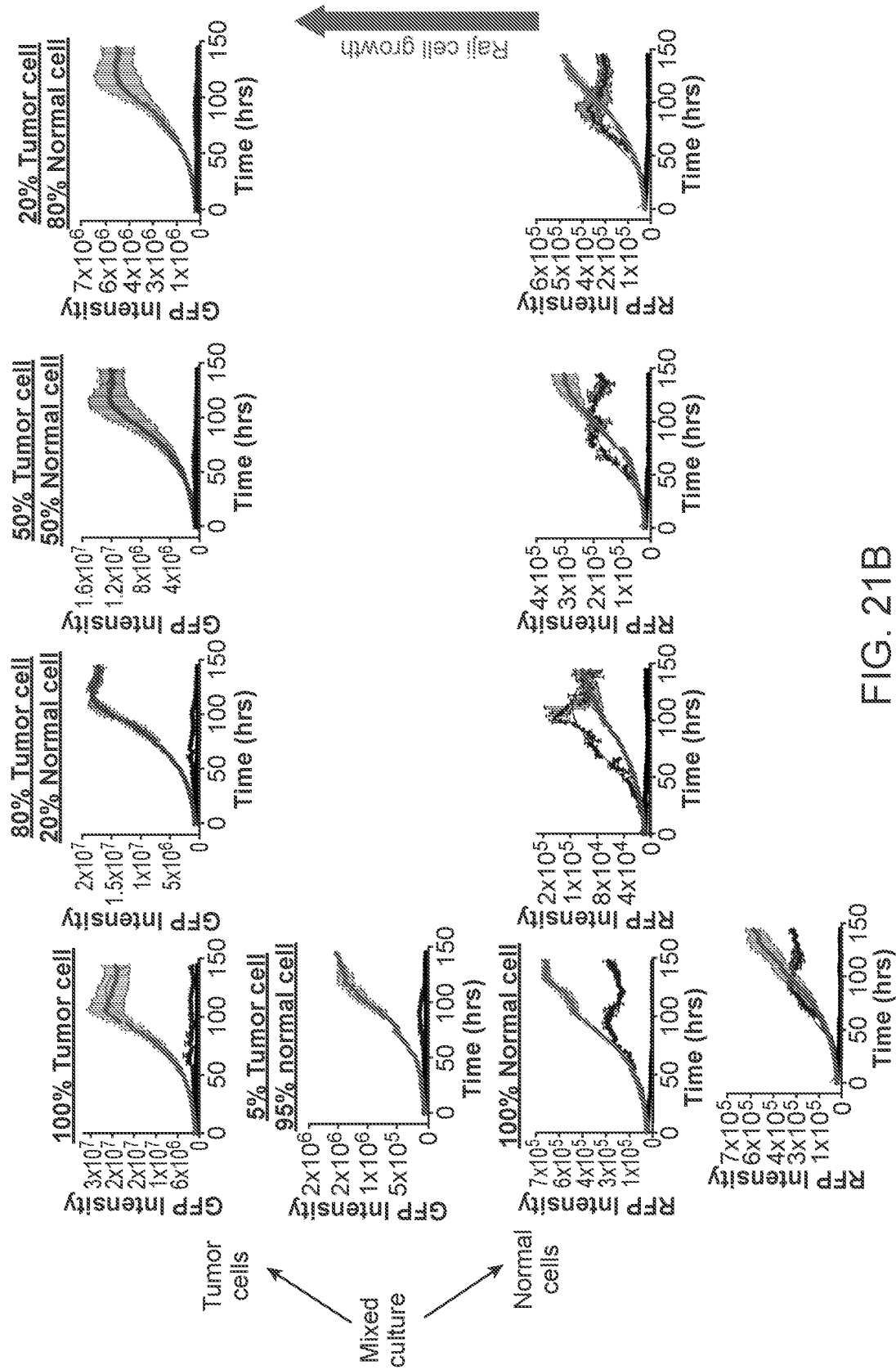


FIG. 21B

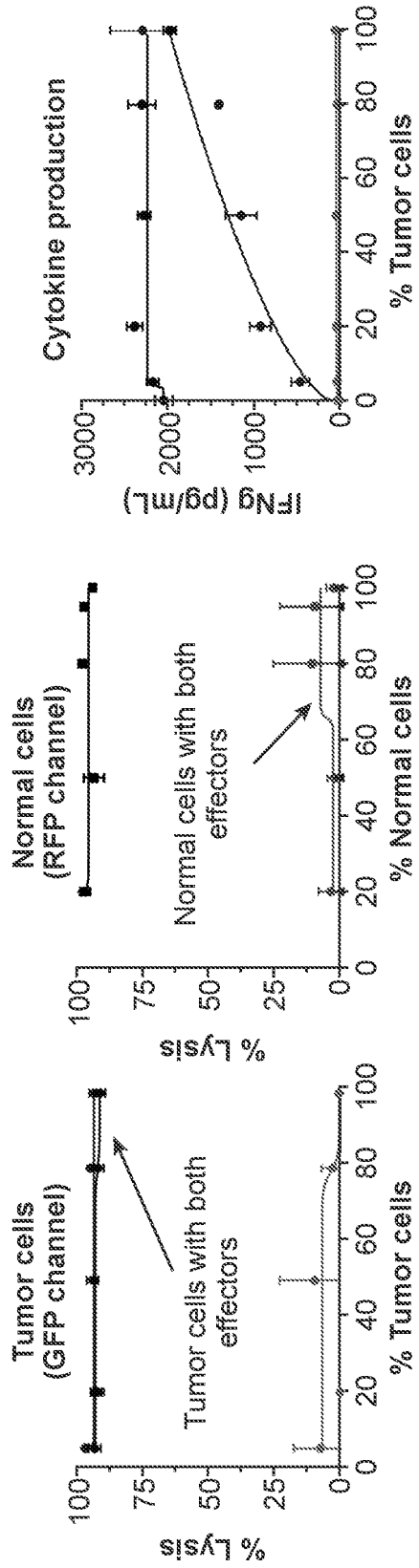


FIG. 21C

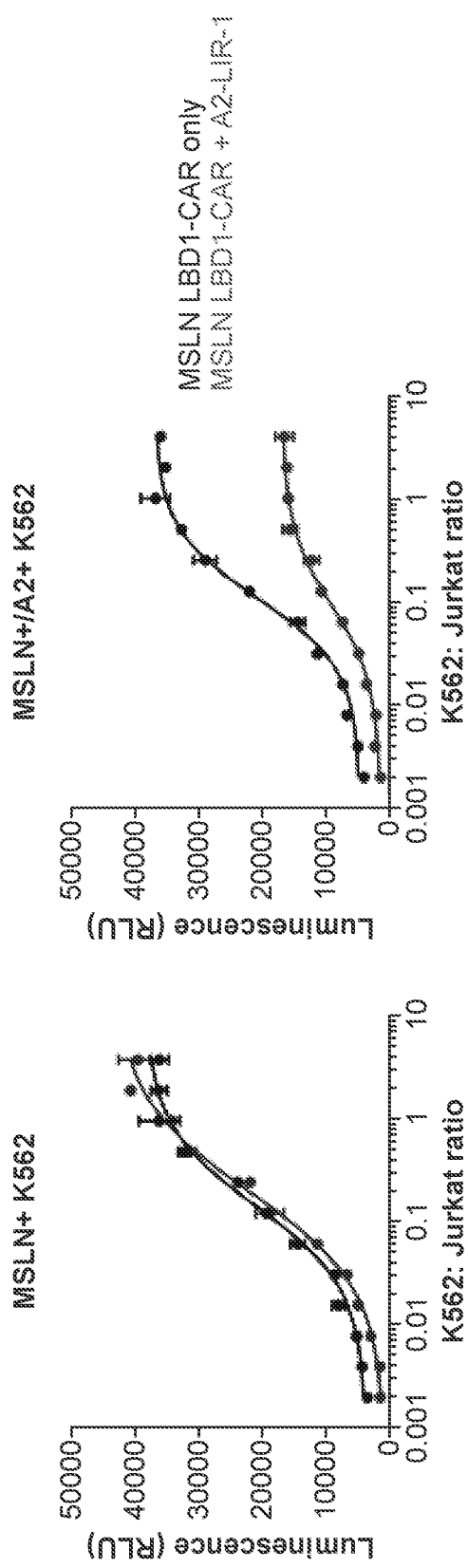


FIG. 22A

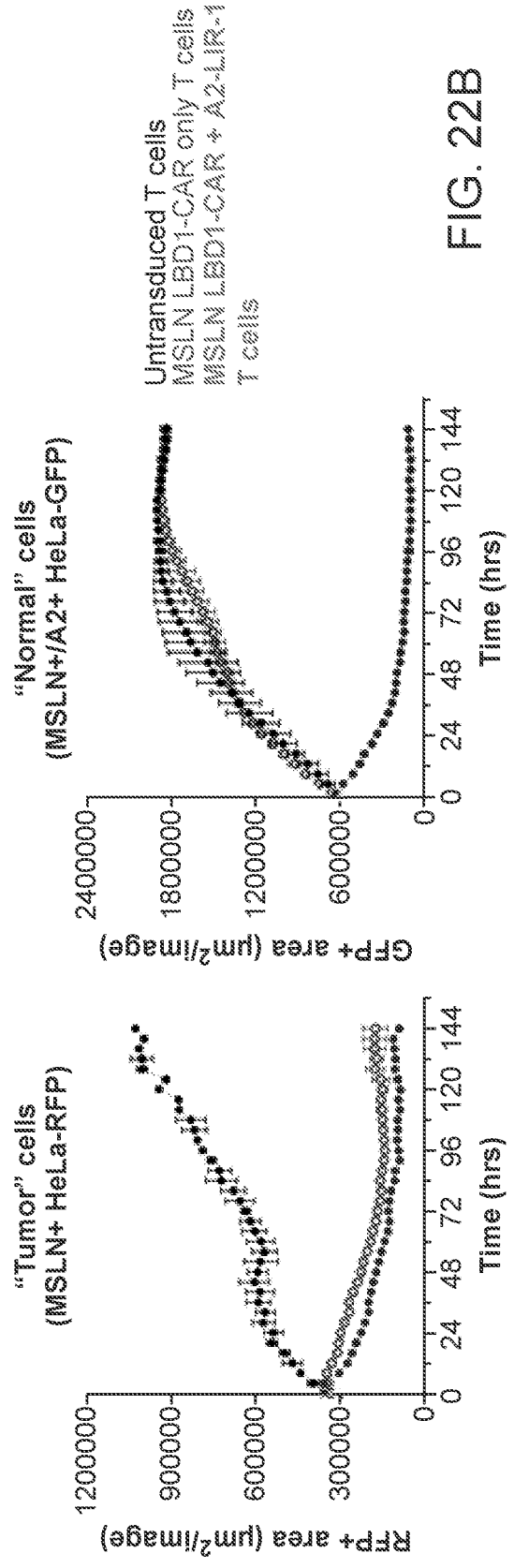


FIG. 22B

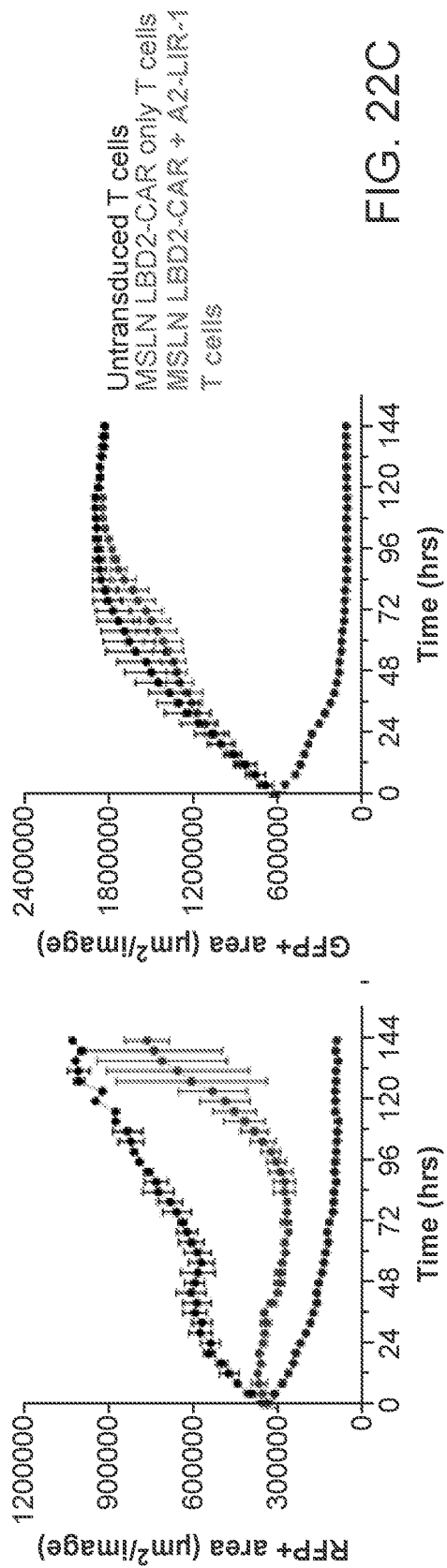


FIG. 22C

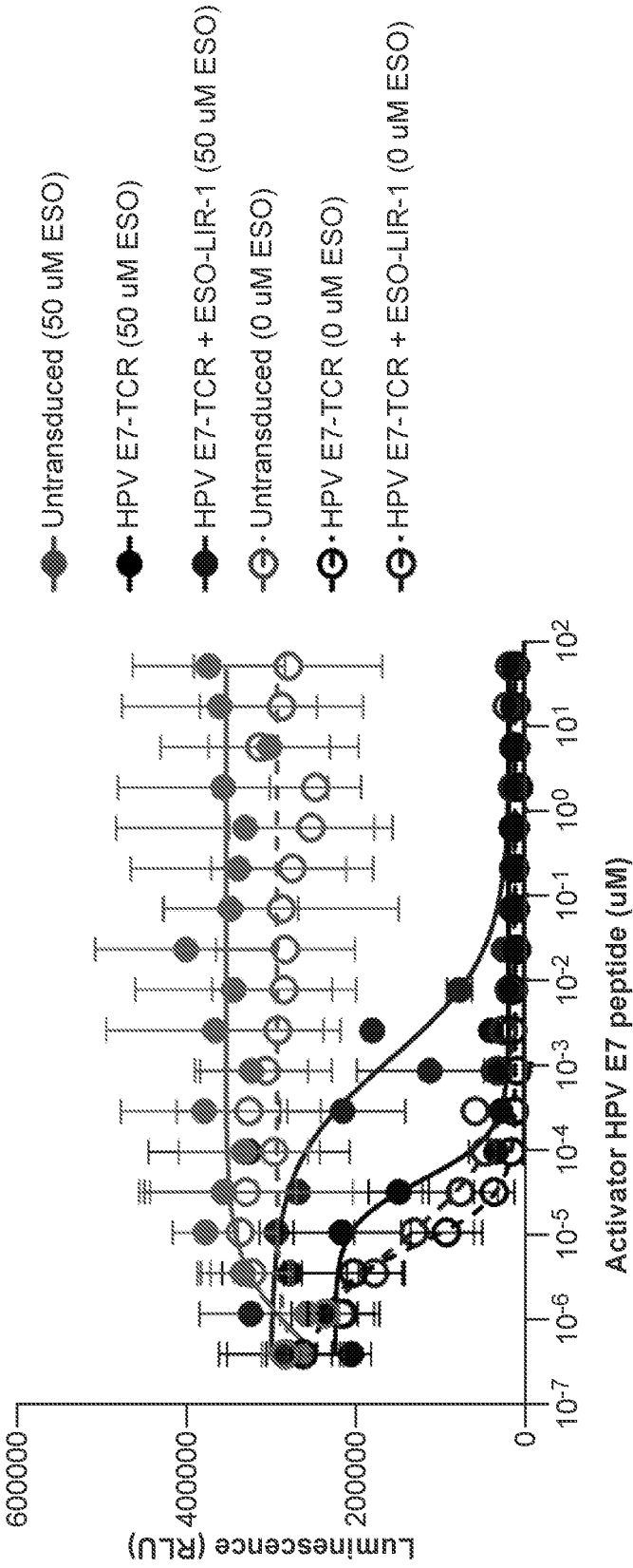


FIG. 23

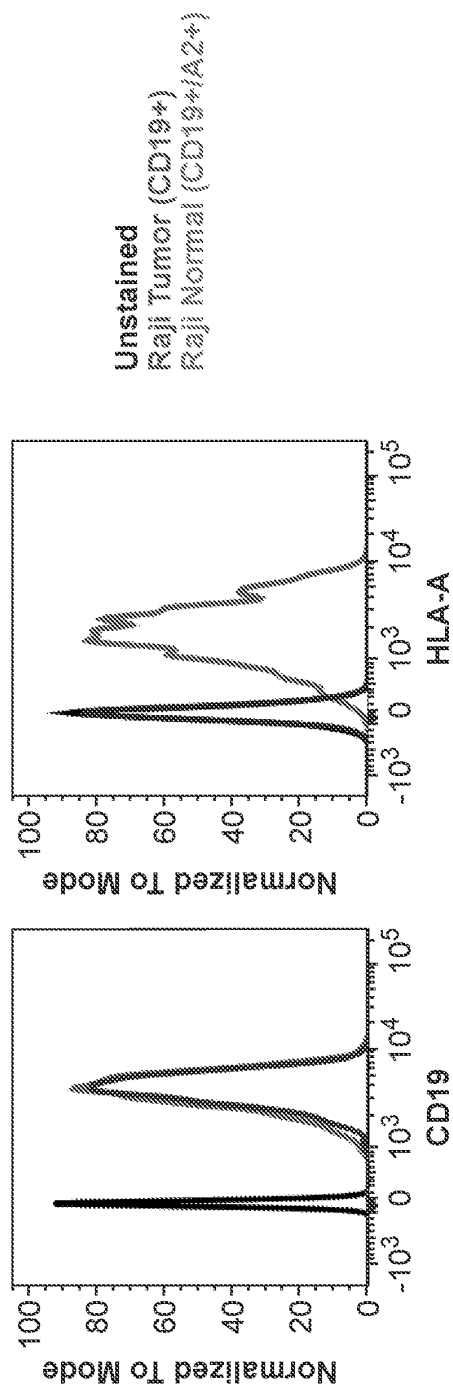


FIG. 24A

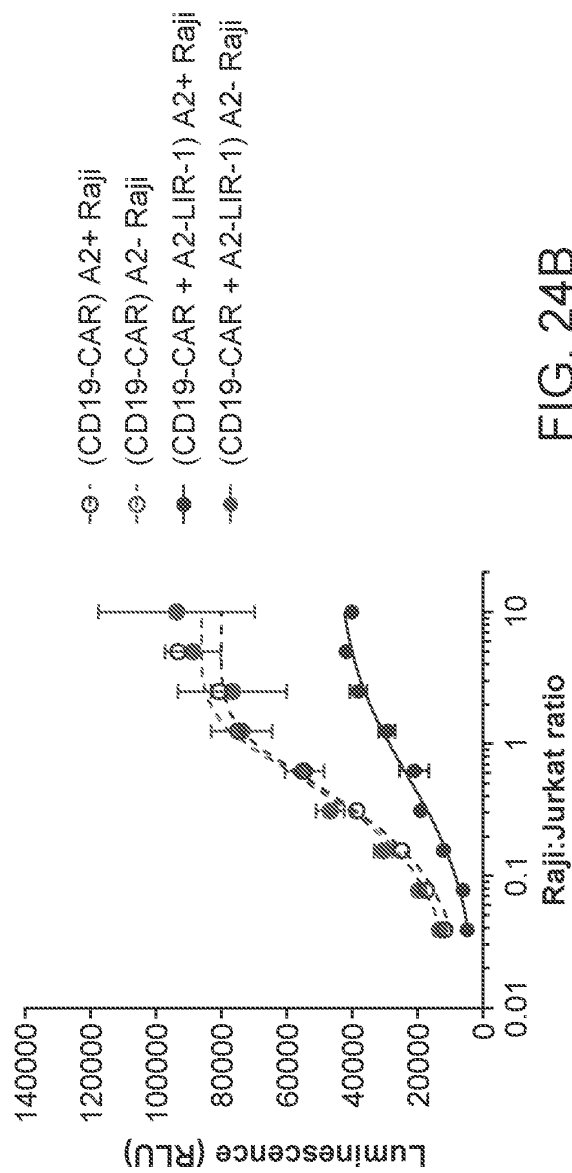


FIG. 24B

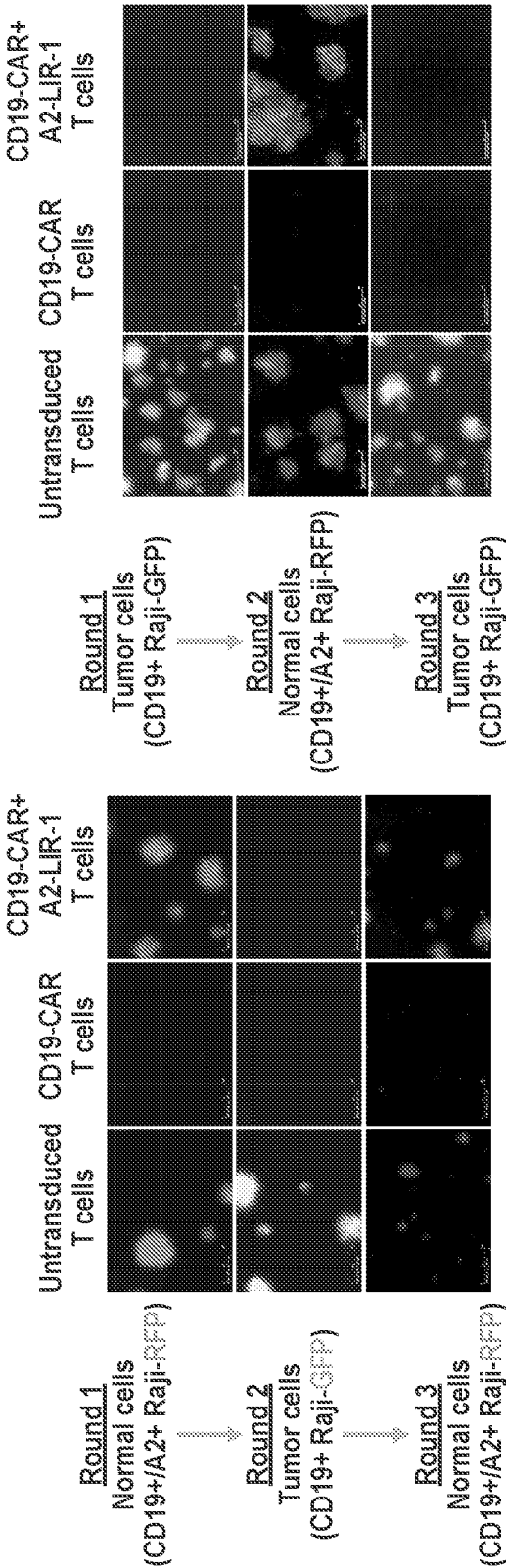


FIG. 25B

FIG. 25A

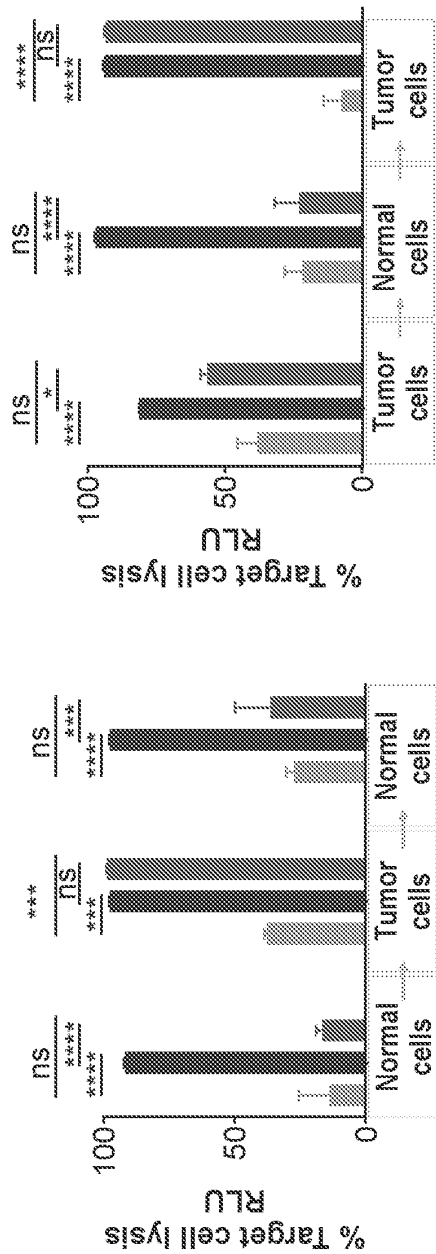


FIG. 25C

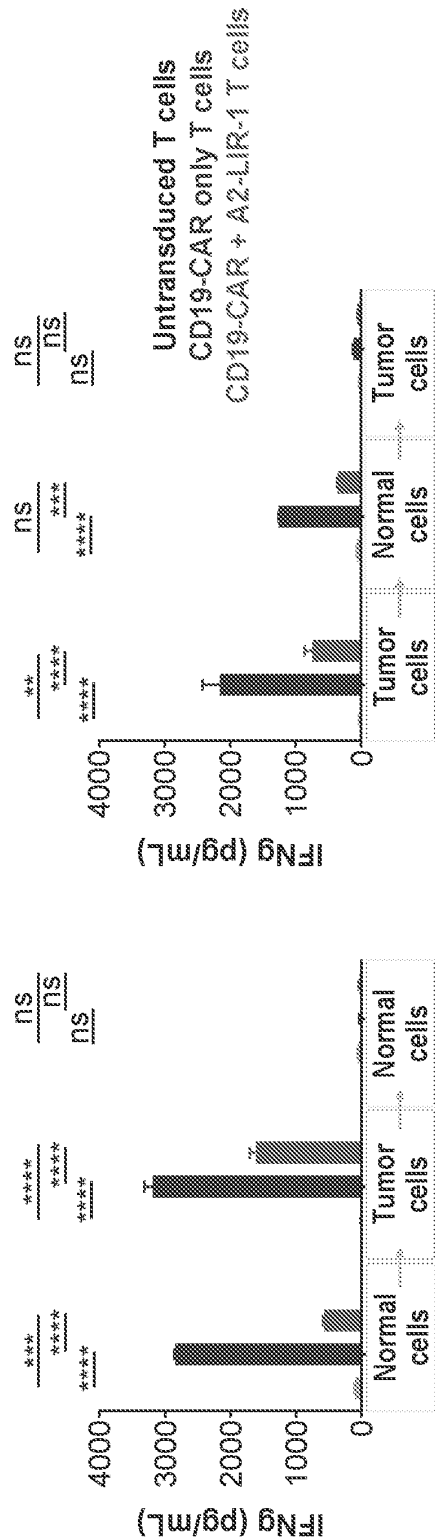


FIG. 25D

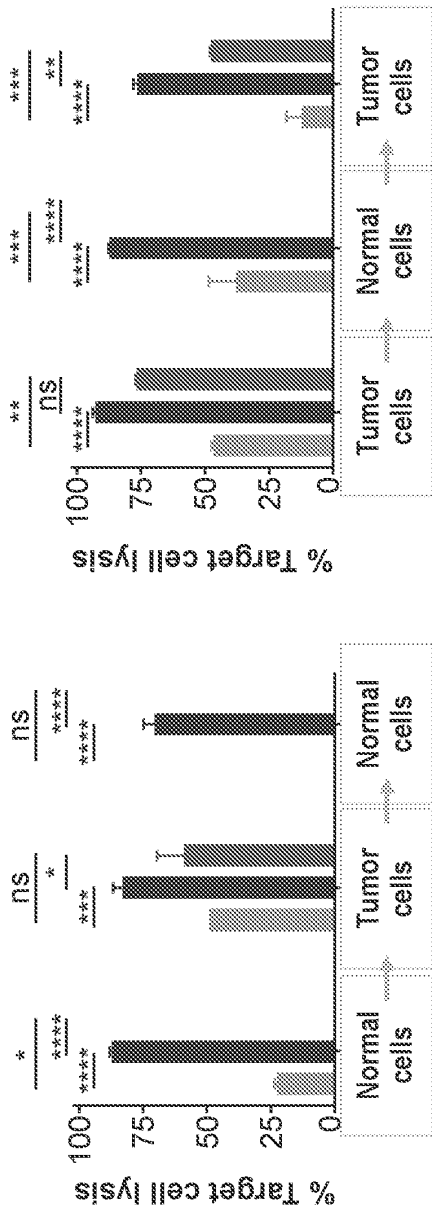


FIG. 26A

Untransduced T cells
CD19-CAR only T cells
CD19-CAR + A2-LIR-1 T cells

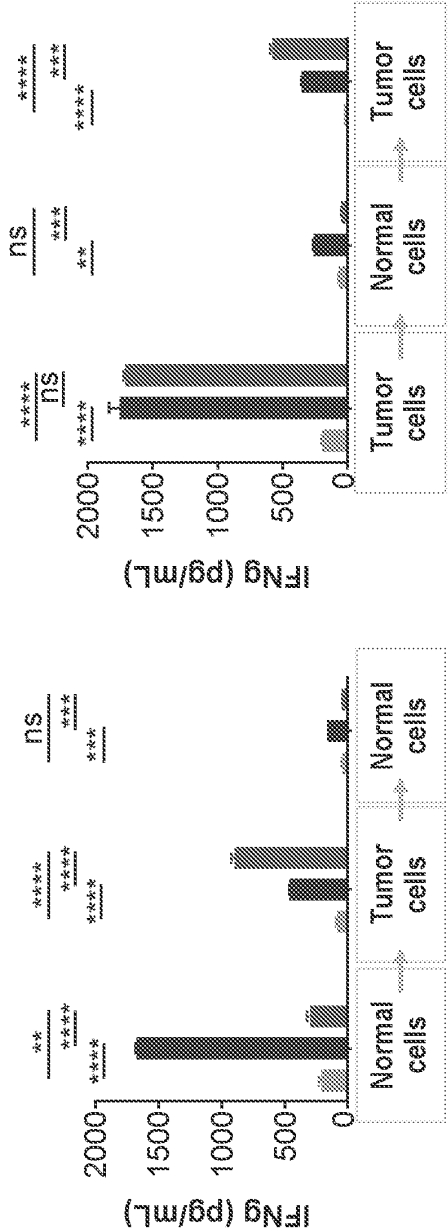
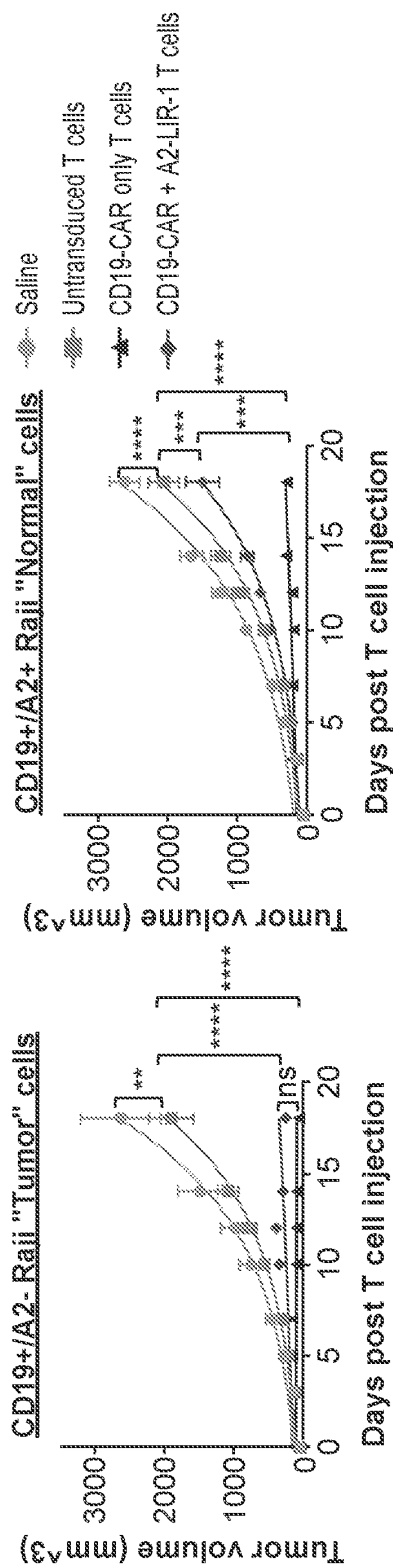
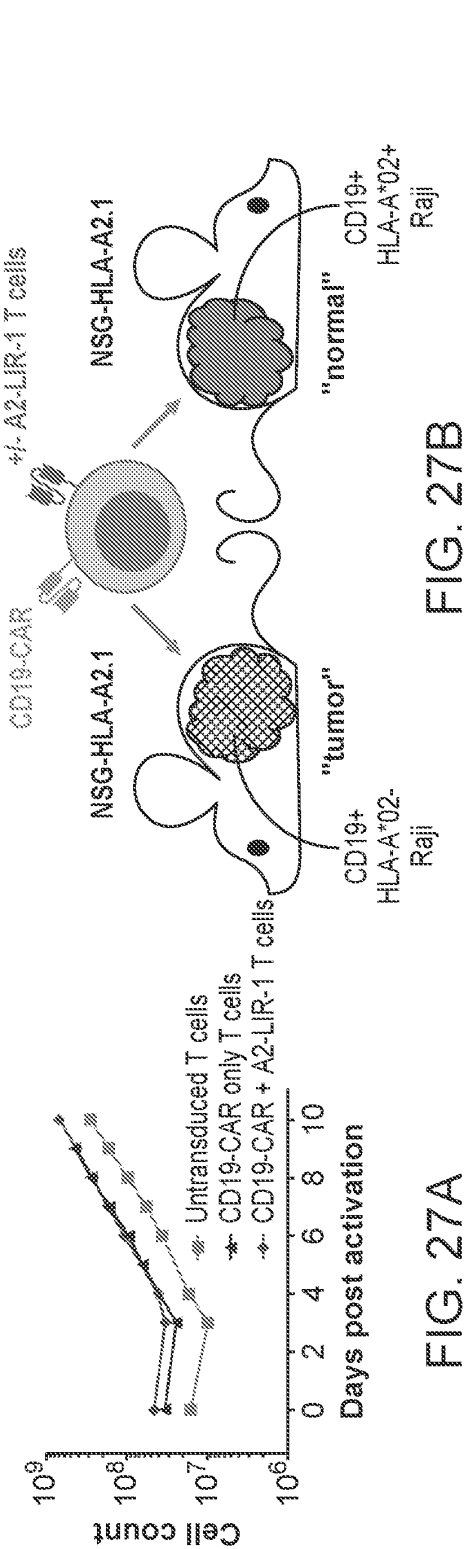


FIG. 26B



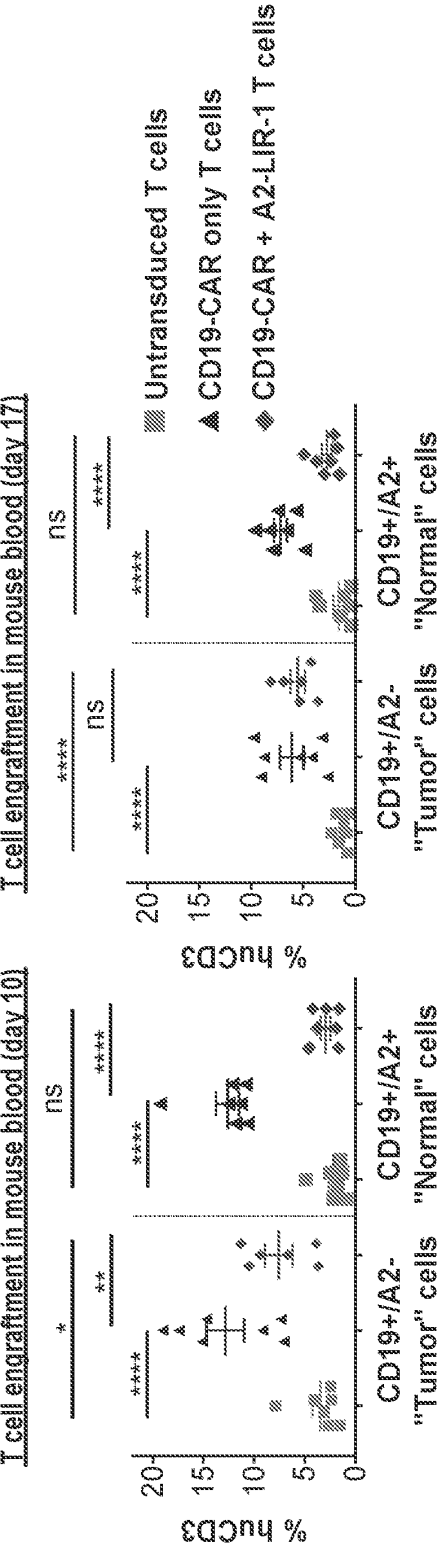


FIG. 27D

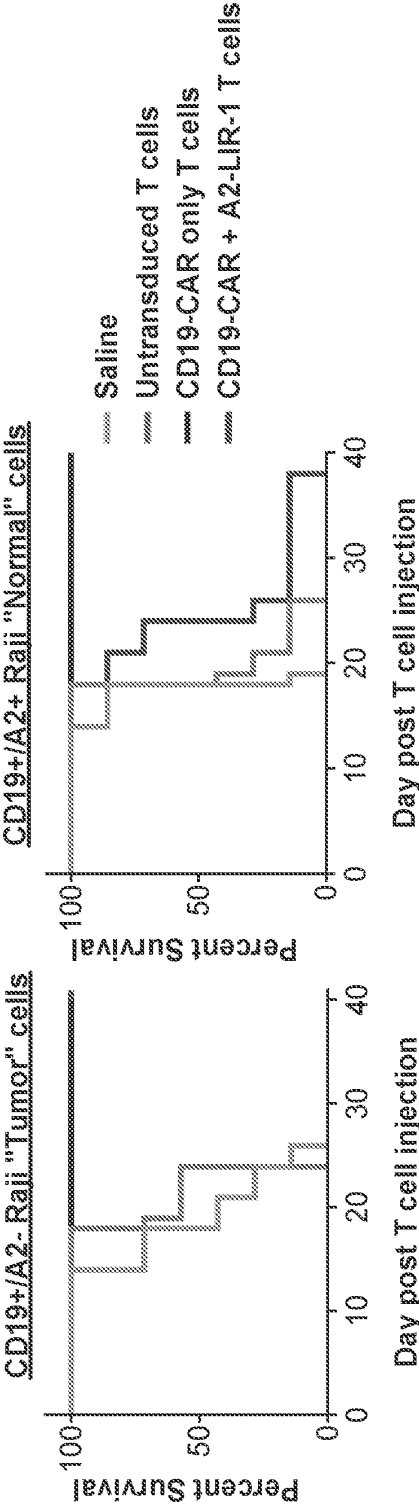


FIG. 27E

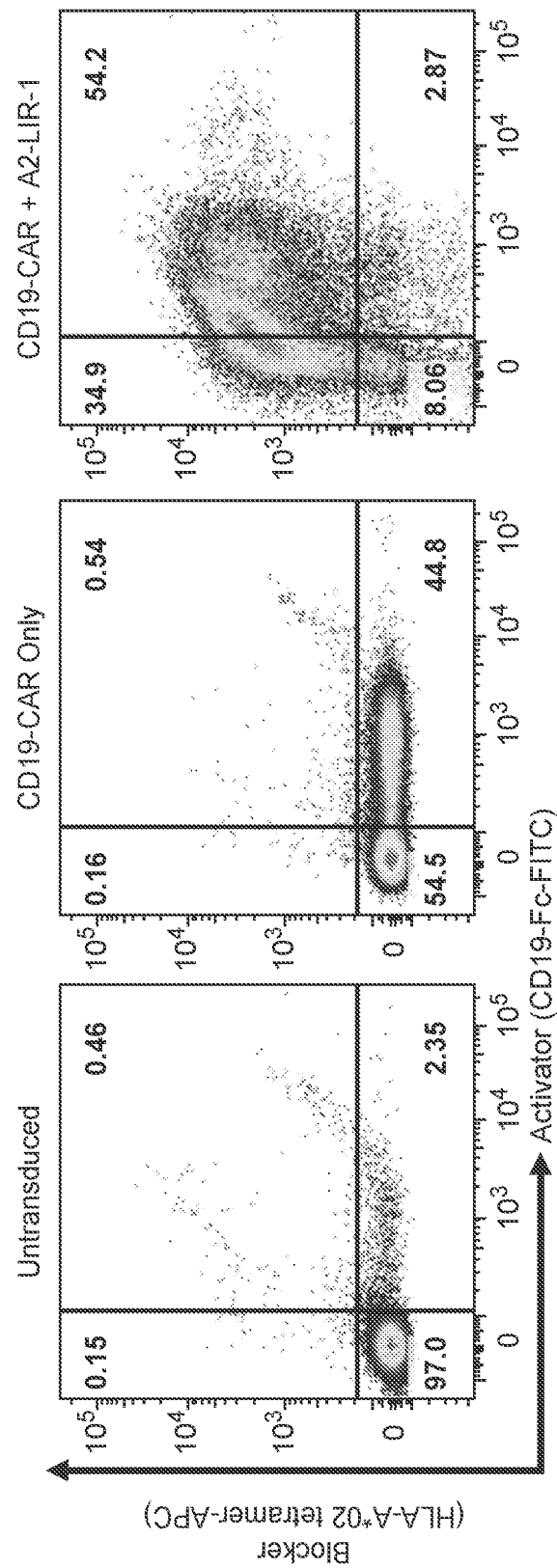


FIG. 28A

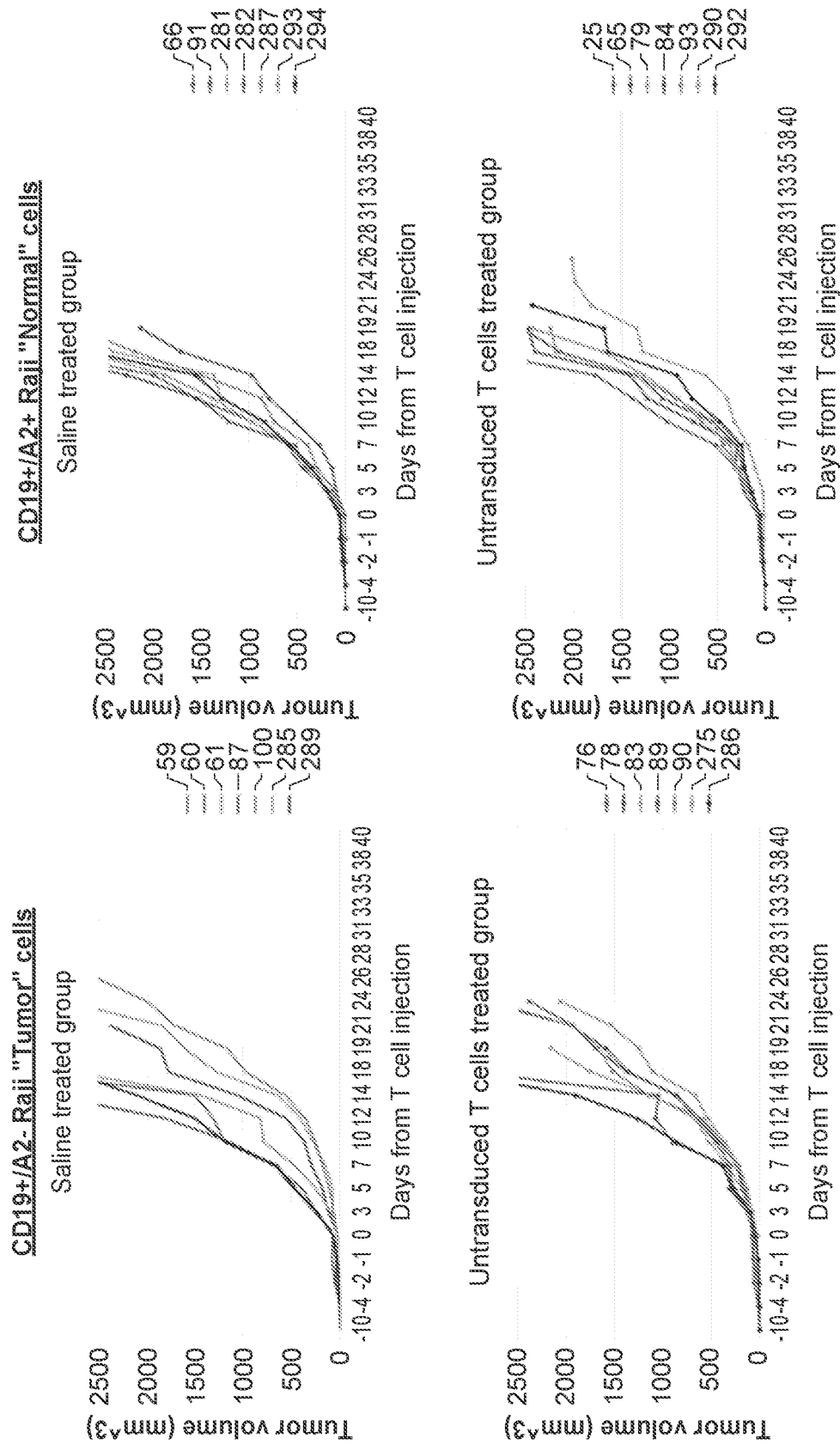


FIG. 28B

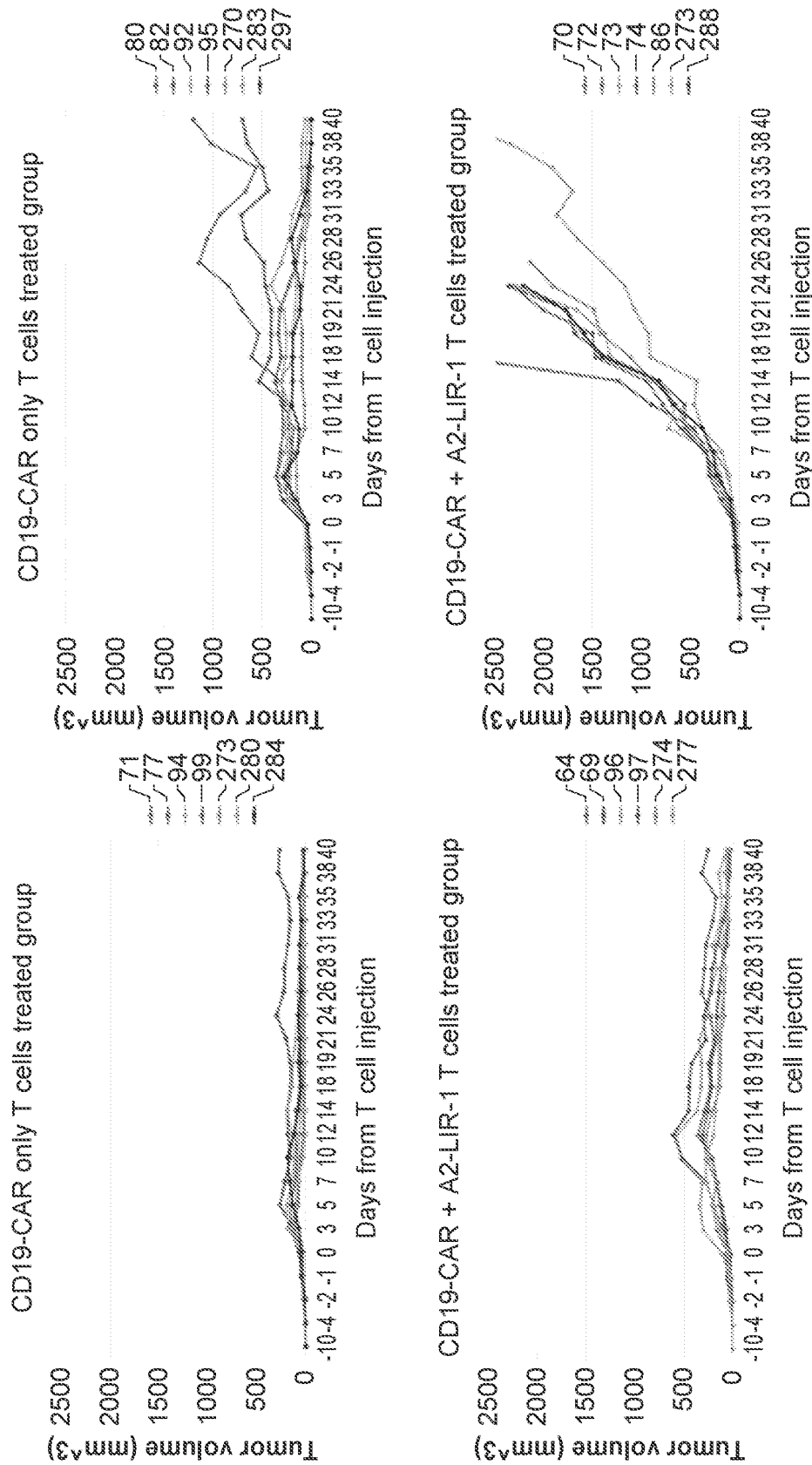


FIG. 28B (Cont.)

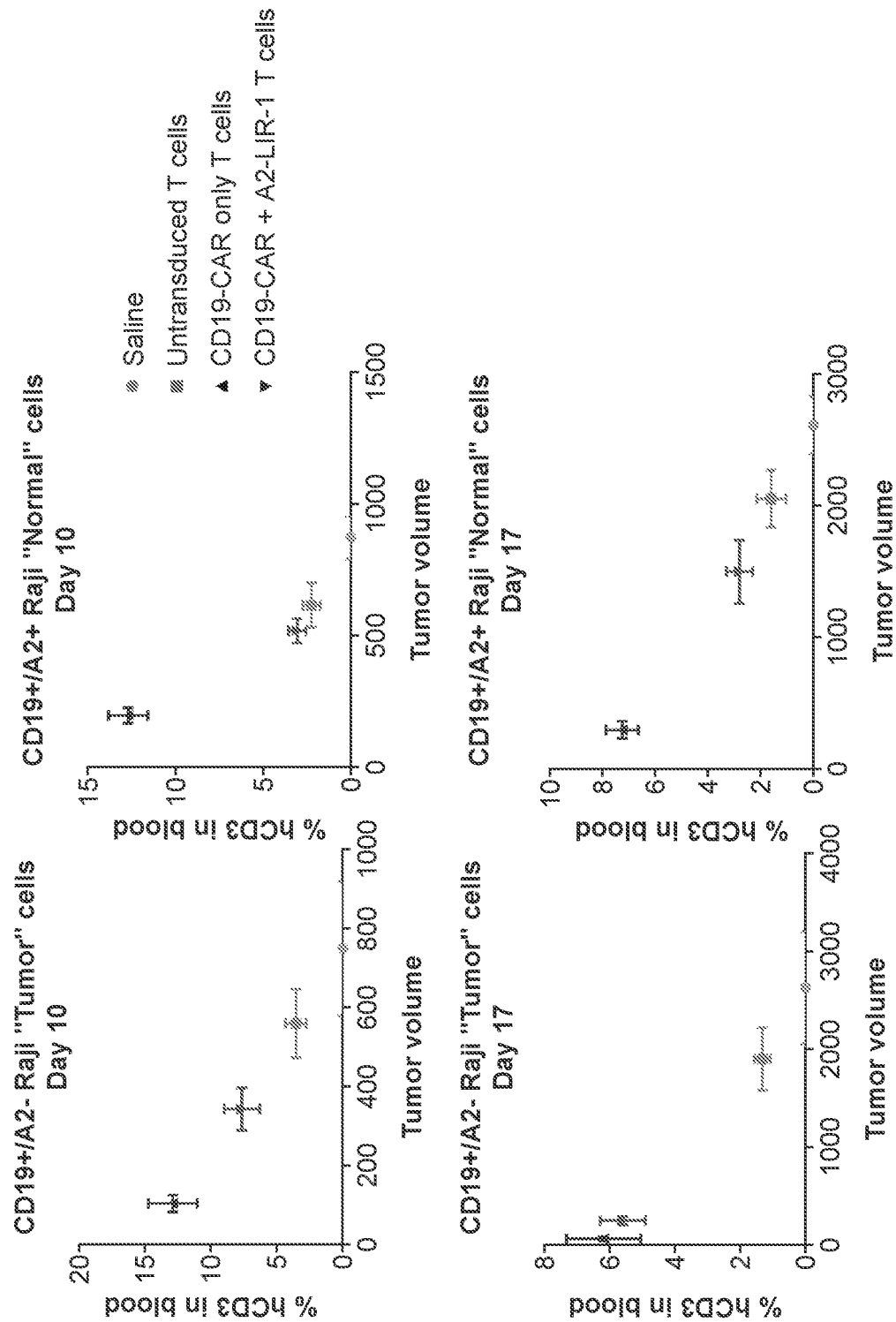


FIG. 28C

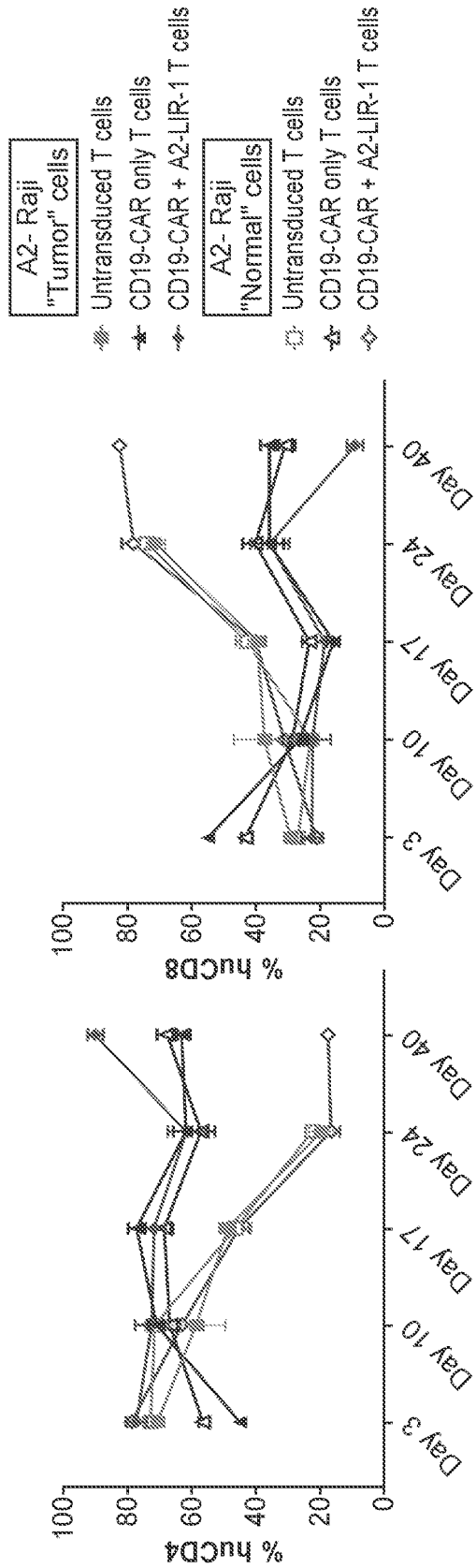


FIG. 28D

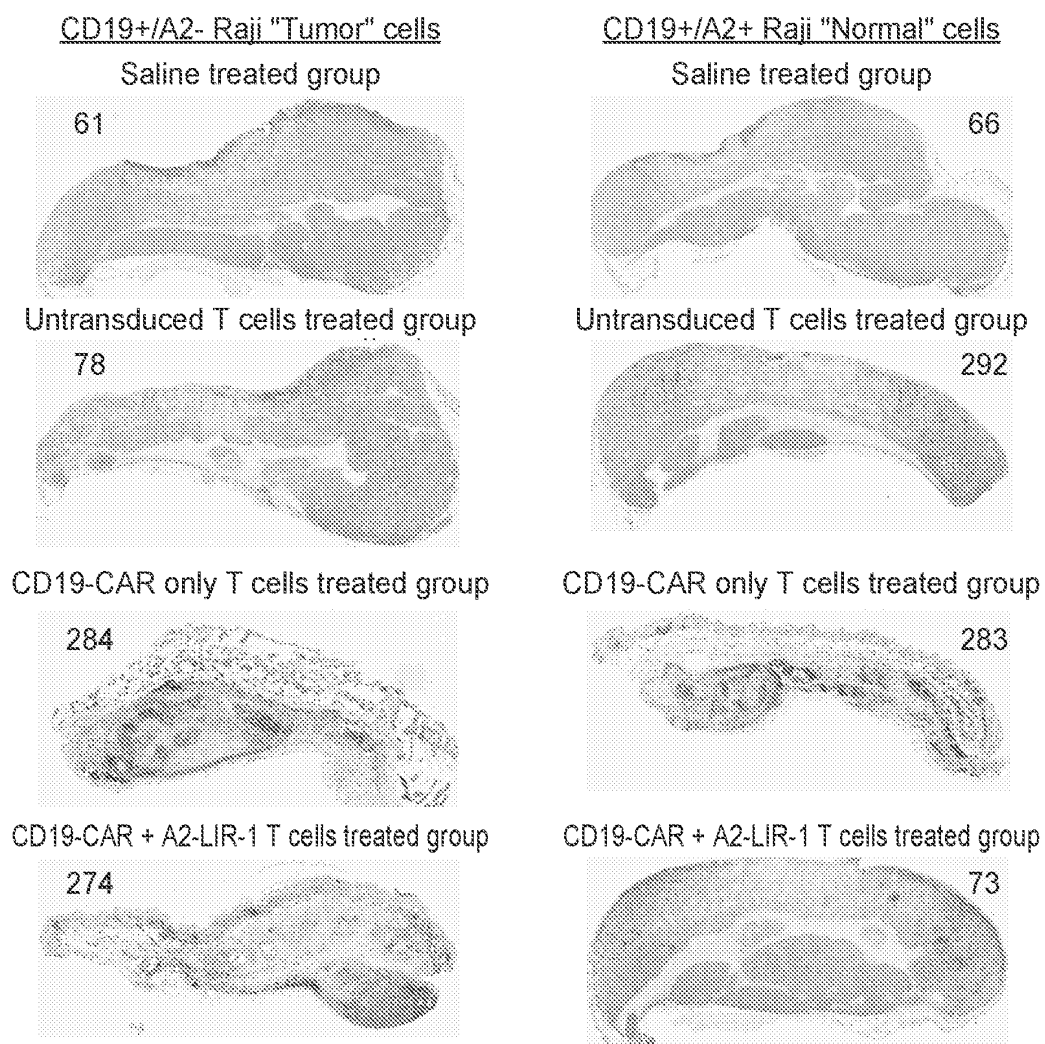


FIG. 29A

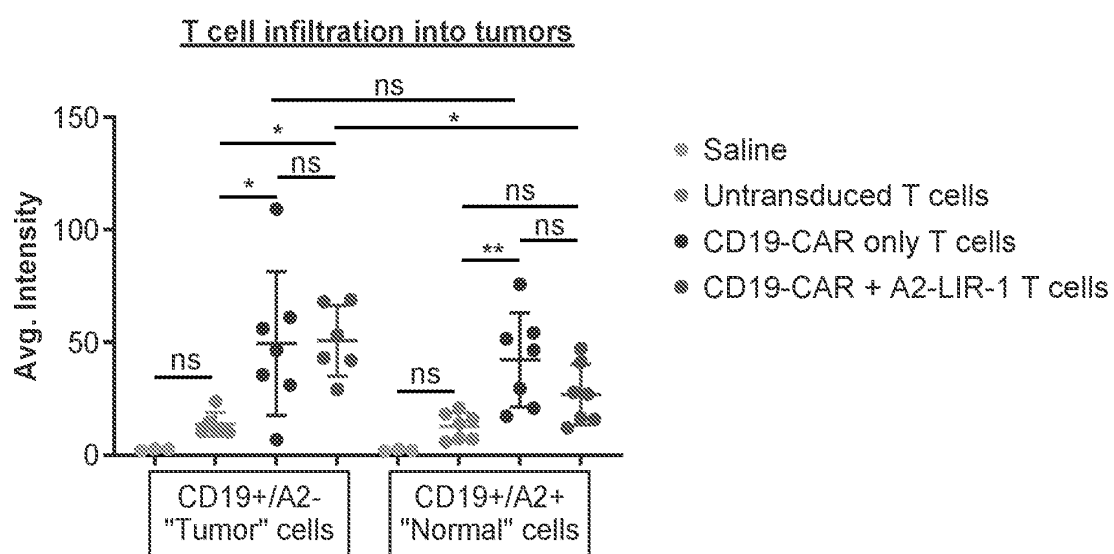


FIG. 29B