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Figures 1A-1B

A

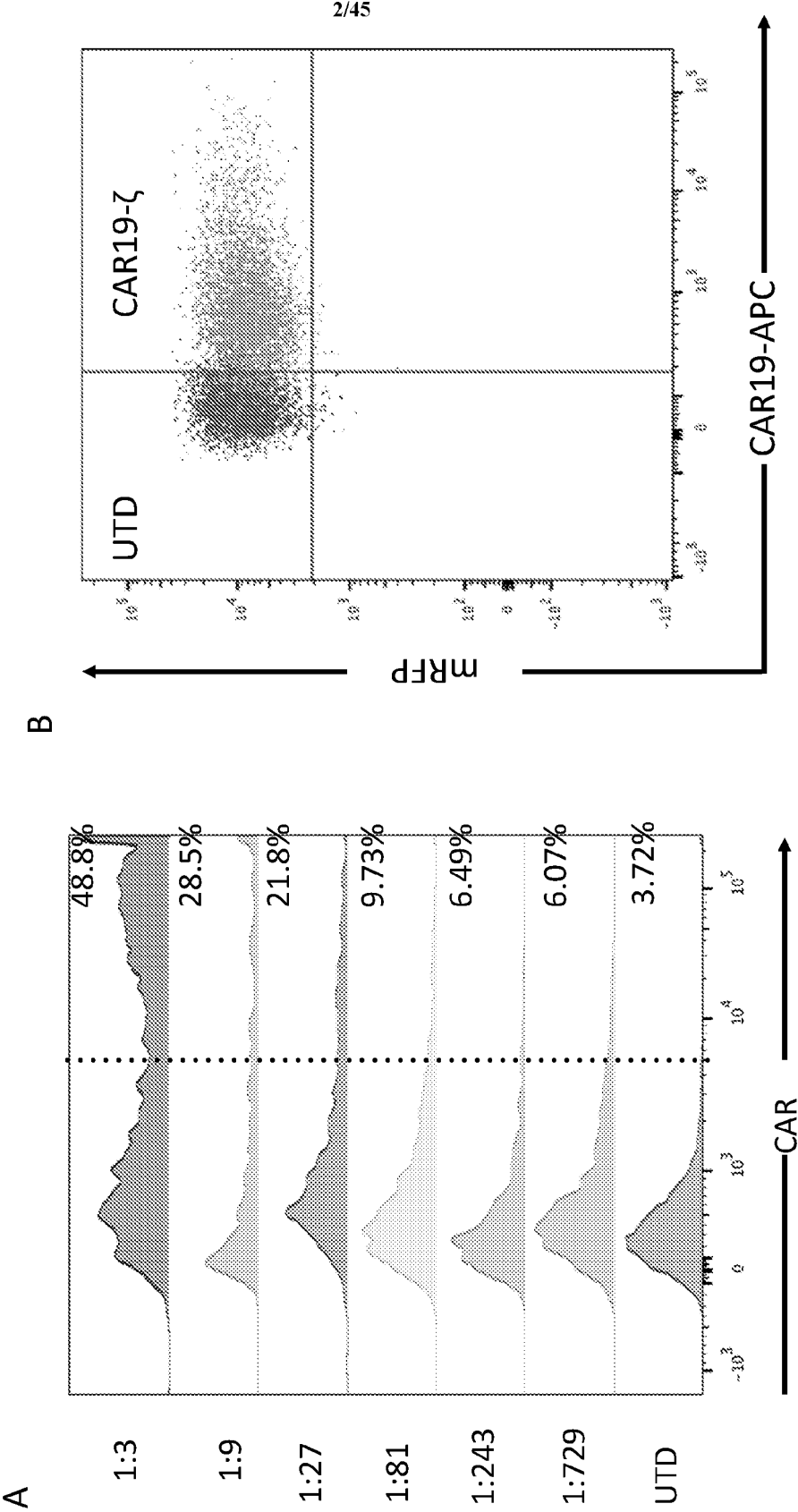
	Extracellular		TM	Intracellular	Secreted/Co-Expressed
CARMA Concept	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s)	
Cytokine CARMA	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s) 2A	Cytokine(s)
mAb CARMA	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s) 2A	mAb(s)/scFv(s)
pep CARMA	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s) 2A	synergistic peptide
Enz CARMA	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s) 2A	enzyme
DN CARMA	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s) 2A	Dominant Neg. Receptor
TAA CARMA	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s) 2A	Tumor assoc. antigen
CRISPR CARMA	Targeting Domain(s)	Hinge Domain	TM Domain	Signaling Domain(s)	CRISPR Gene Editing

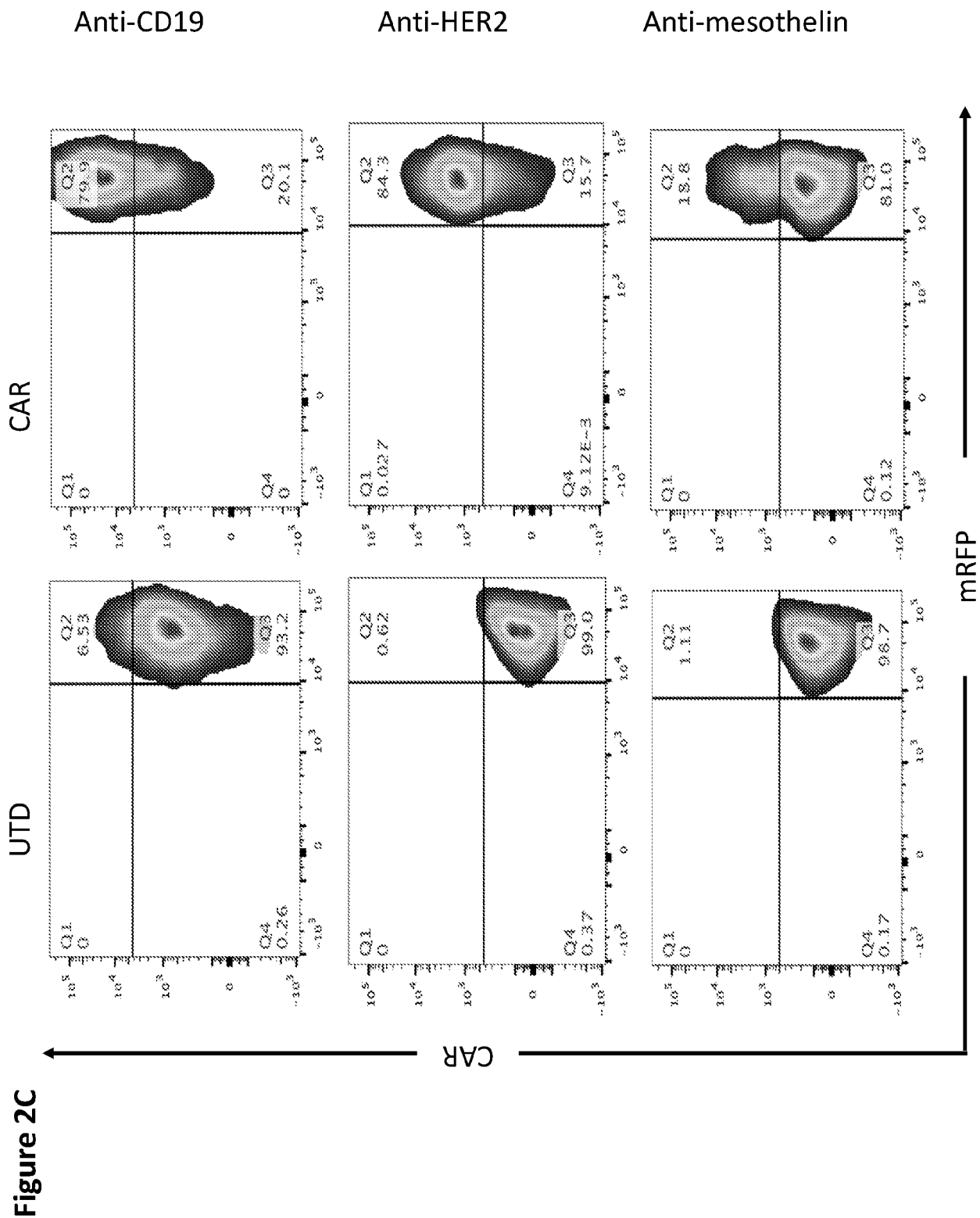
B

CARMA-ζ	Antigen Specific scFv	CD8 Hinge	CD8 TM	CD3-ζ
CARMA-γ	Antigen Specific scFv	CD8 Hinge	CD8 TM	FCER1-γ
CARMA-Dectin	Antigen Specific scFv	CD8 Hinge	CD8 TM	Dectin-1

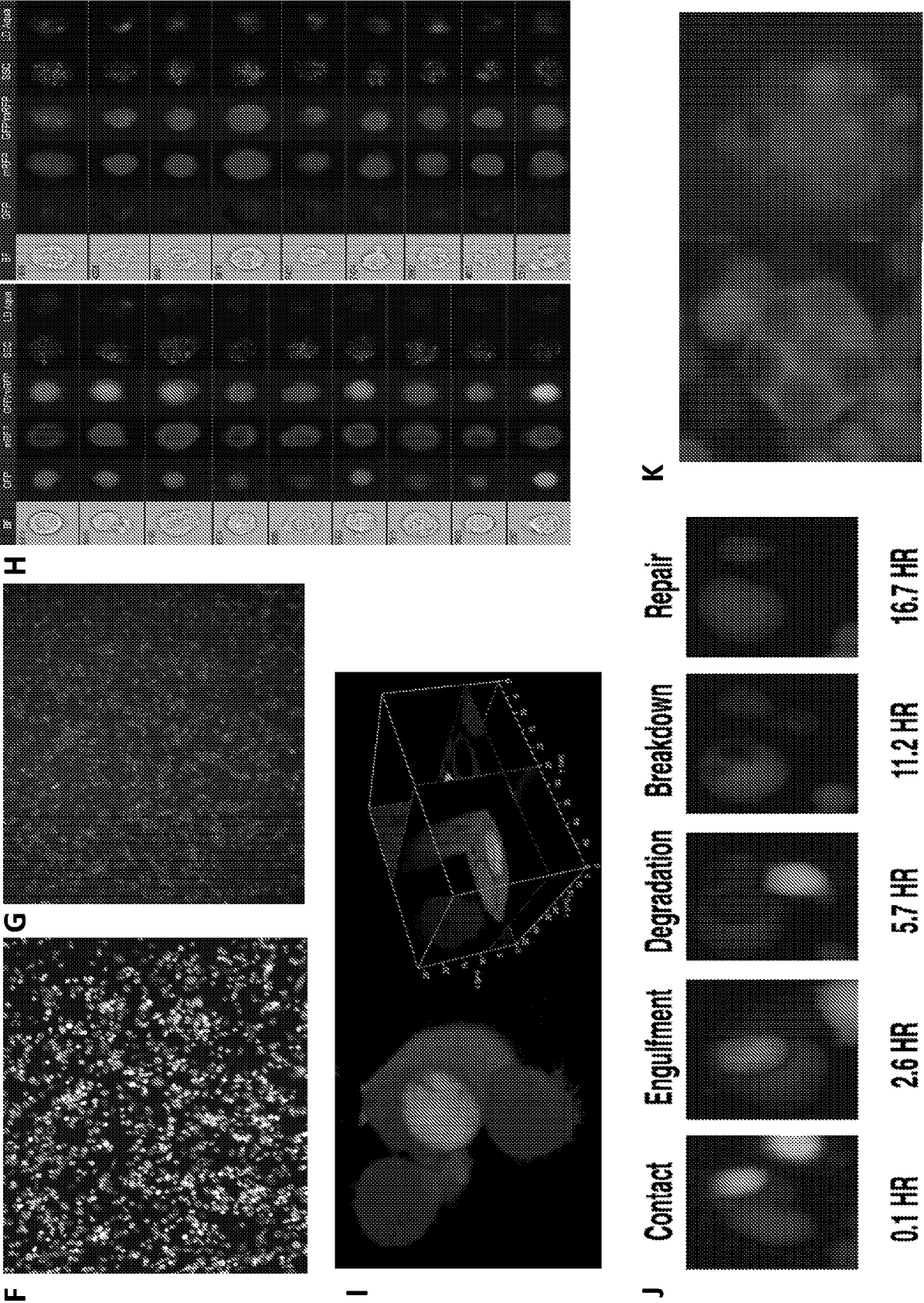
* Specific but not exclusive examples of macrophage CAR construct design.

Figures 2A-2B

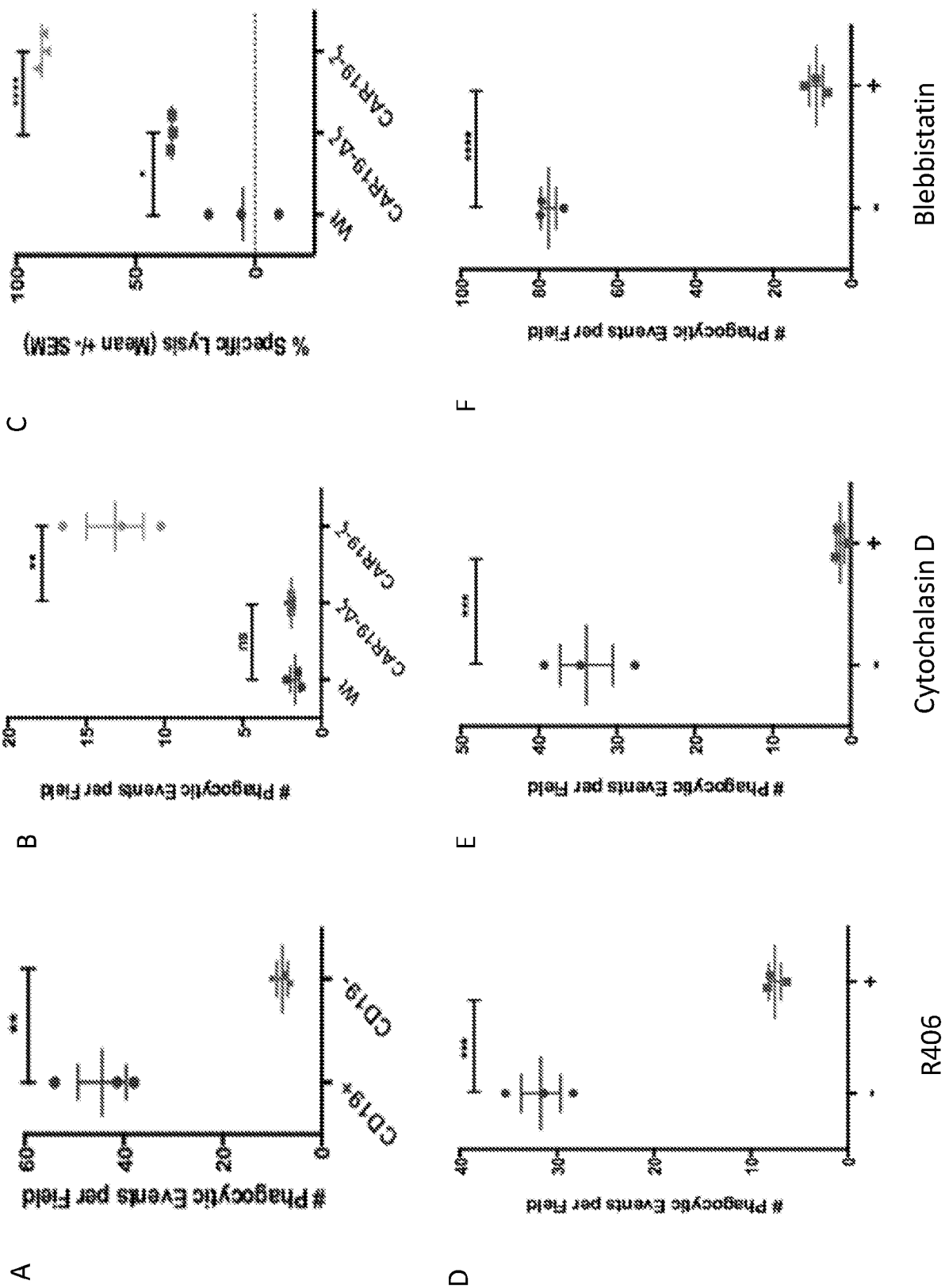




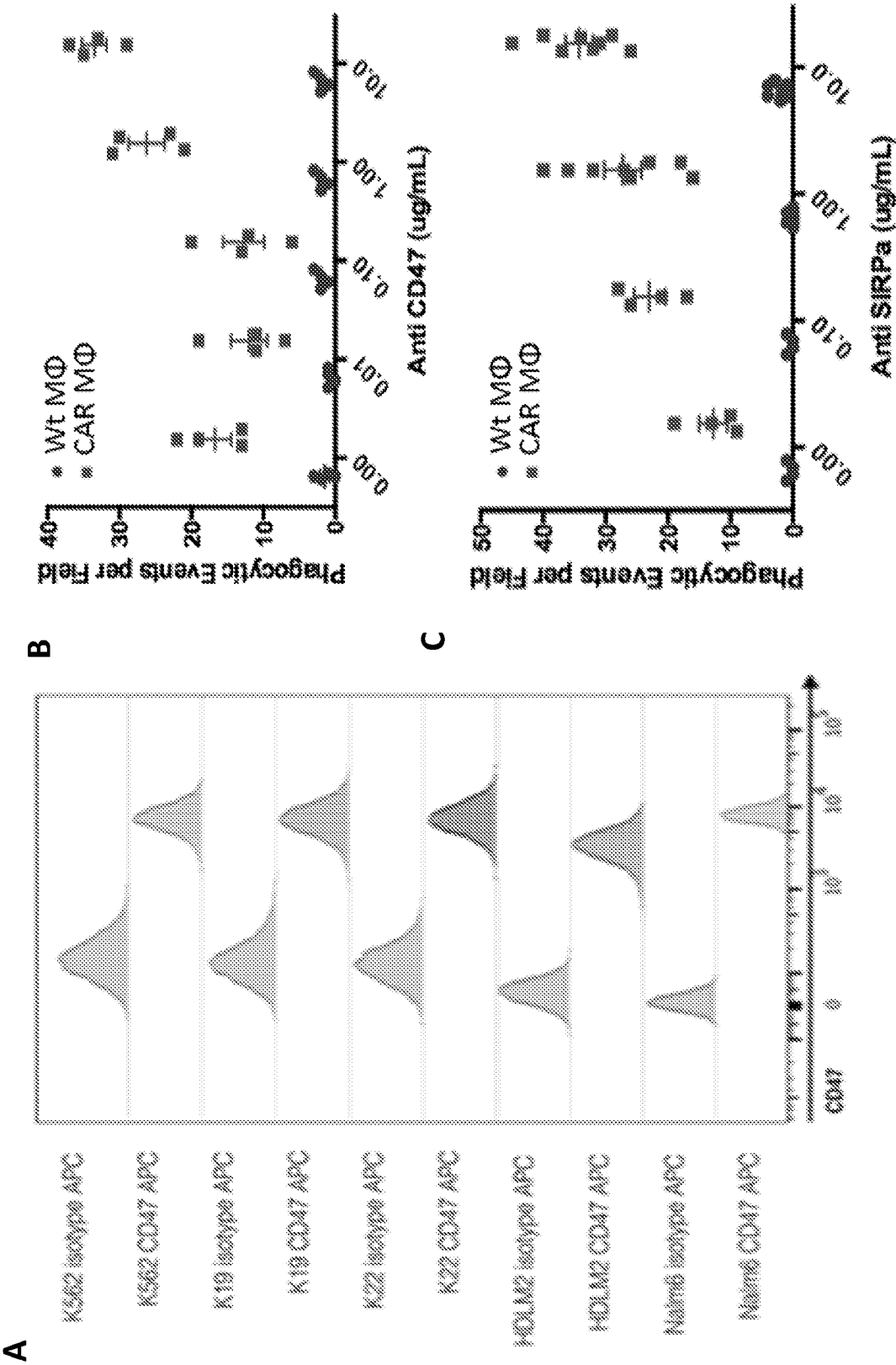
Figures 3F-3K



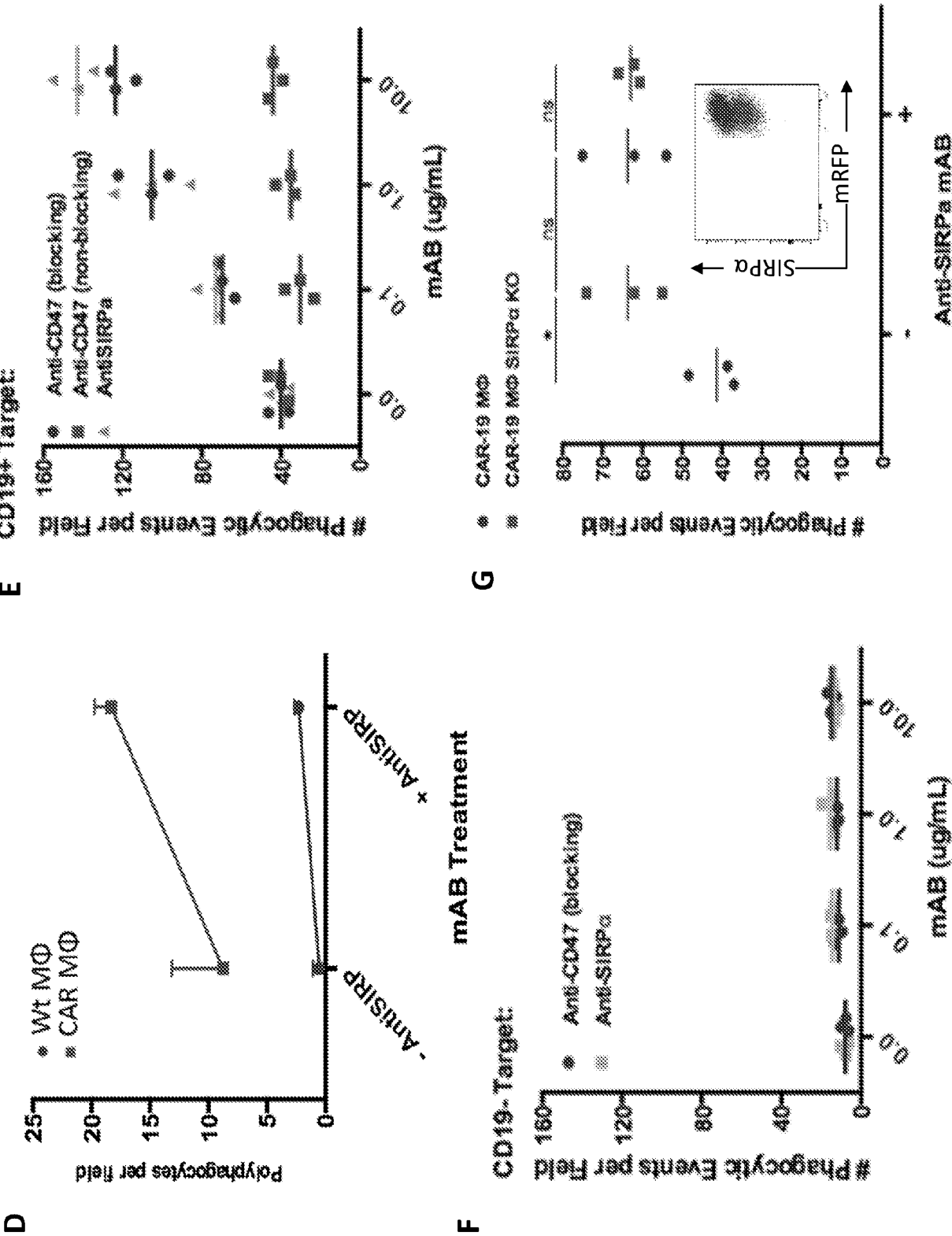
Figures 4A-4F



Figures 5A-5C



Figures 5D-5G



Figures 6A-6D

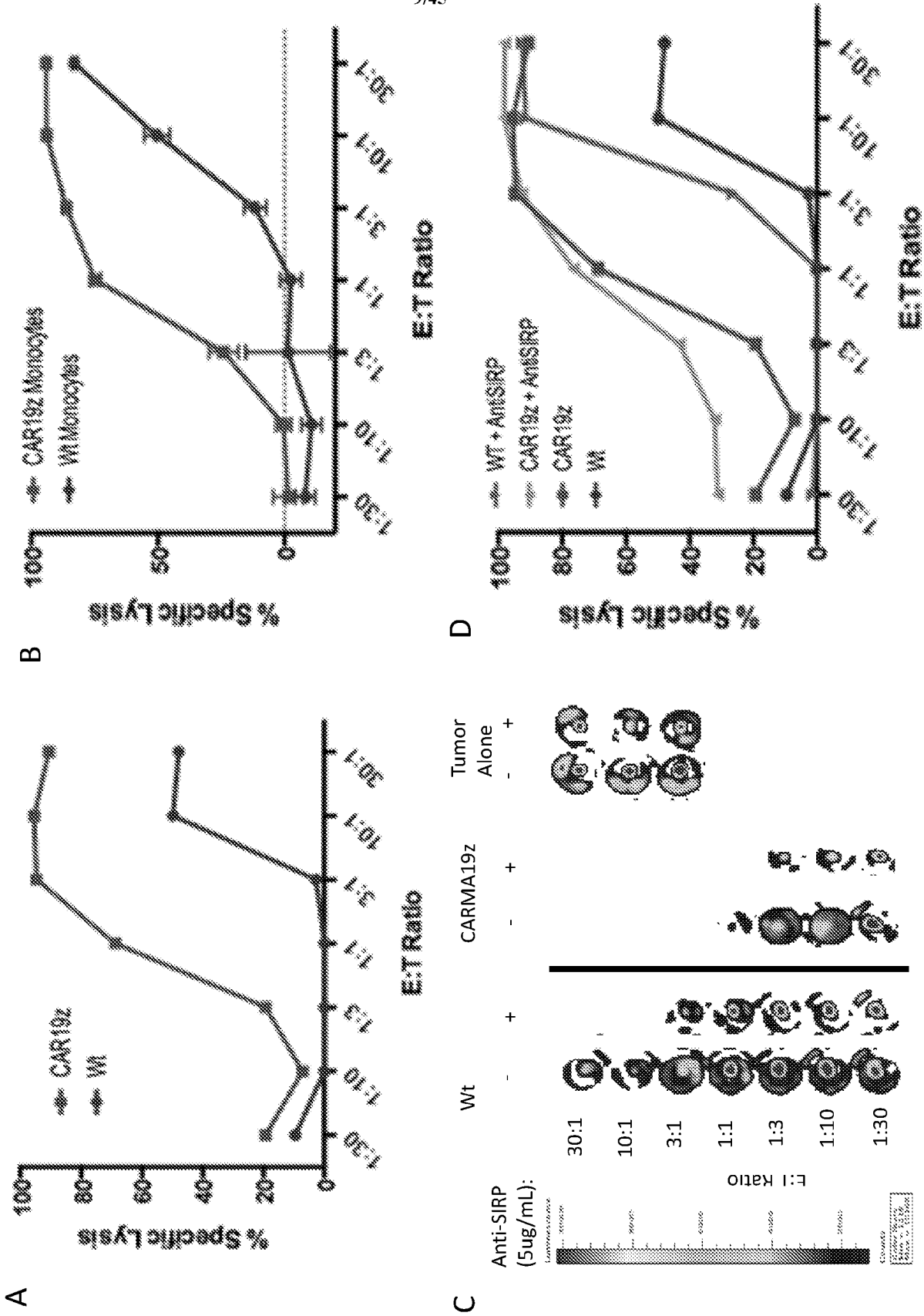
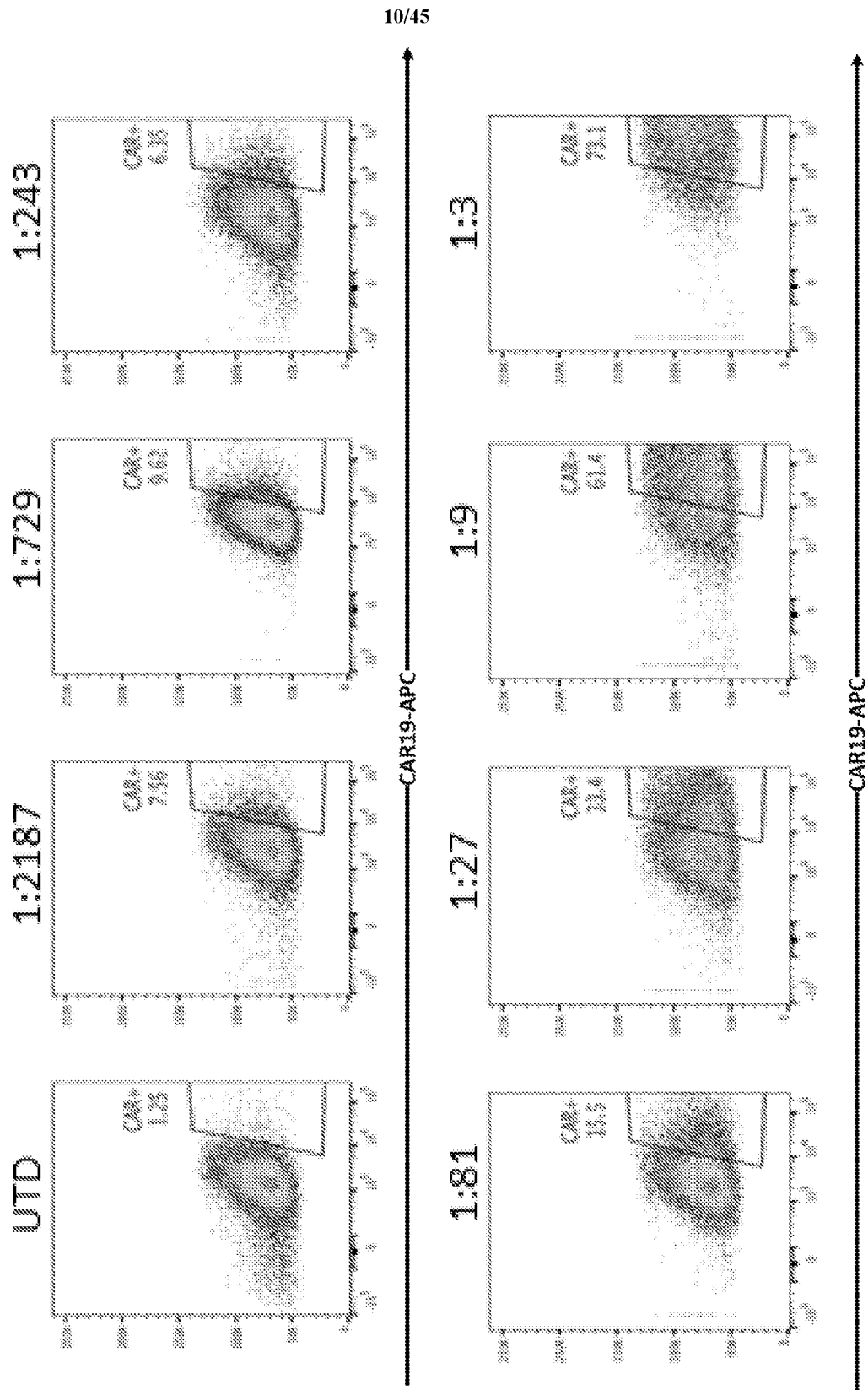
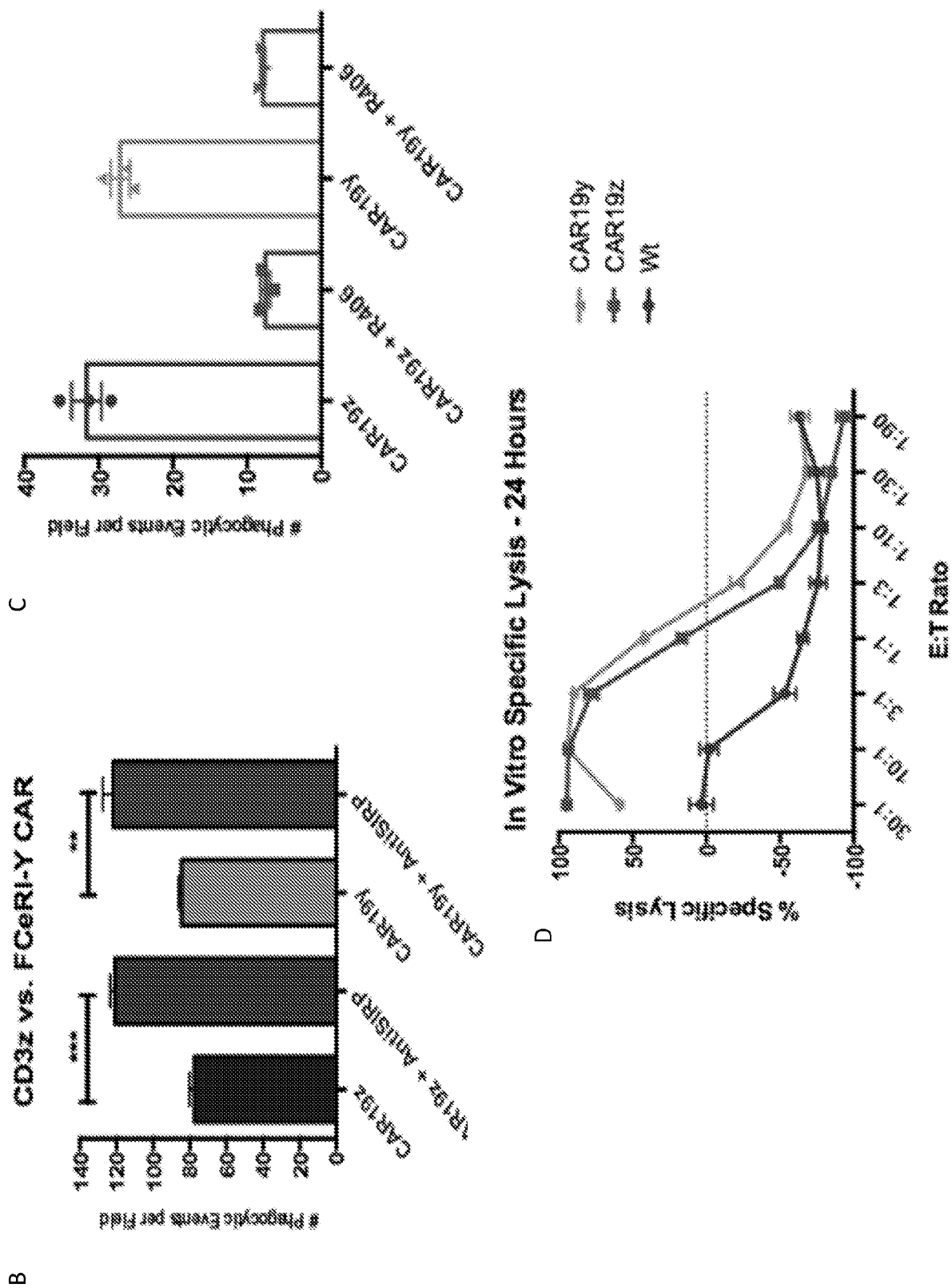


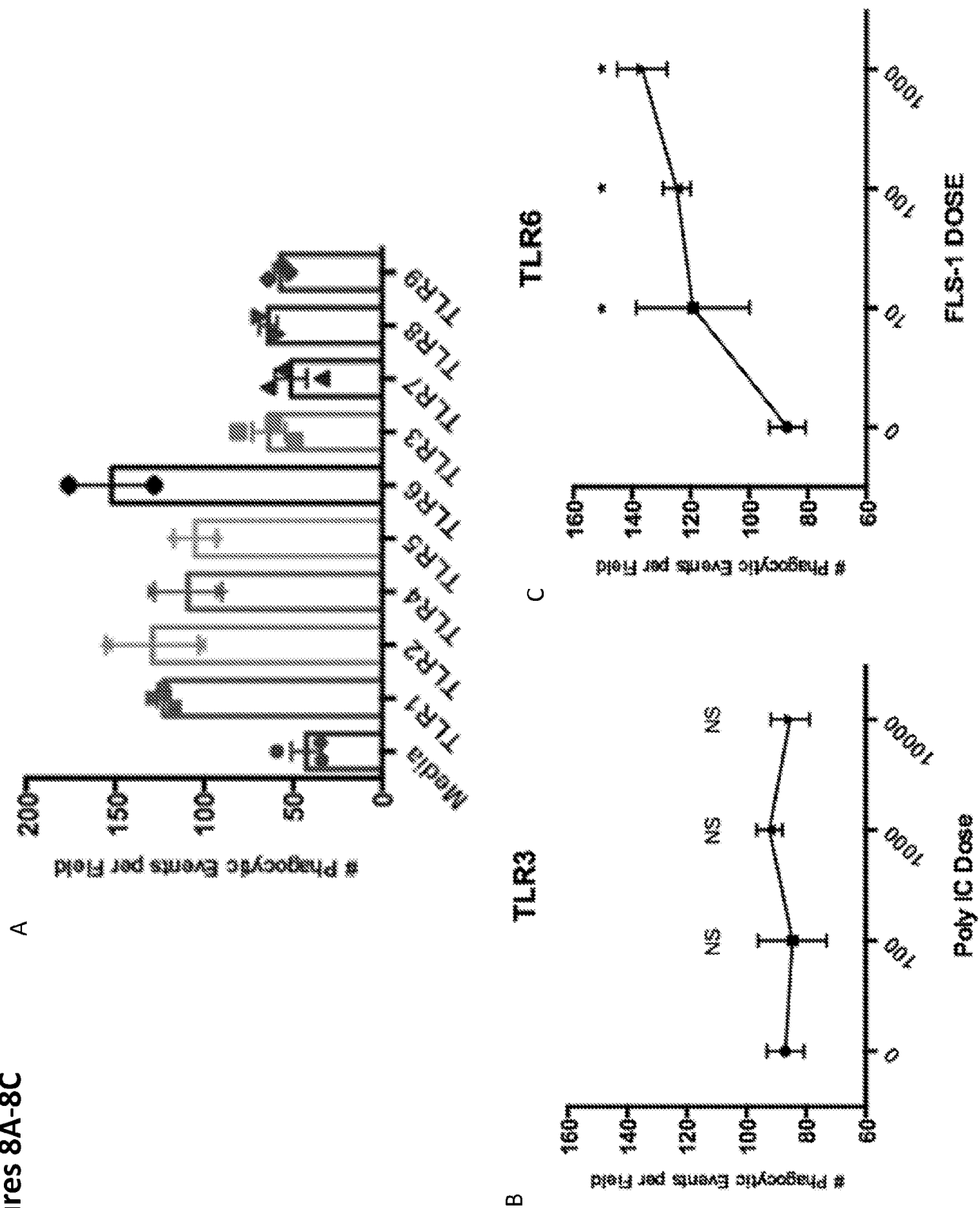
Figure 7A



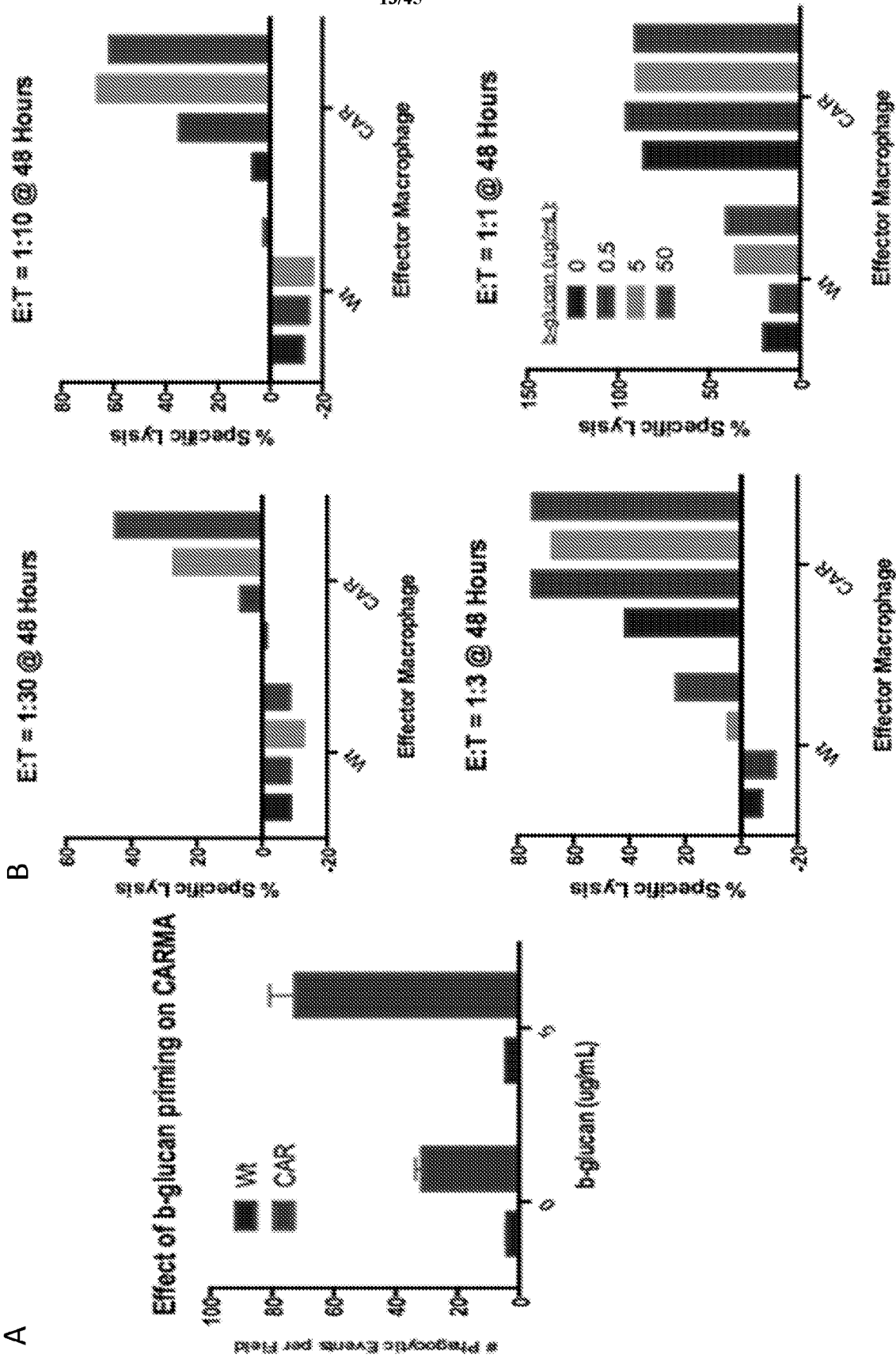
Figures 7B-7D



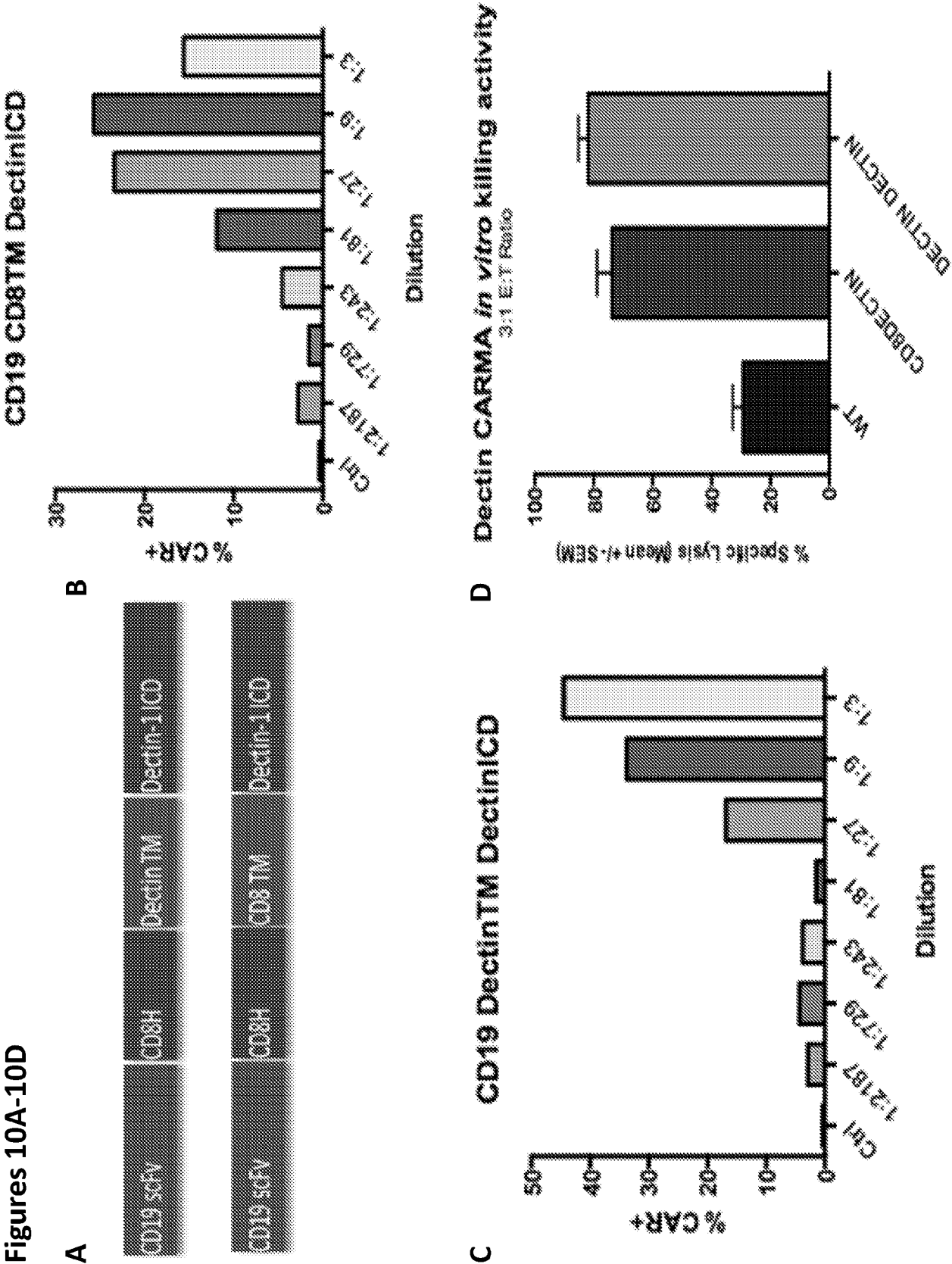
Figures 8A-8C



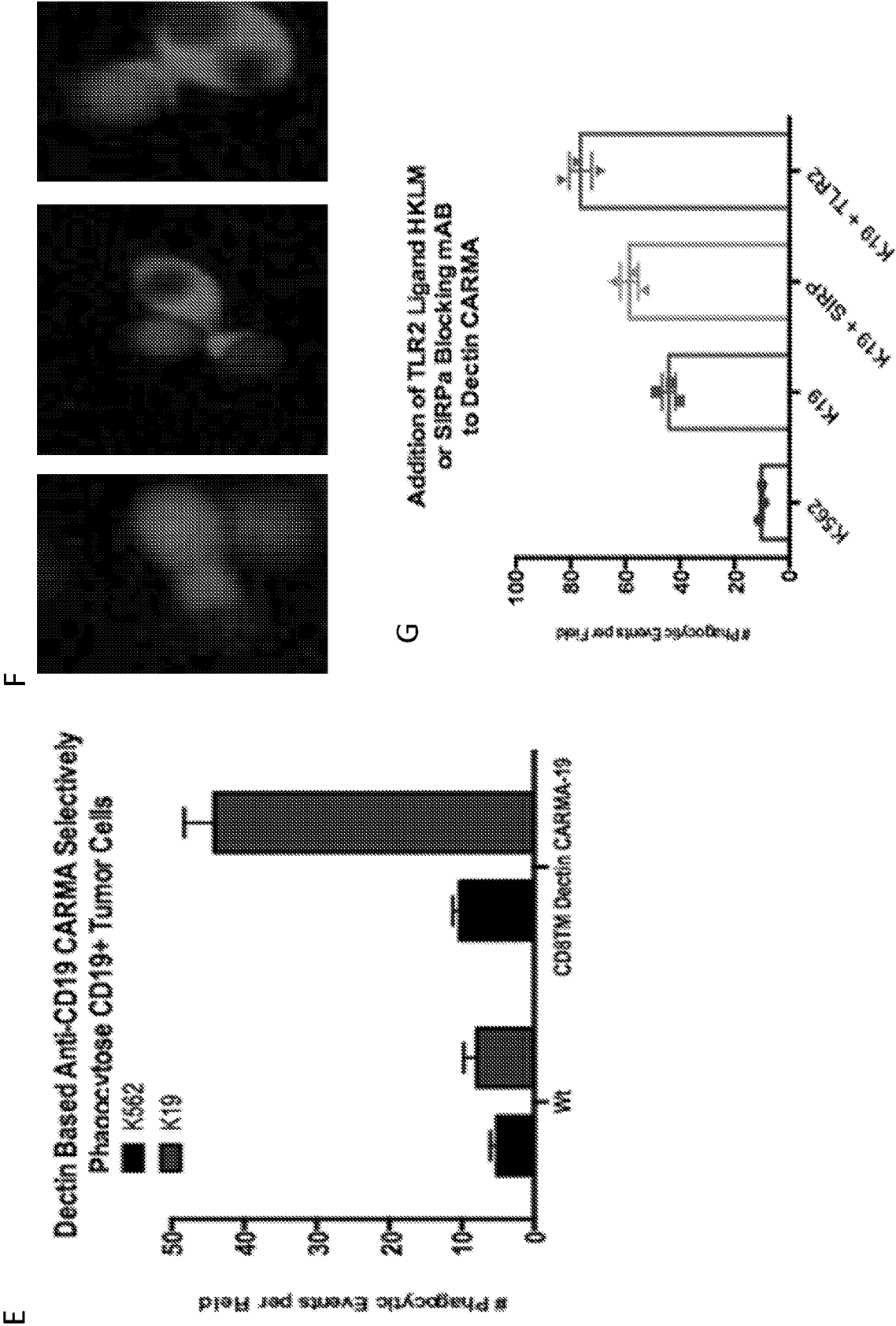
Figures 9A-9B



Figures 10A-10D



Figures 10E-10G



Figures 11A-11C

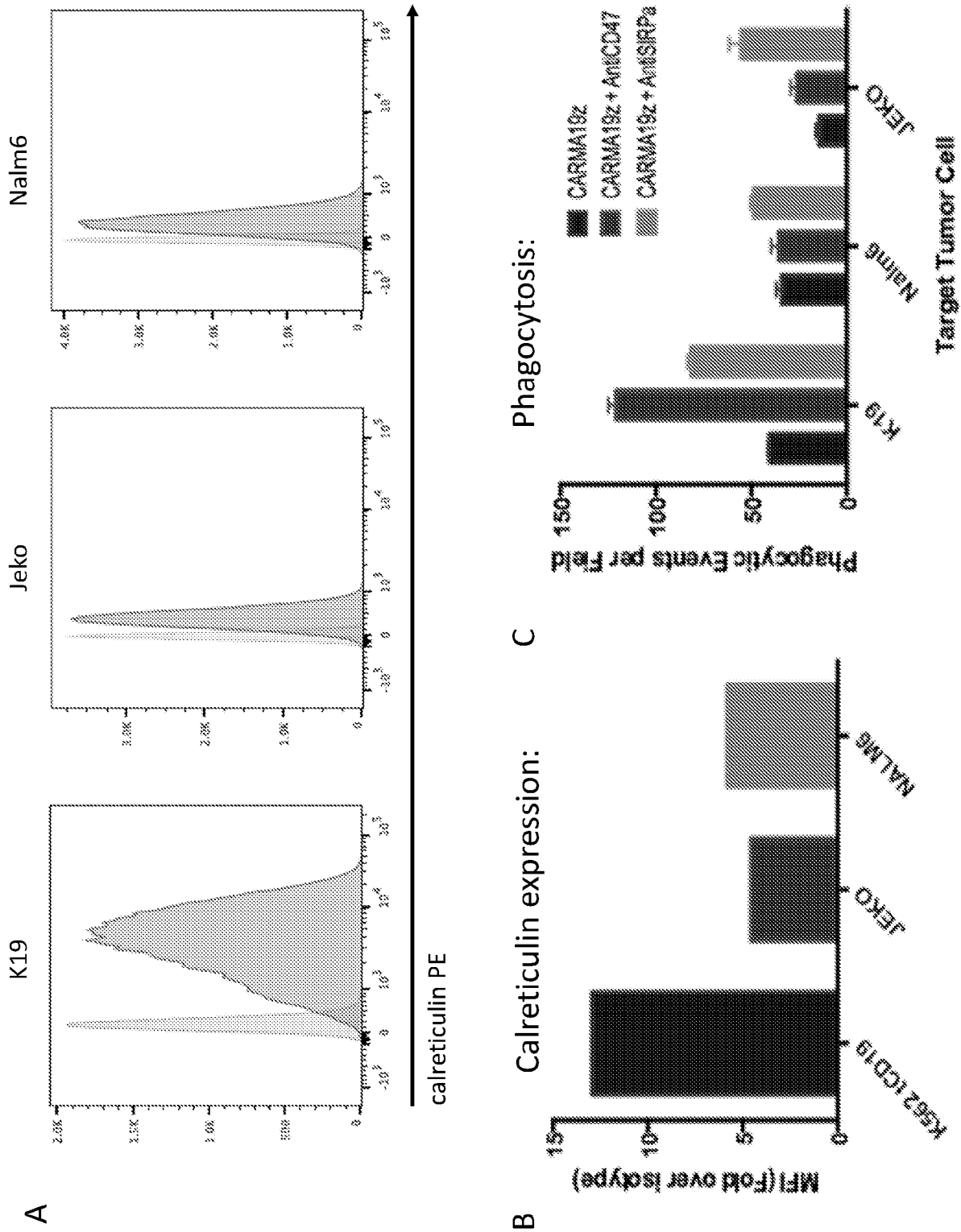


Figure 12A

Primary human monocyte gating strategy, viability, and anti-HER2 CAR expression

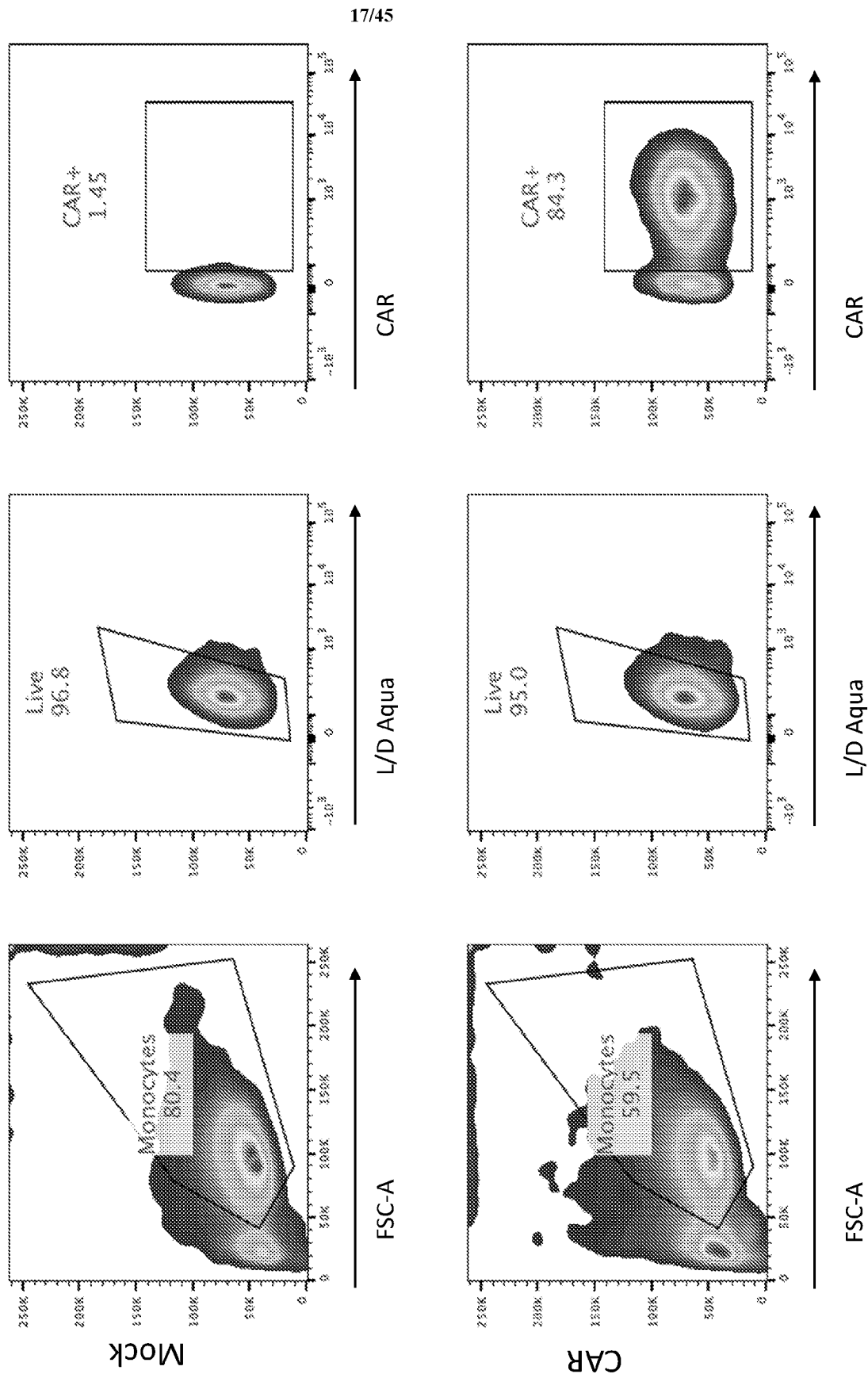
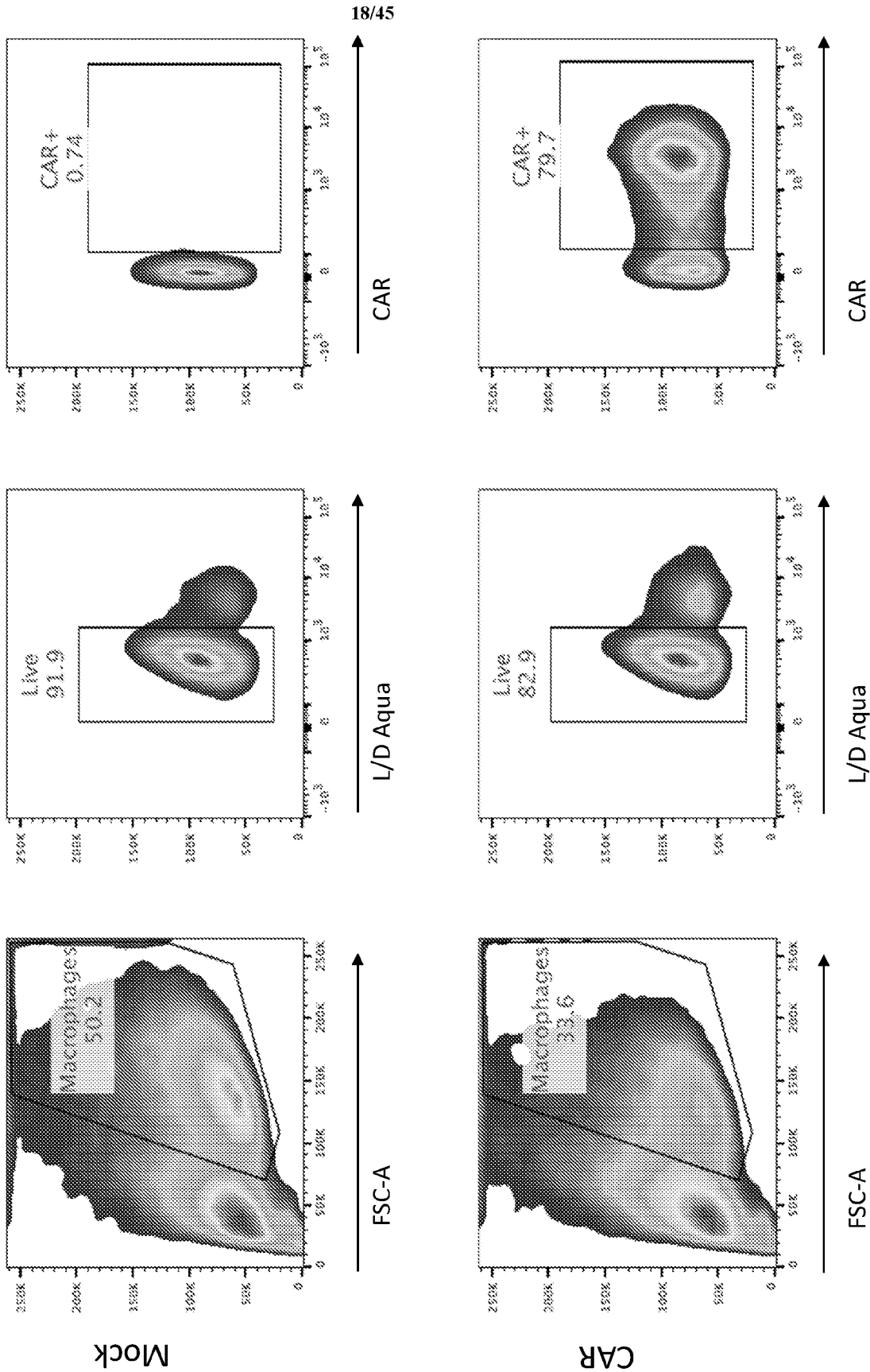


Figure 12B

Primary human macrophage gating strategy, viability, and anti-HER2 CAR expression



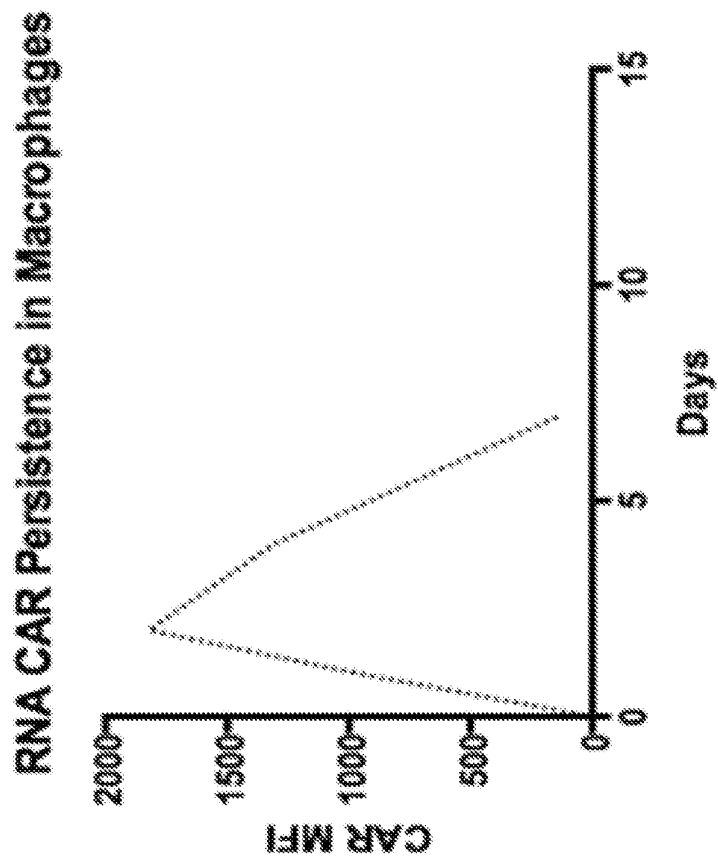
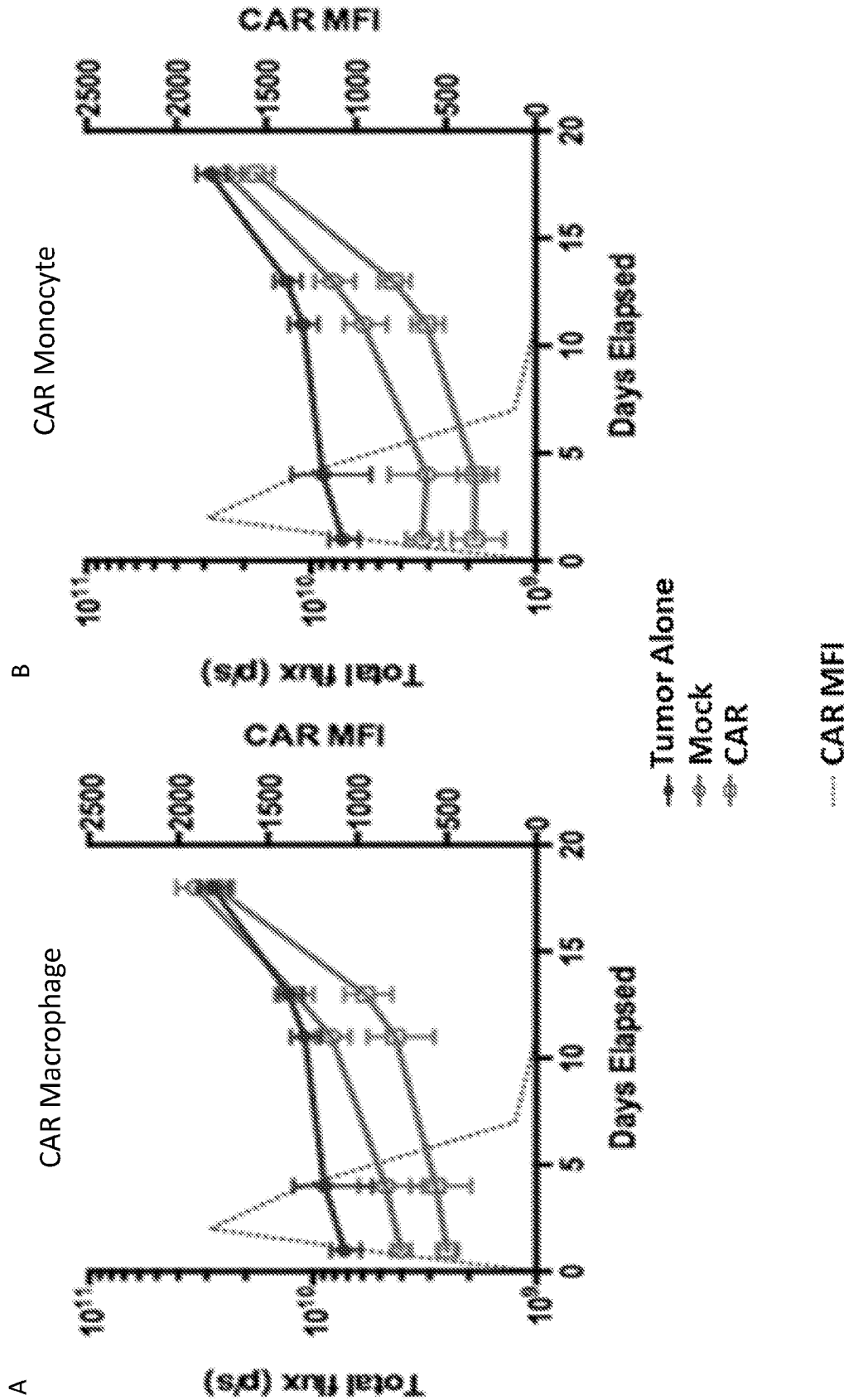


Figure 12C

Figures 13A-13B



NSG Mice, 5 per group

Figure 14A

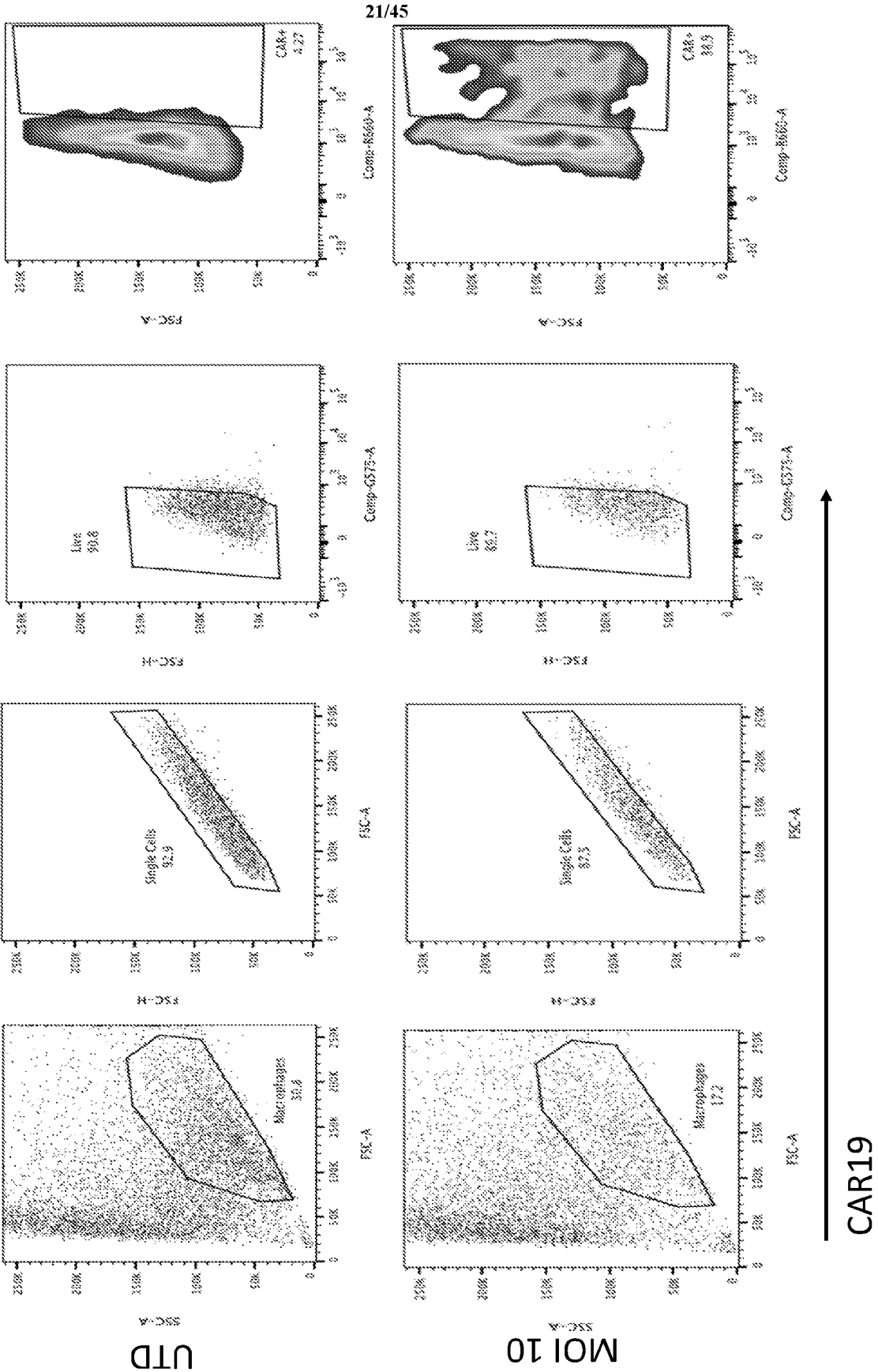


Figure 14B

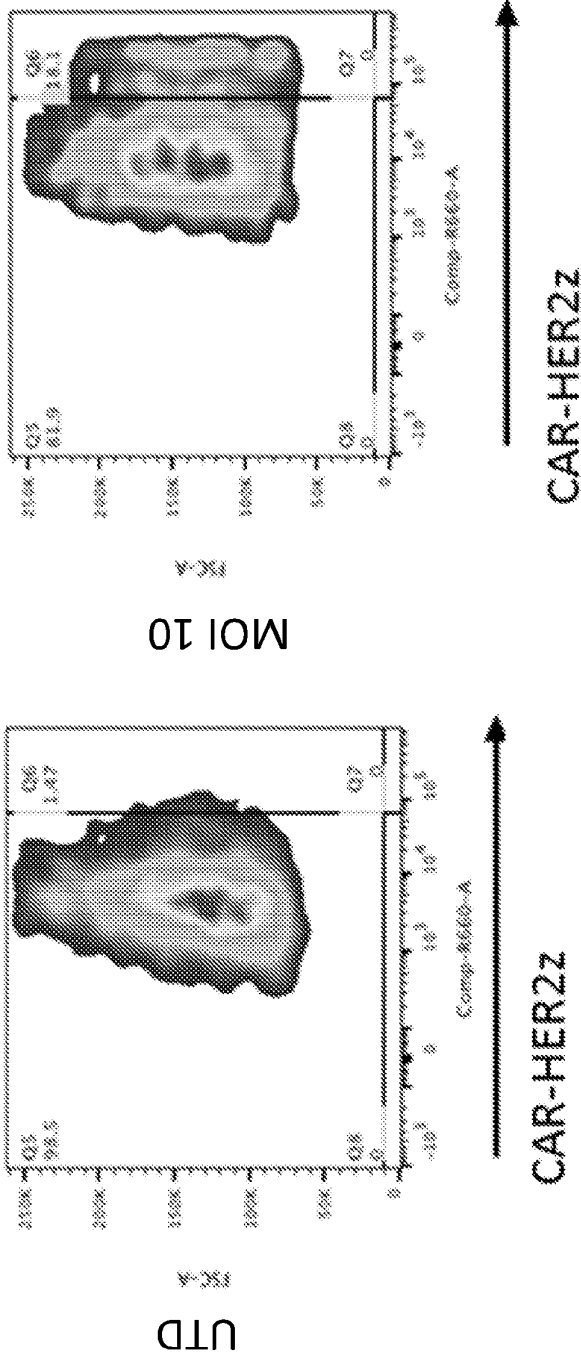
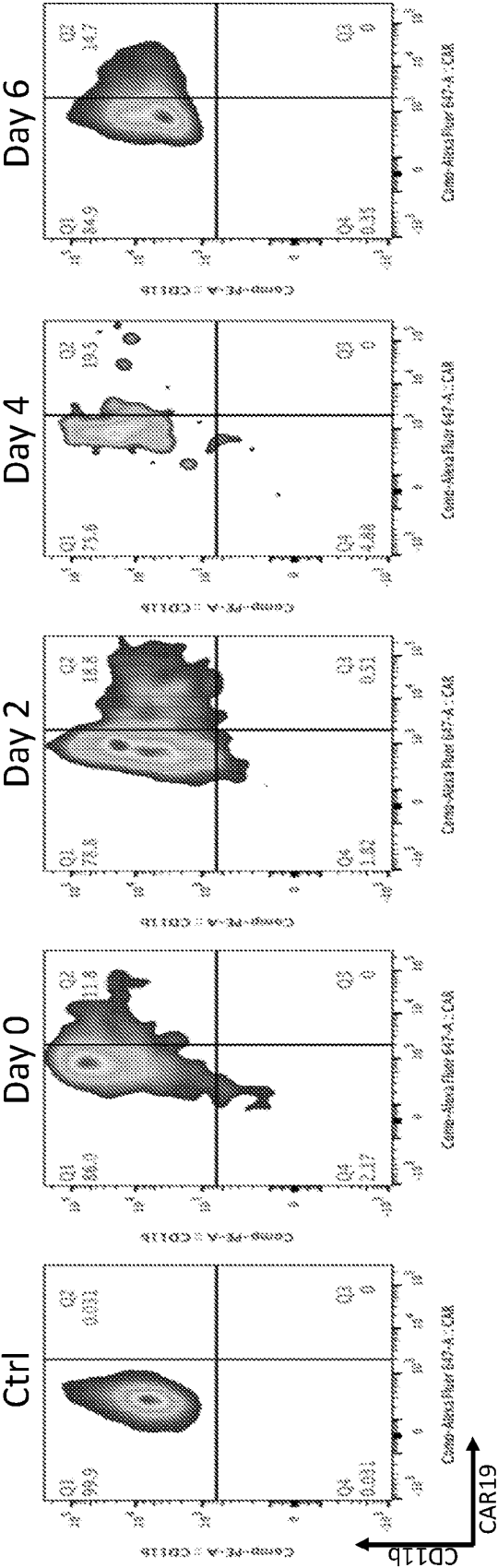


Figure 15A



Figures 15B-15C

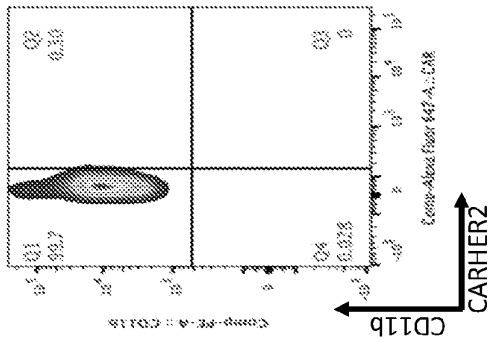
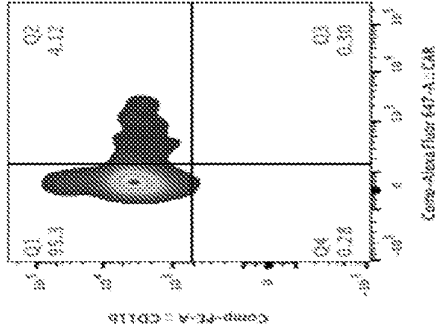
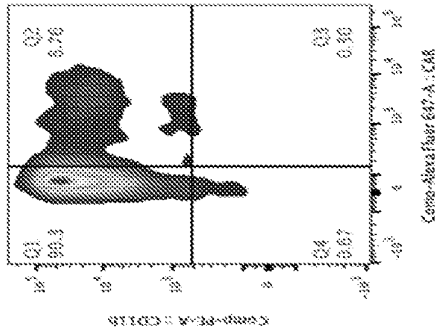
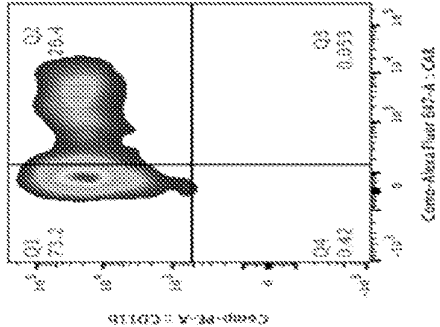
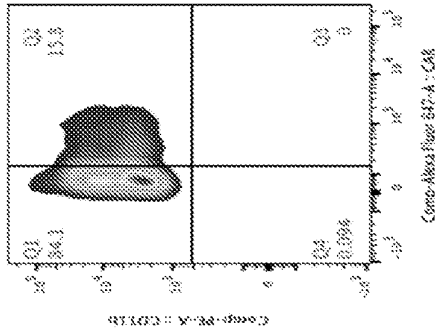
B Ctrl

Day 6

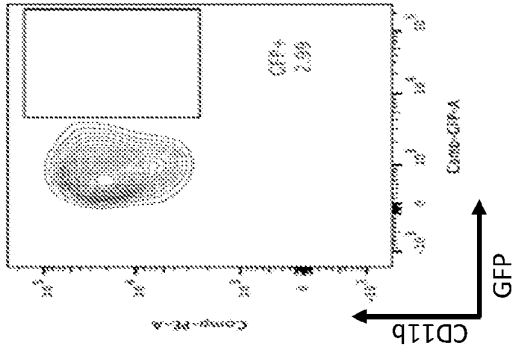
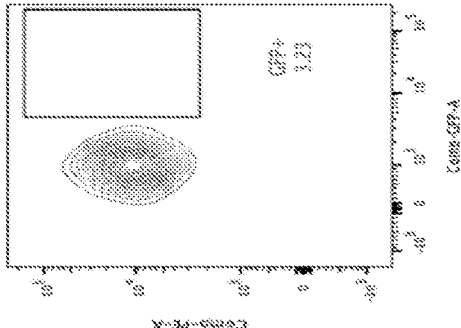
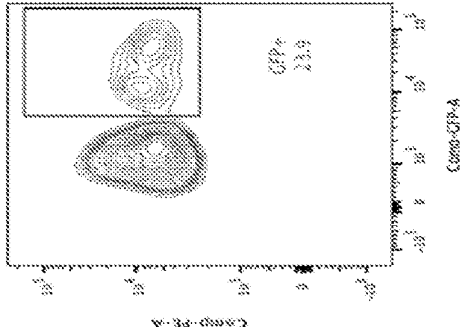
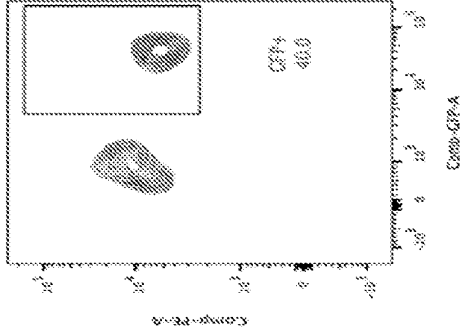
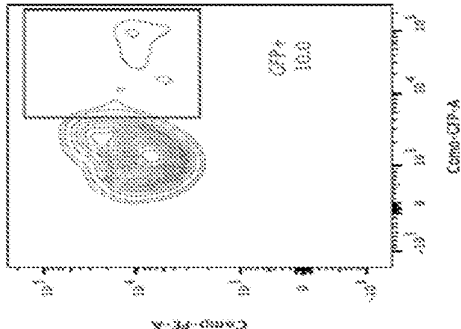
Day 4

Day 2

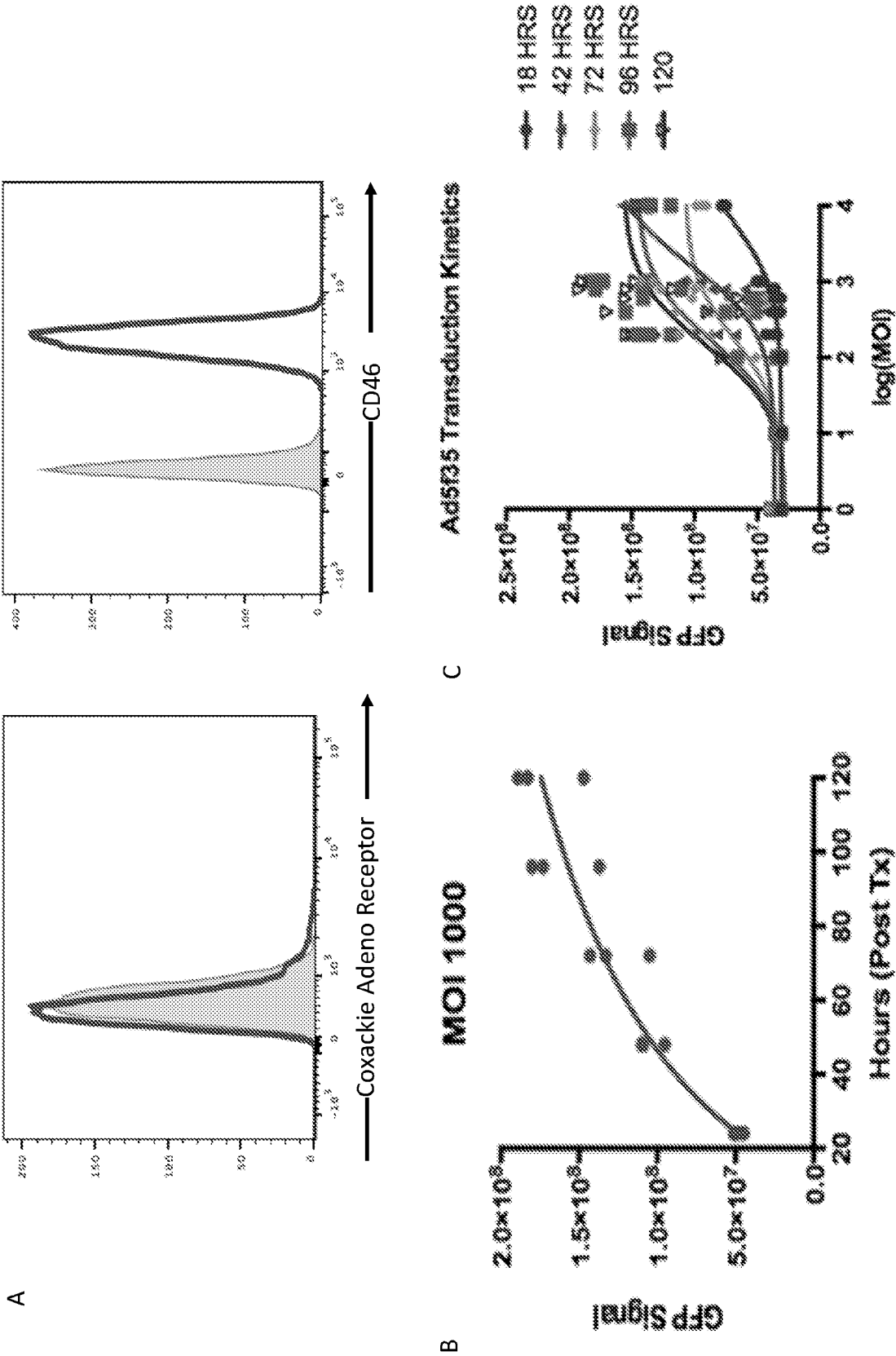
Day 0



C Phagocytosis of K19 by primary CARMA trends with transduction efficiency



Figures 16A-16C



Figures 16D-16E

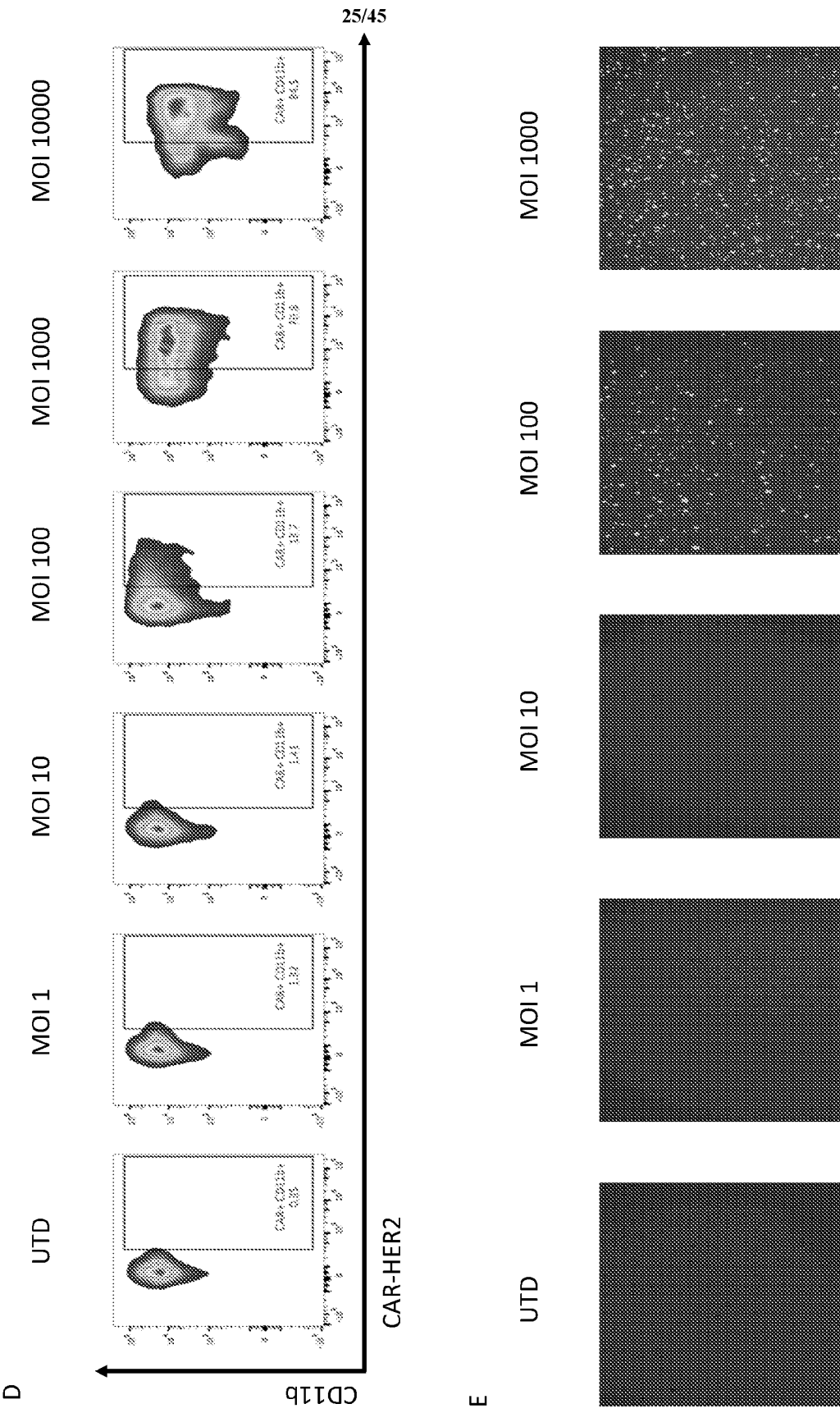
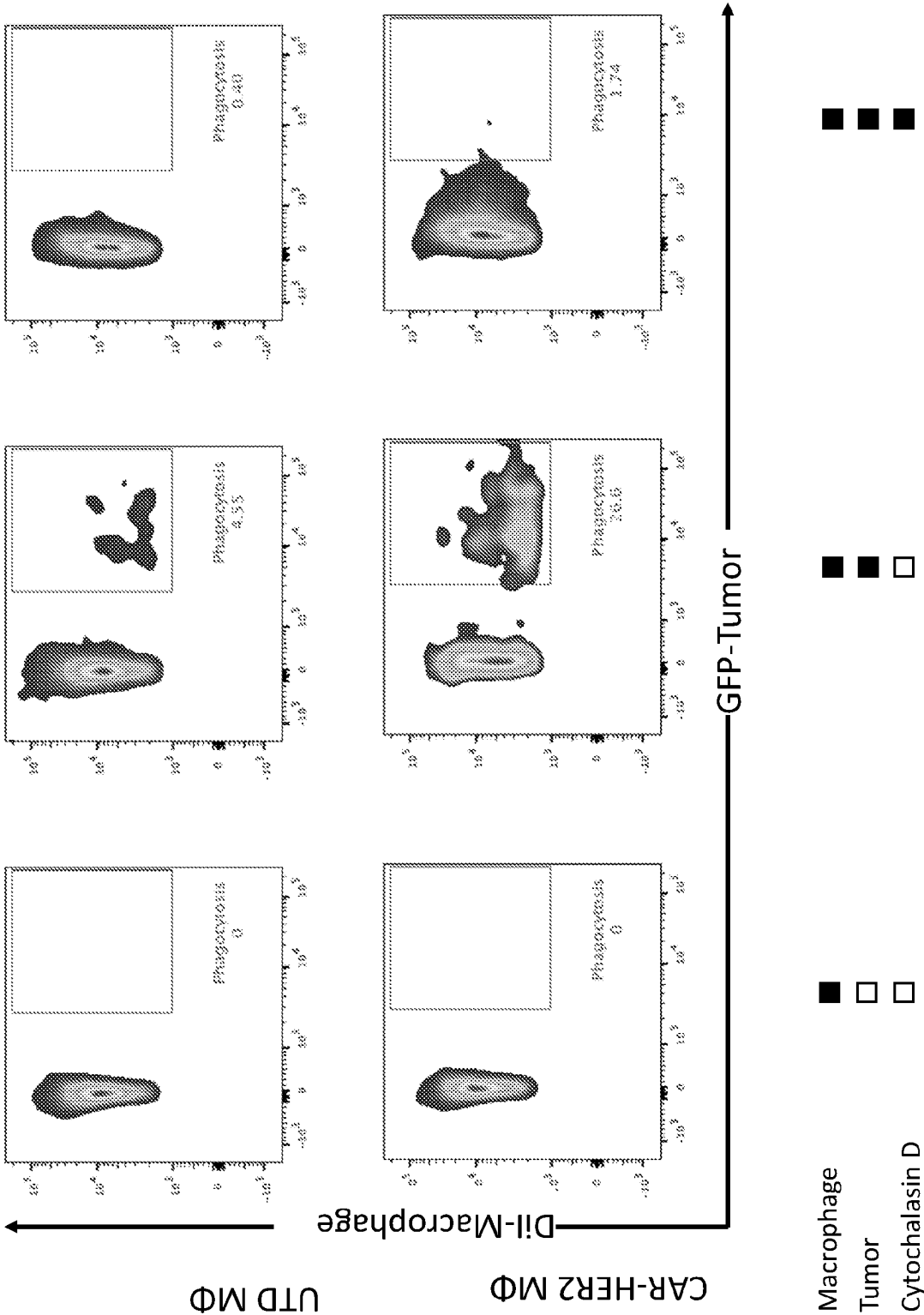
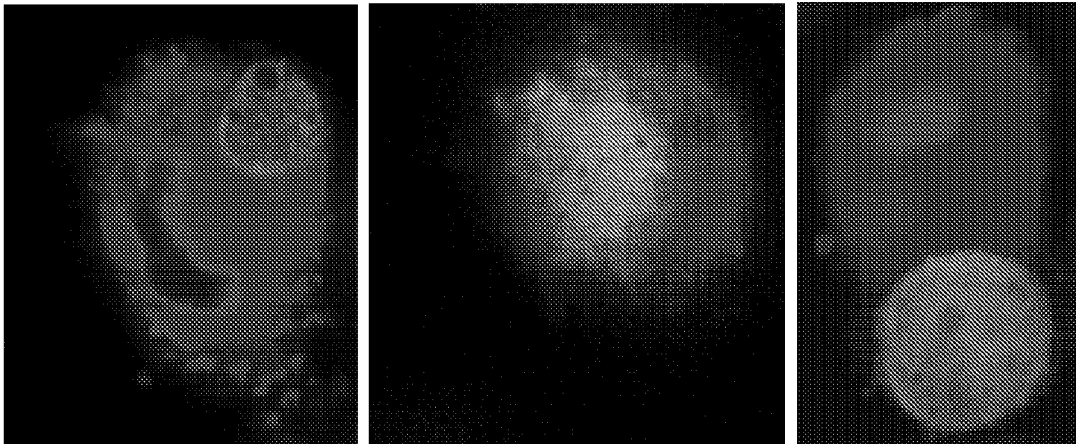
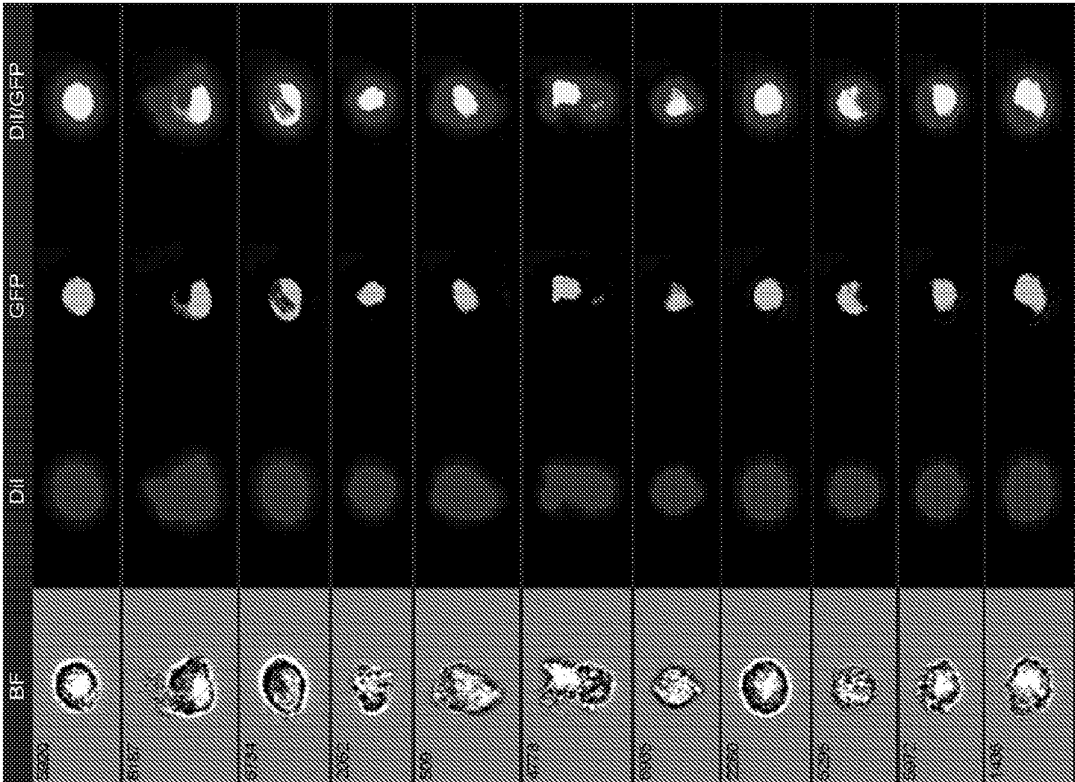


Figure 17A





C



B

Figures 17B- 17C

Figure 18

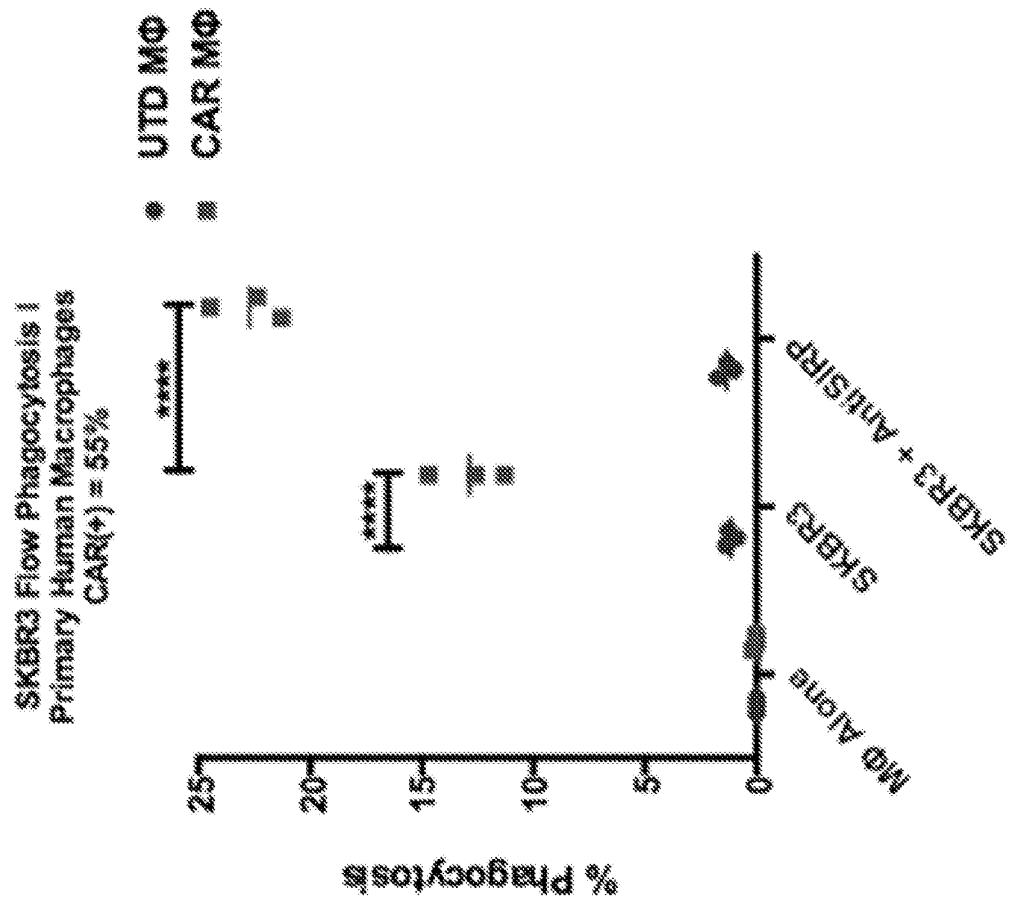
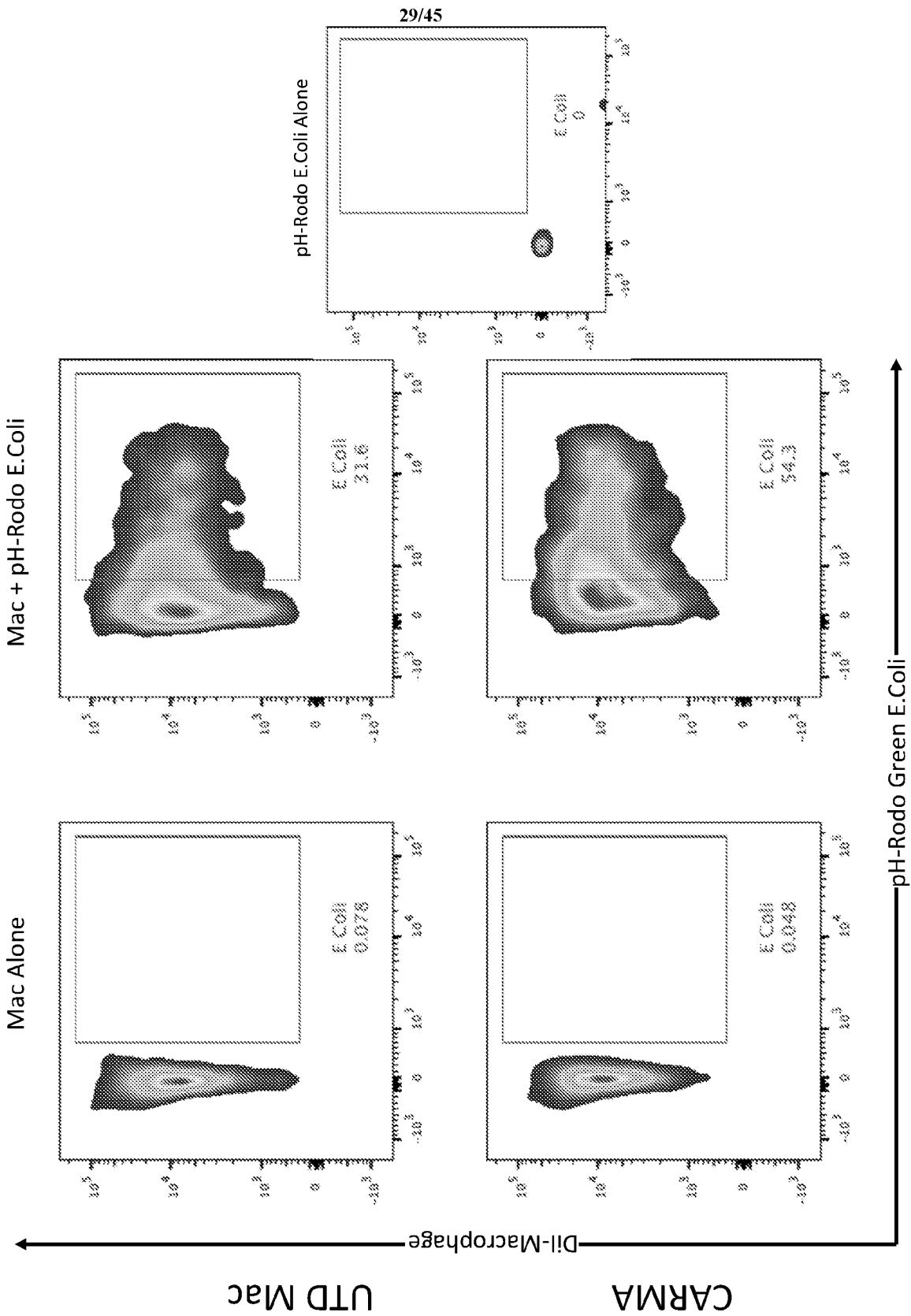
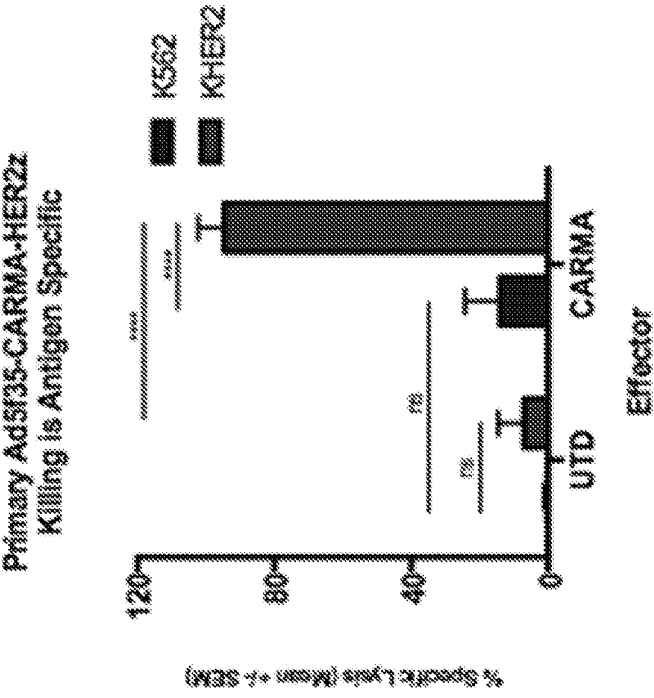


Figure 19

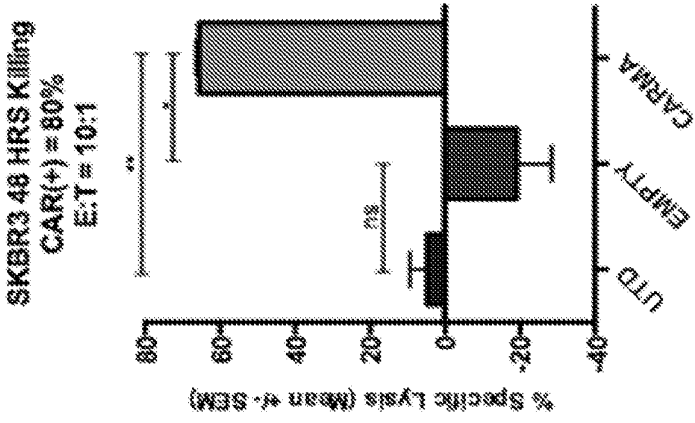


Figures 20A-20C

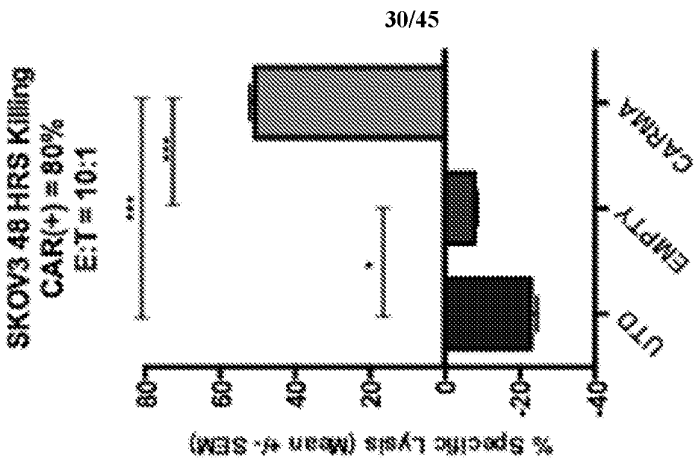
A



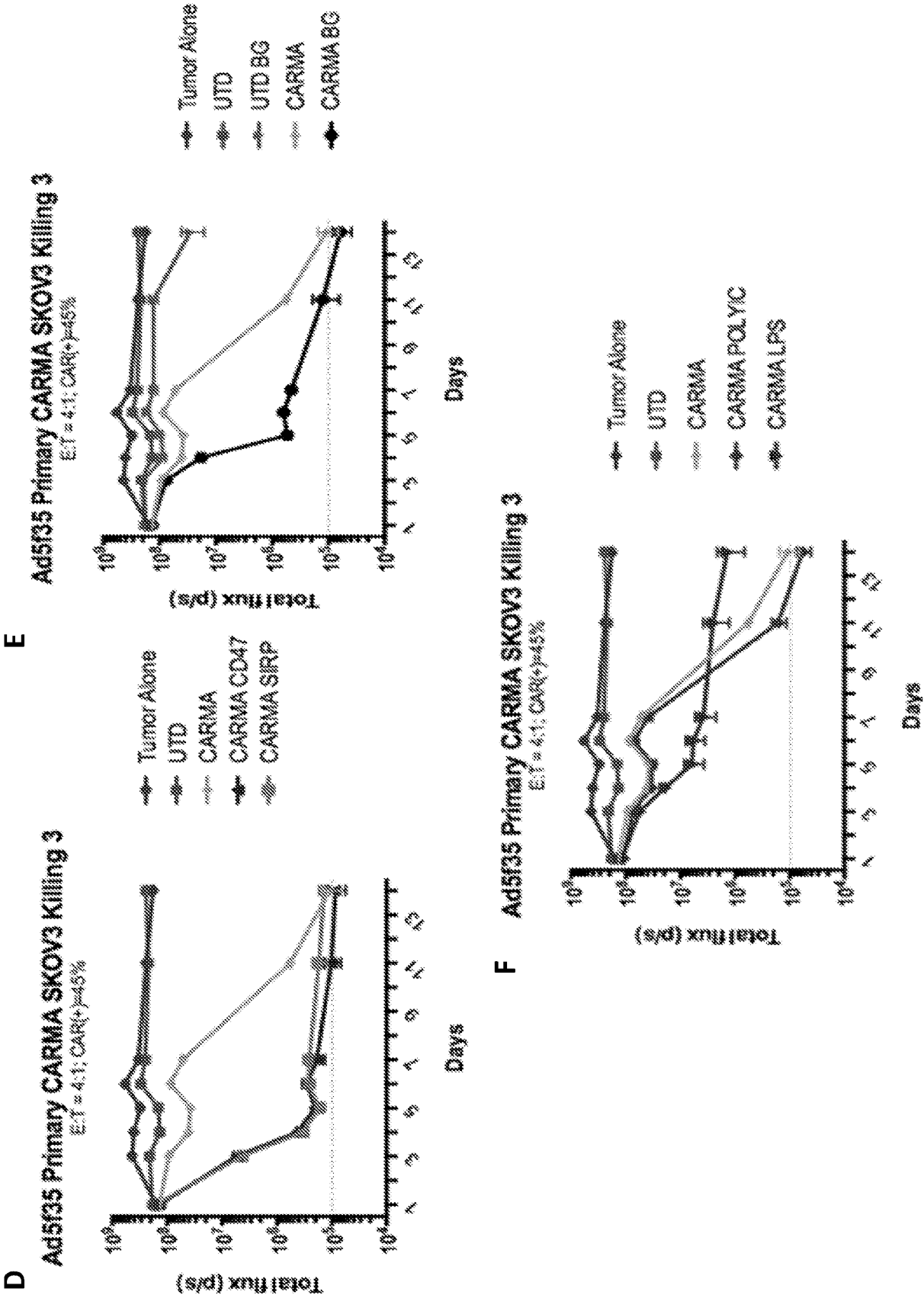
B



C



Figures 20D-20F



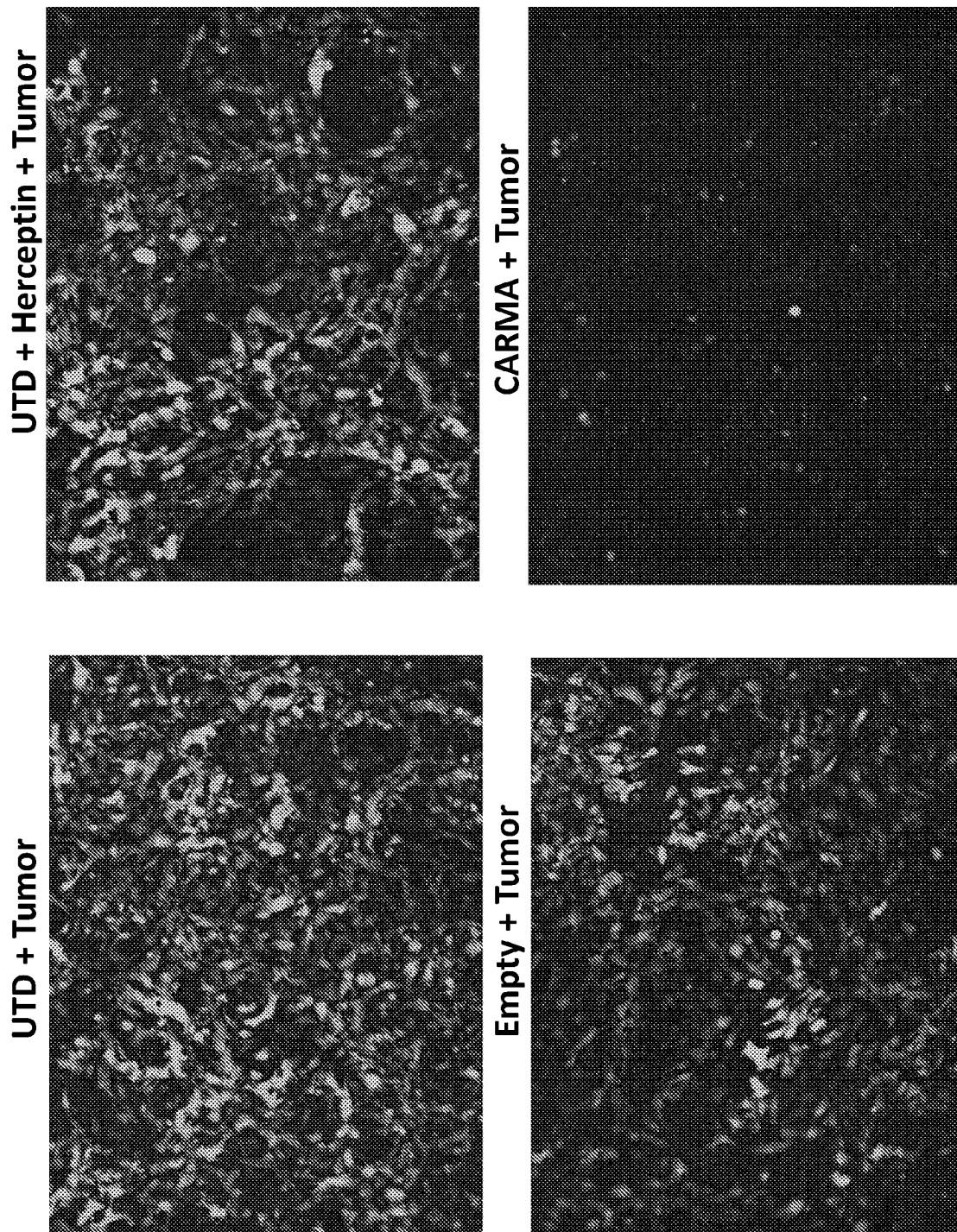
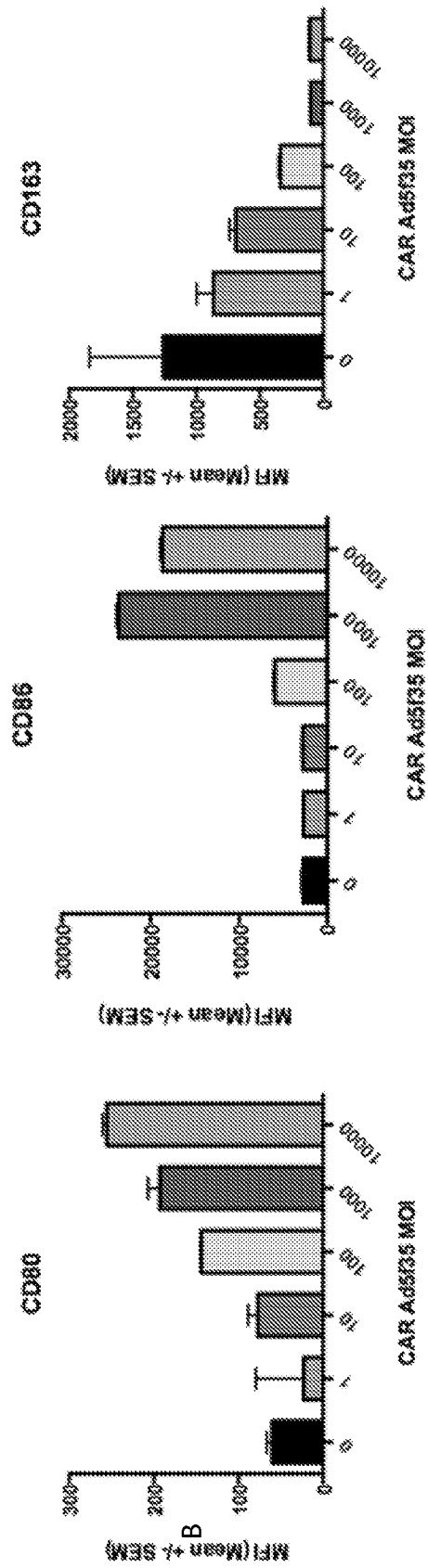


Figure 21

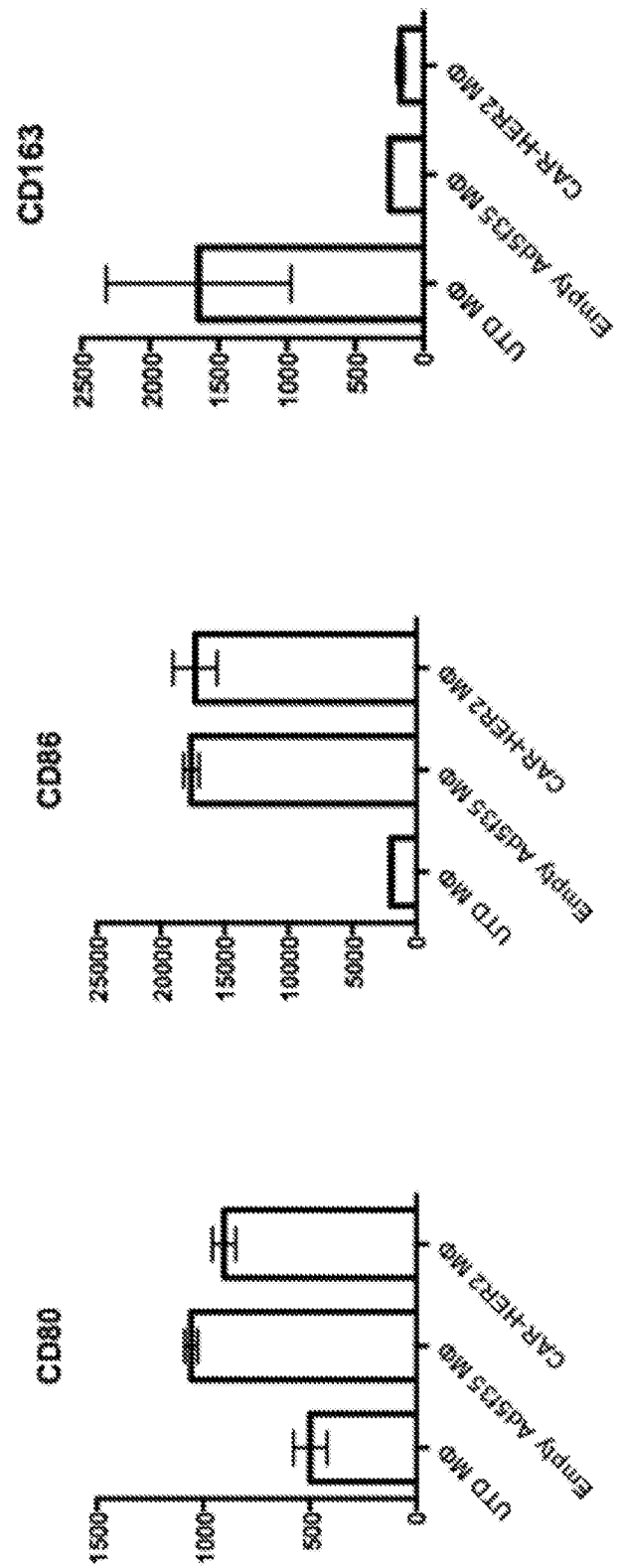
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Figures 22A-22B

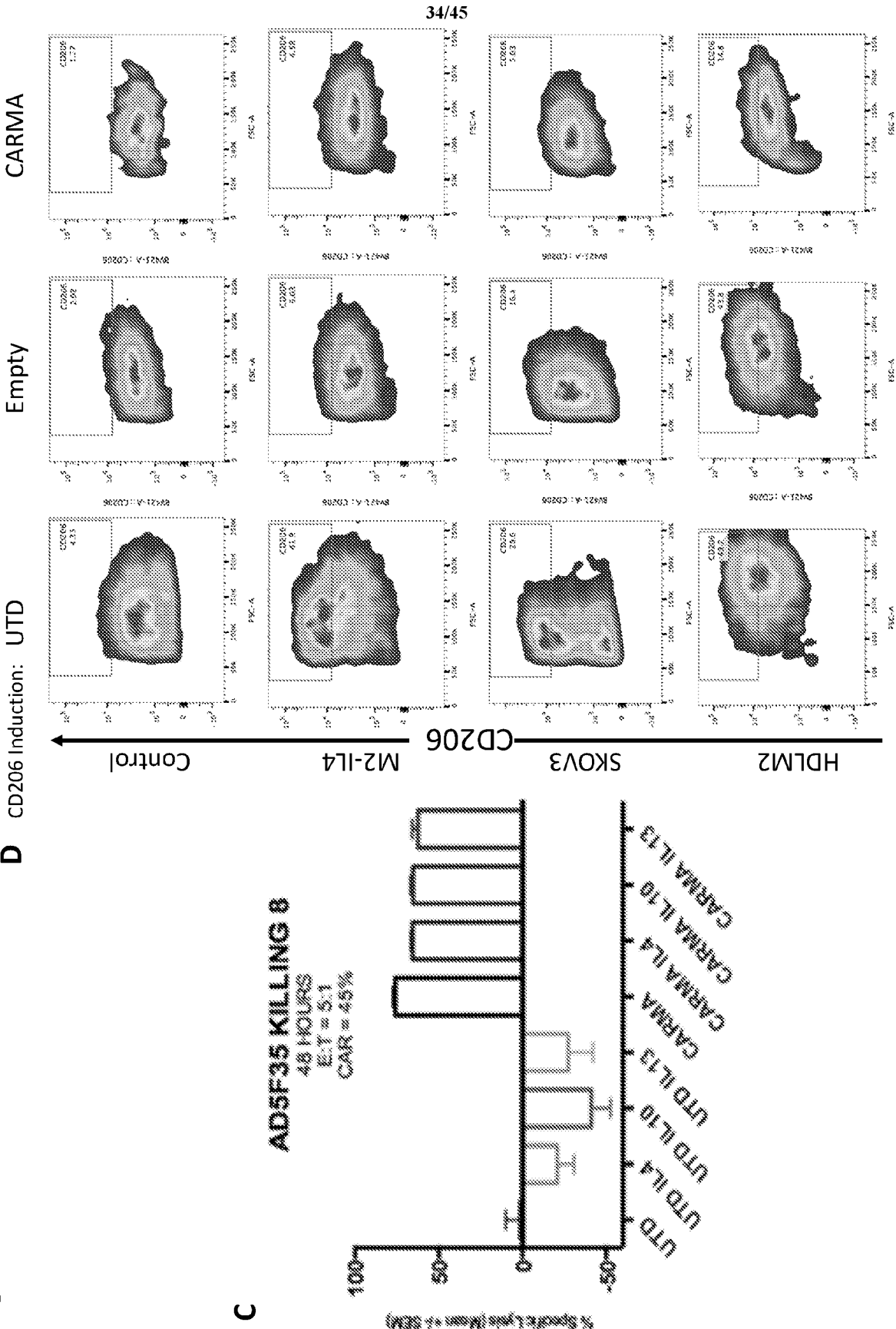
A



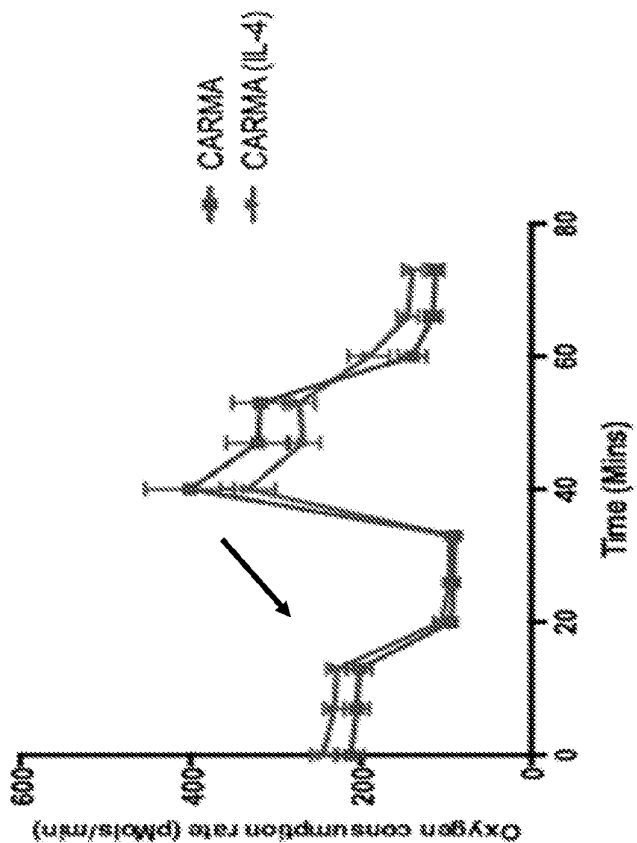
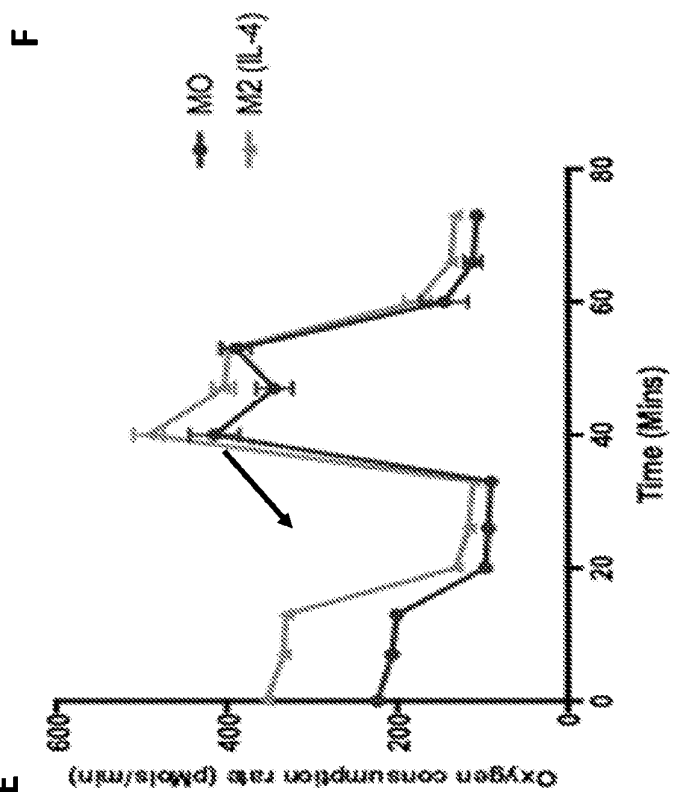
B



Figures 22C-22D



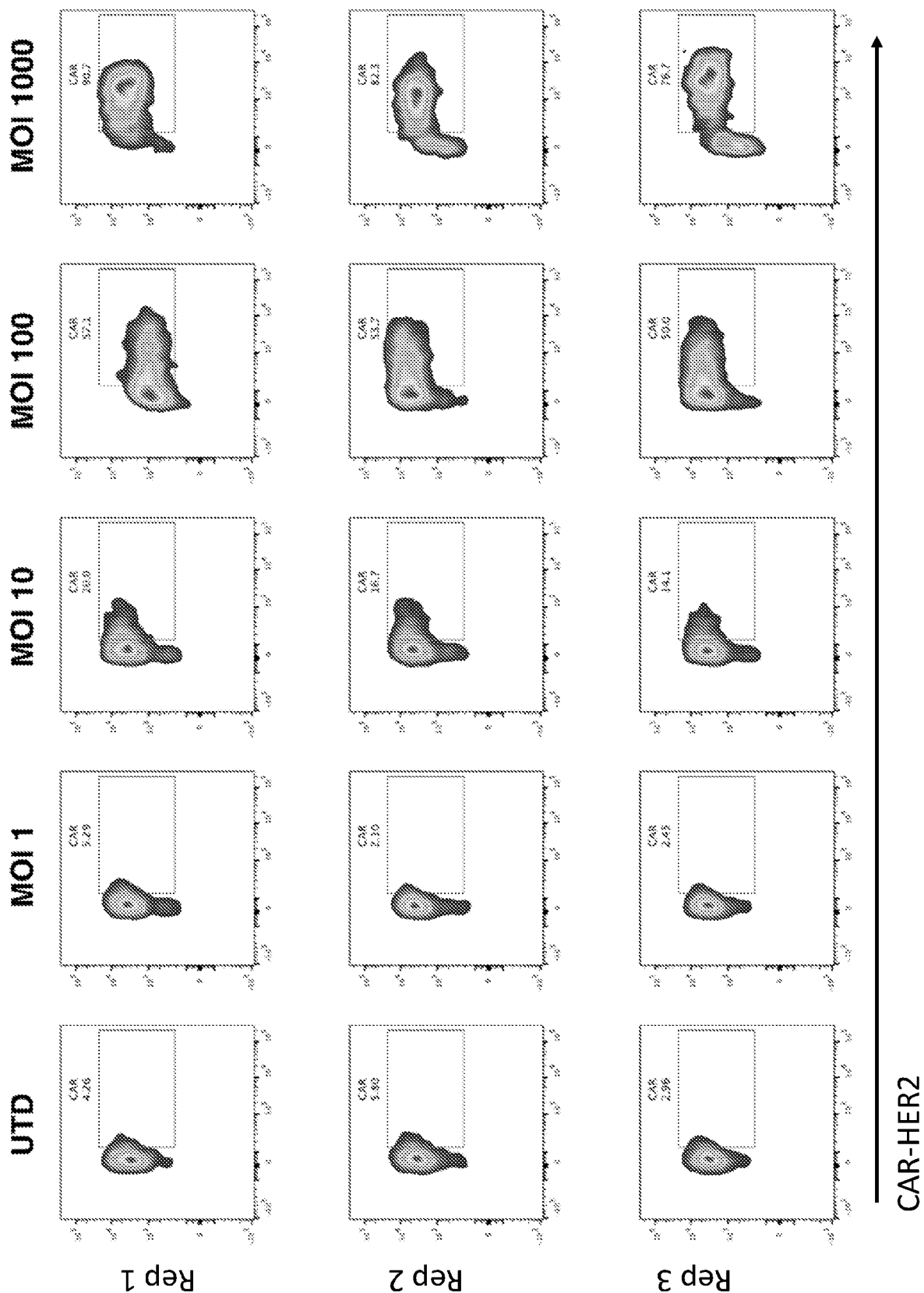
35/45



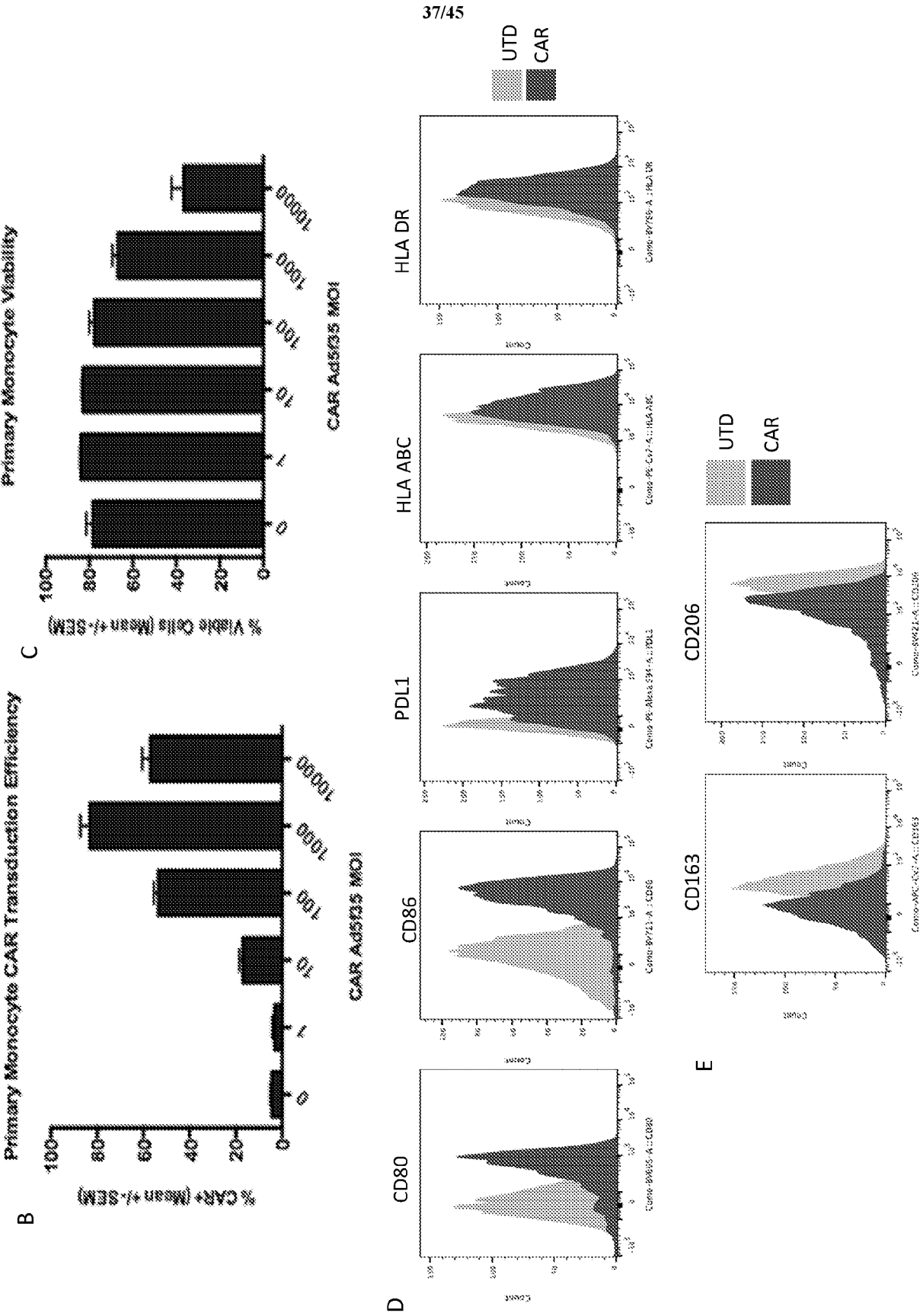
Figures 22E-22F

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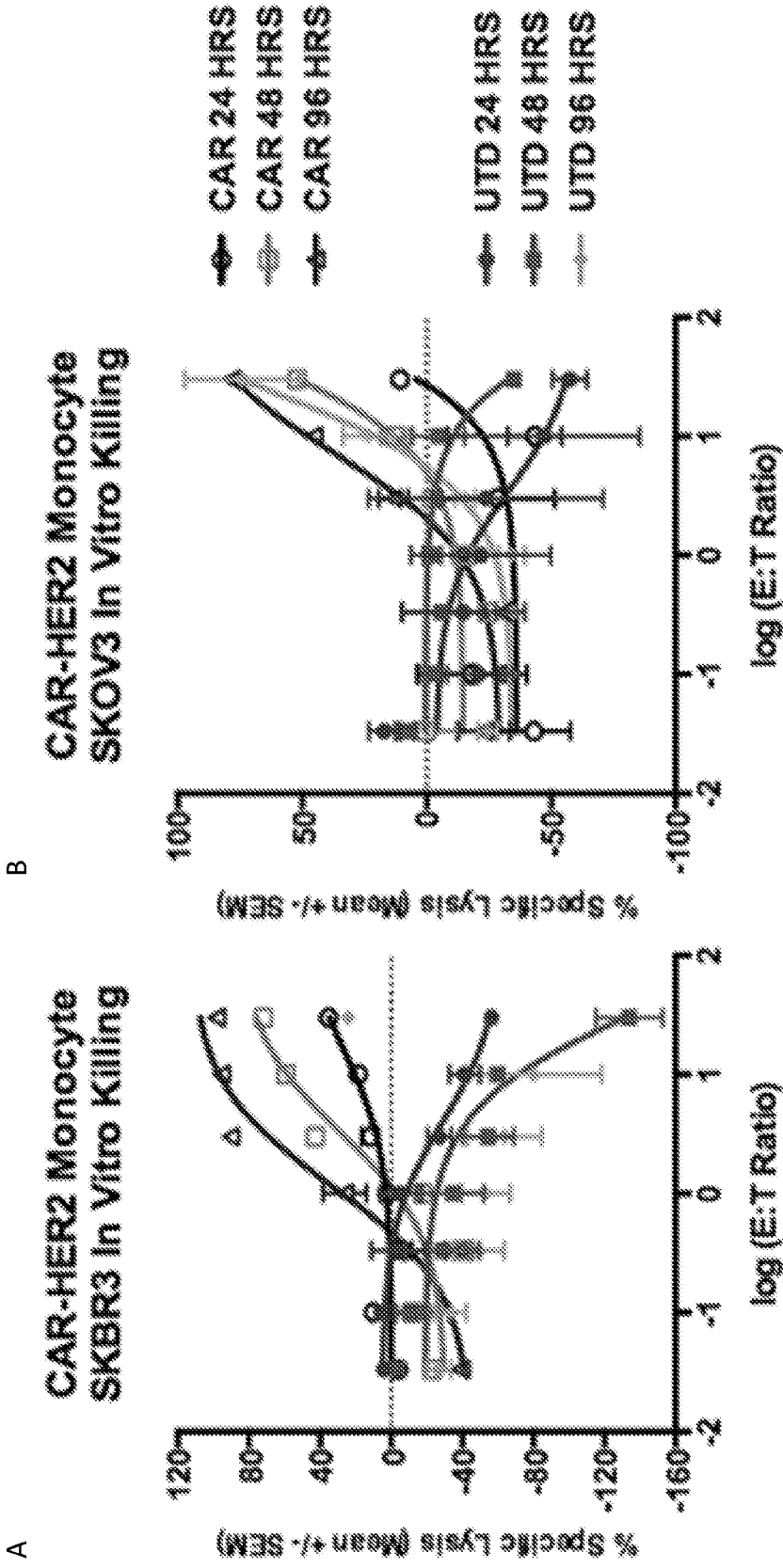
Figure 23A



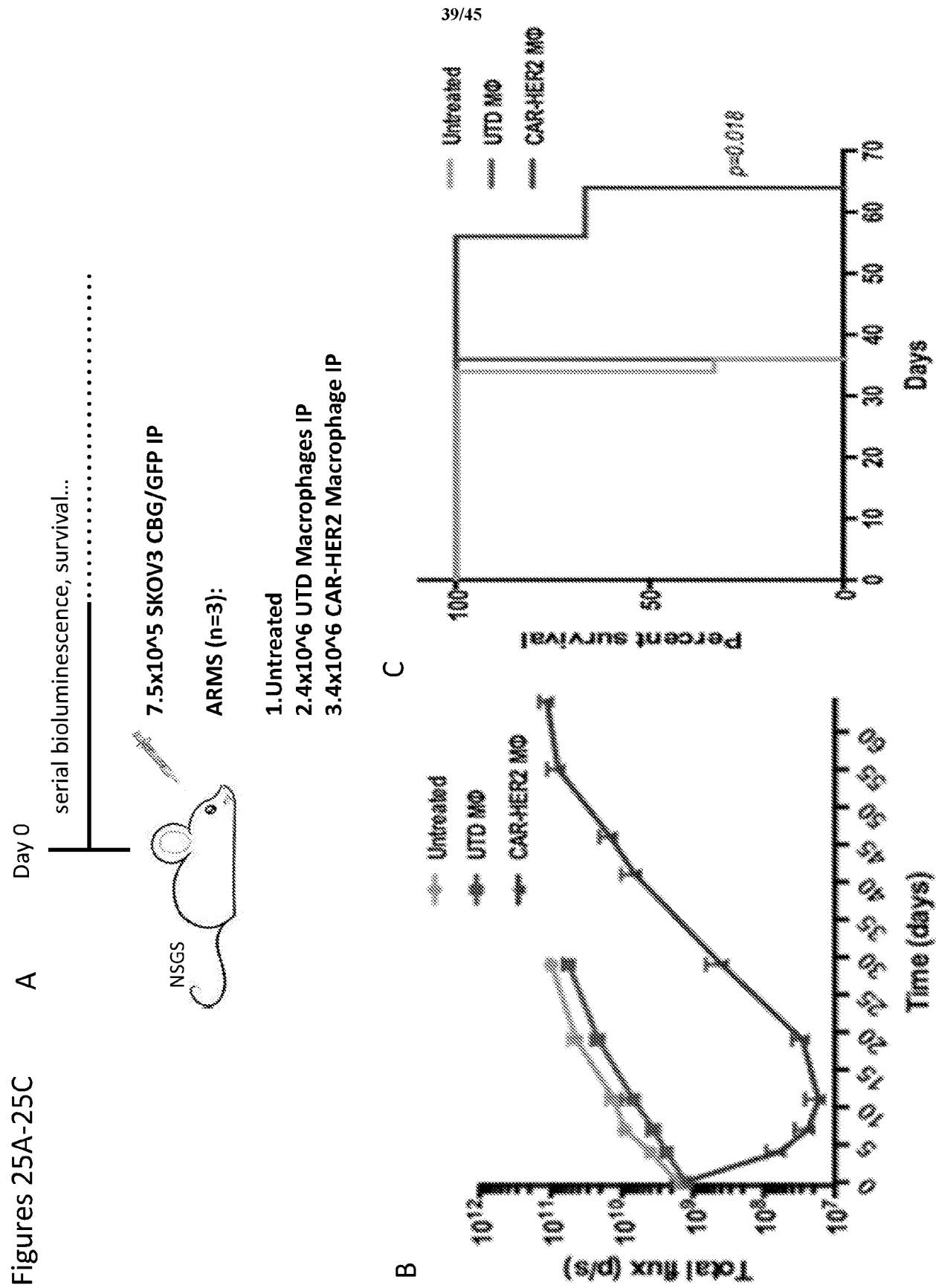
Figures 23B-23E



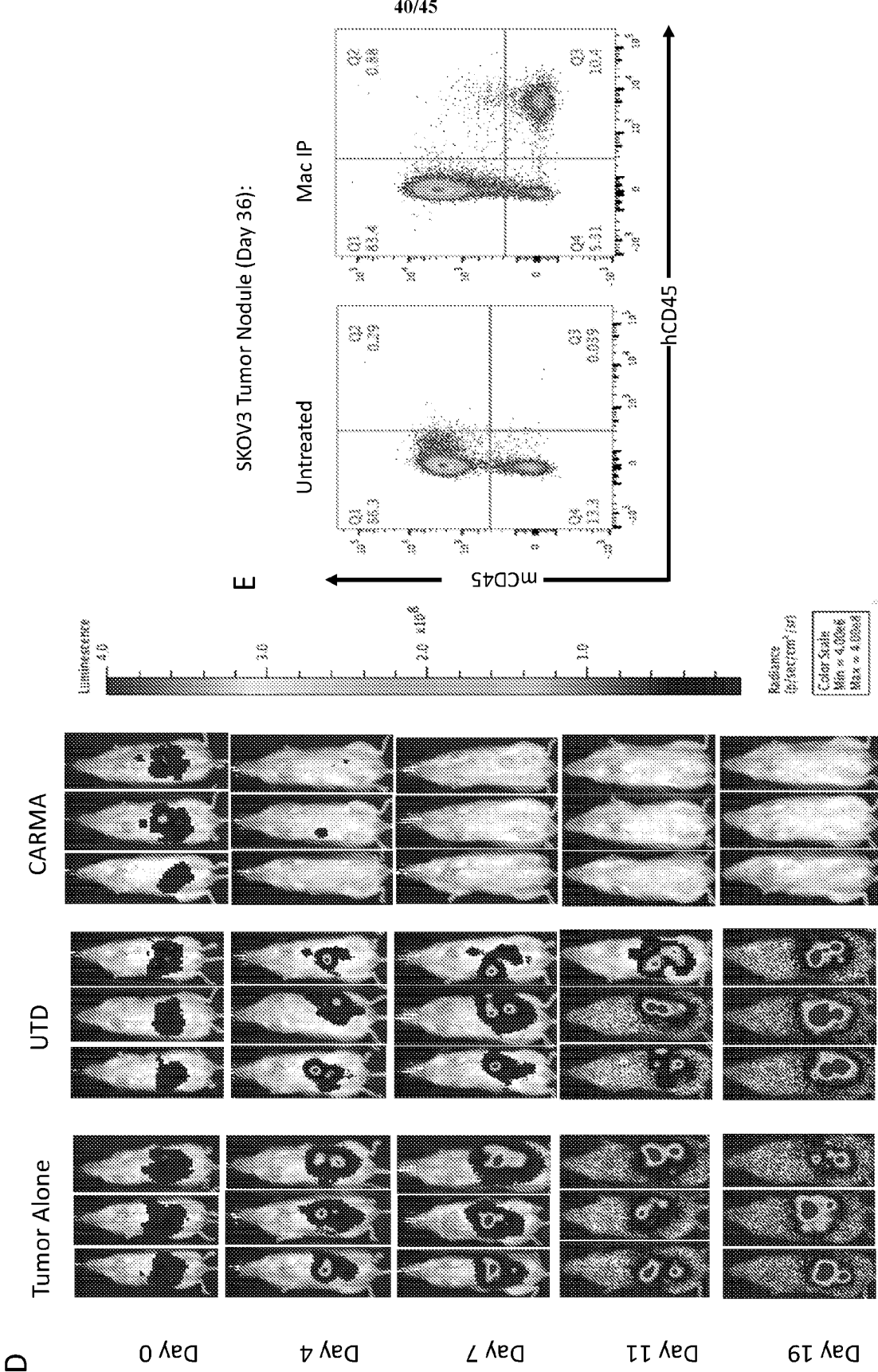
Figures 24A-24B



Figures 25A-25C



Figures 25D-25E



Figures 26A-26C

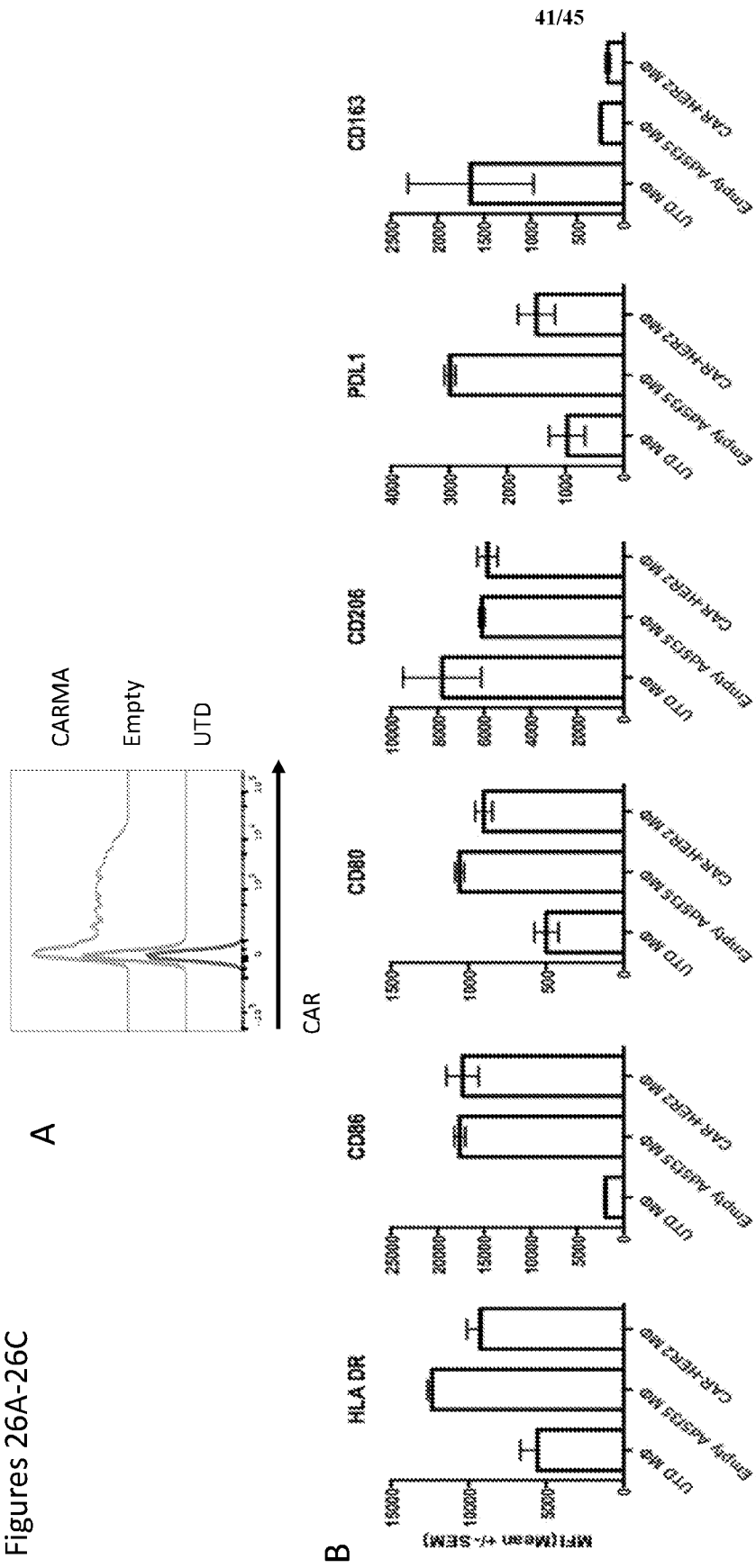
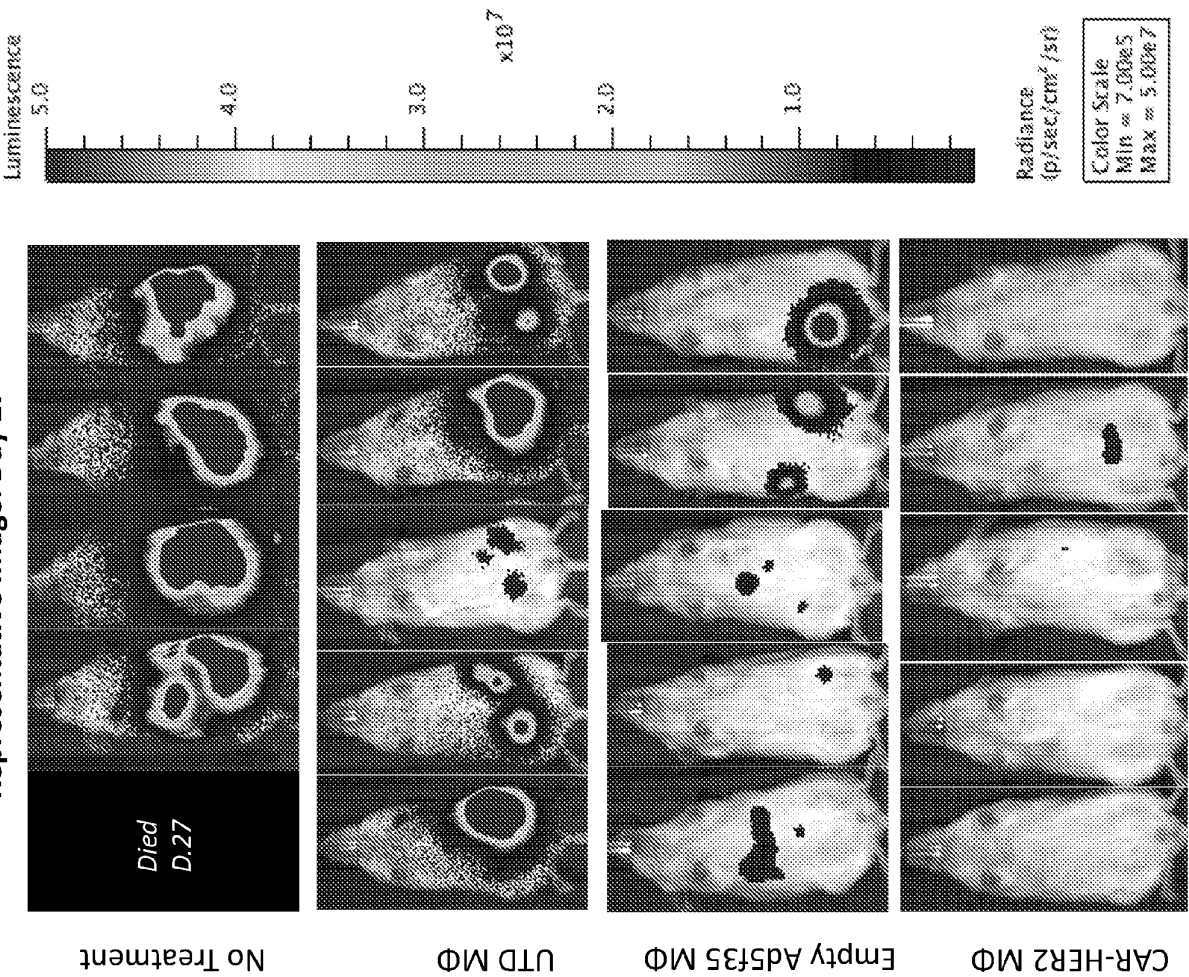


Figure 26D

SKOV3 Xenograft Model
Representative Image: Day 27



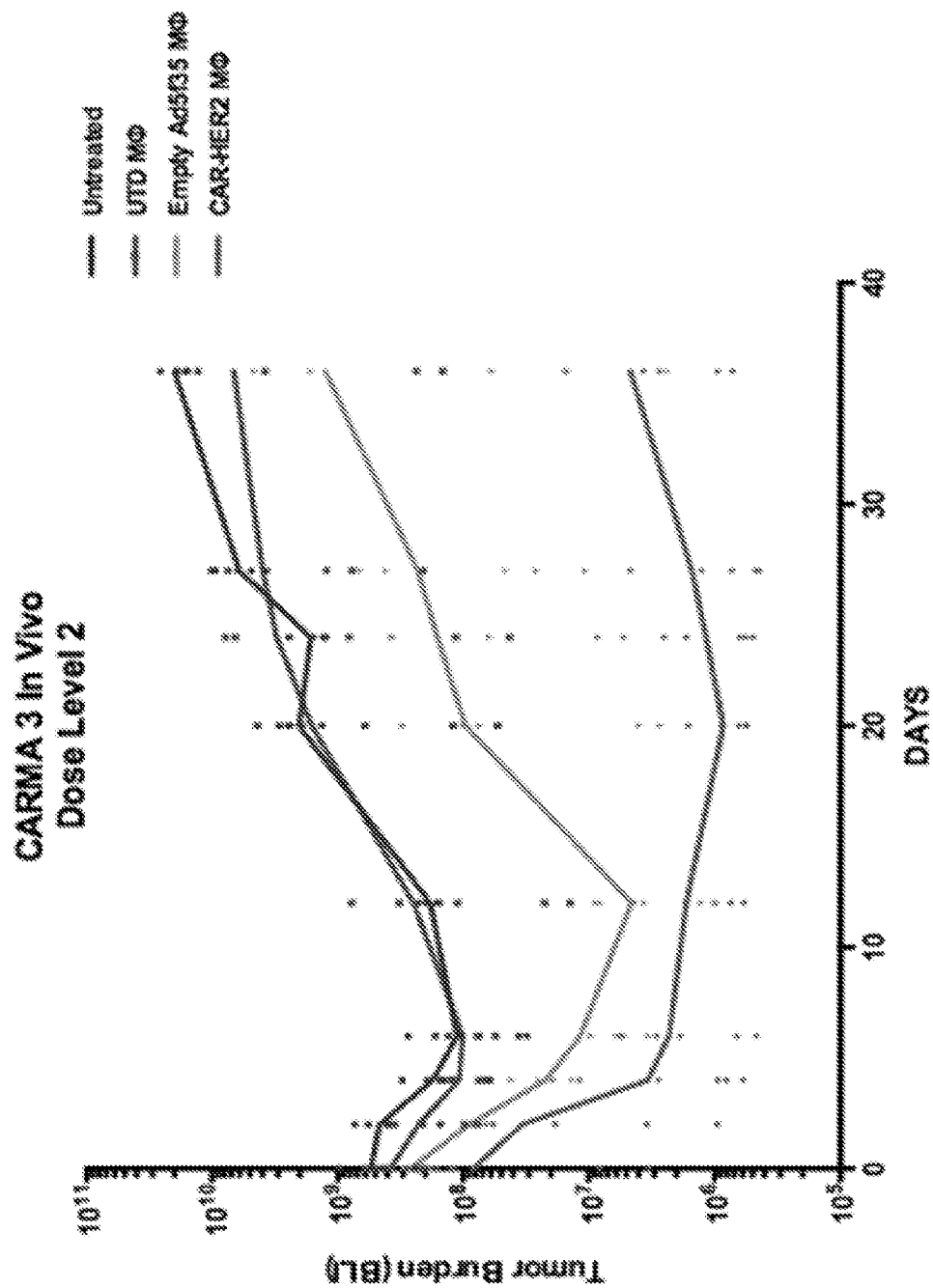


Figure 26E

Figures 27A-27C

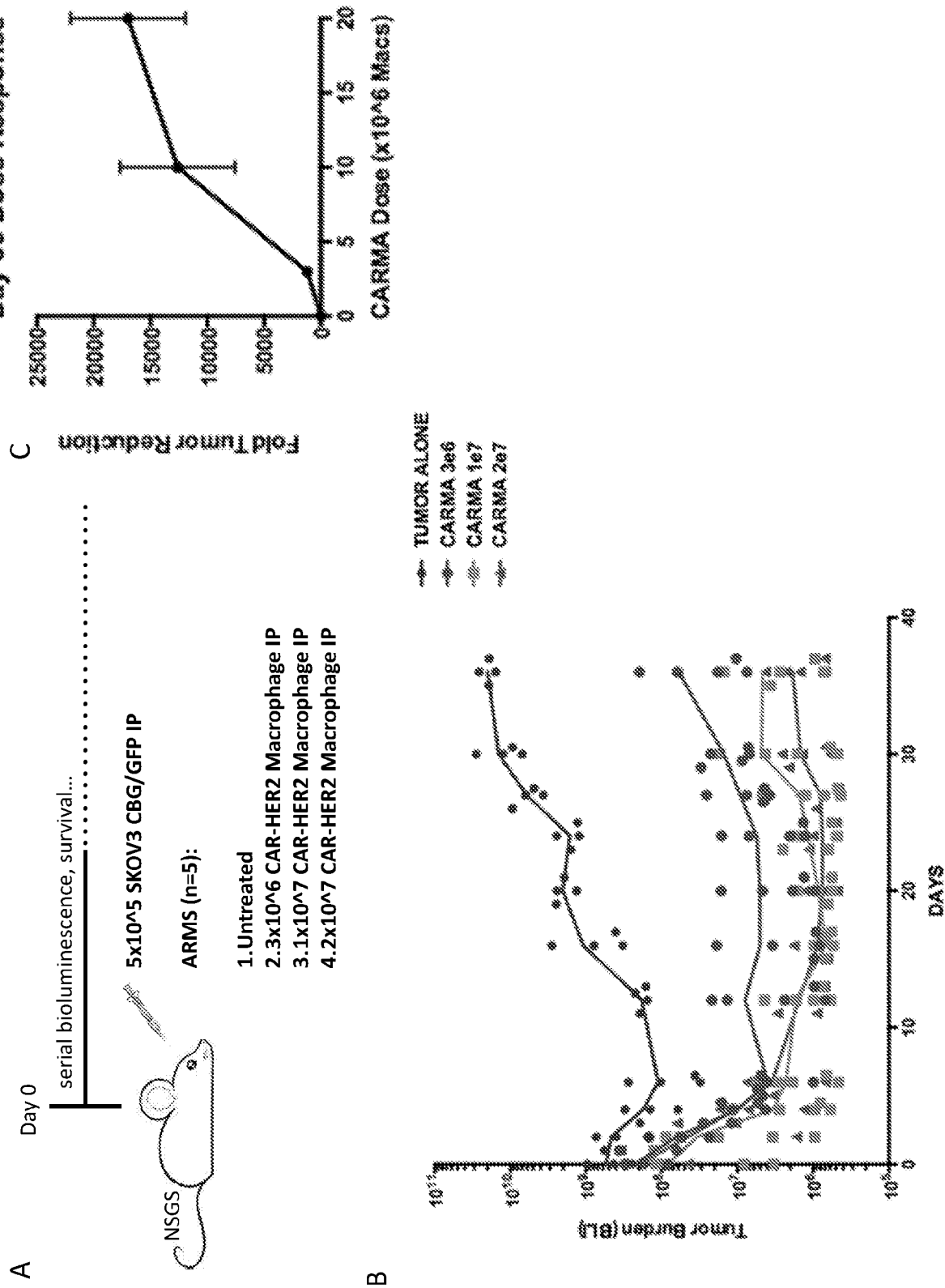


Figure 28

