

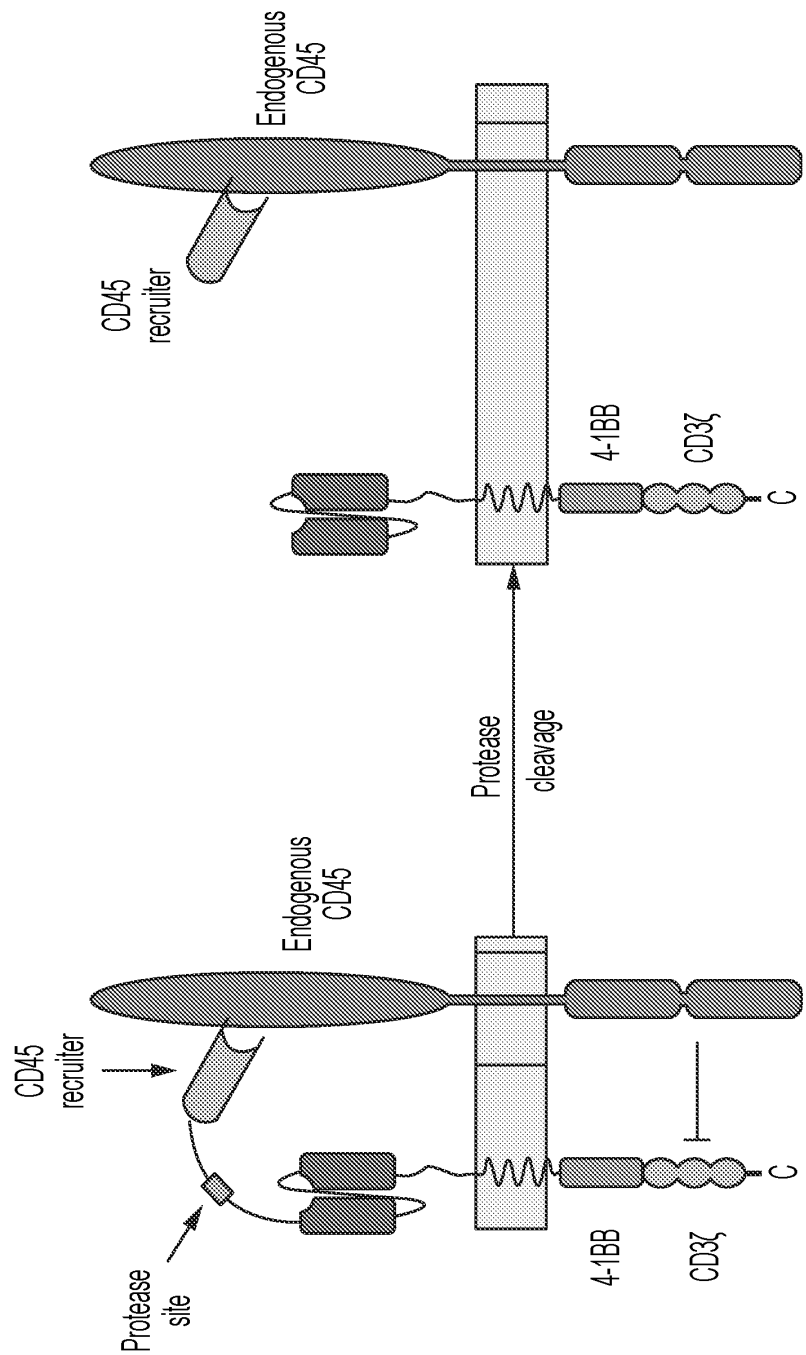


Fig. 1A

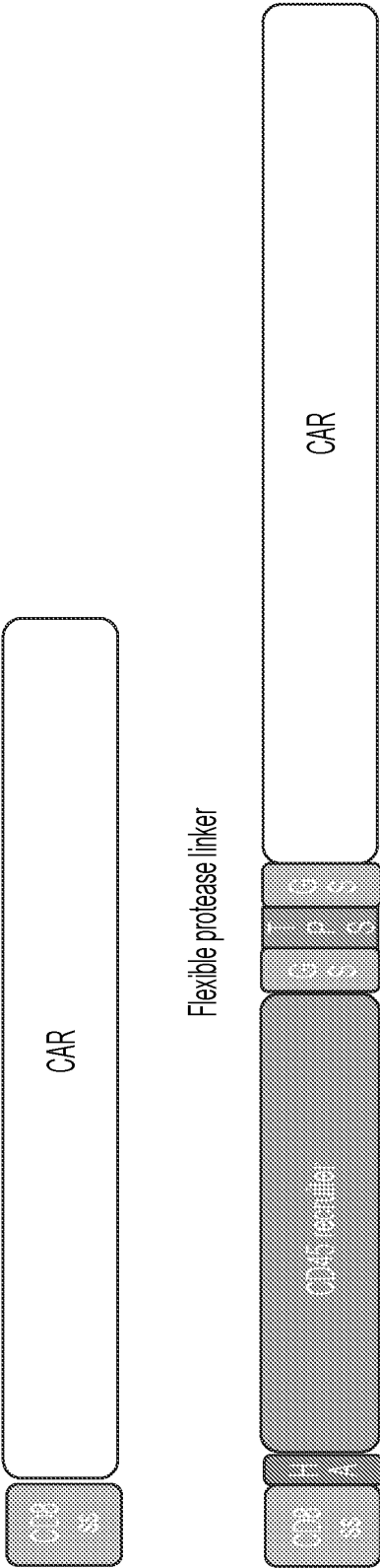


Fig. 1B

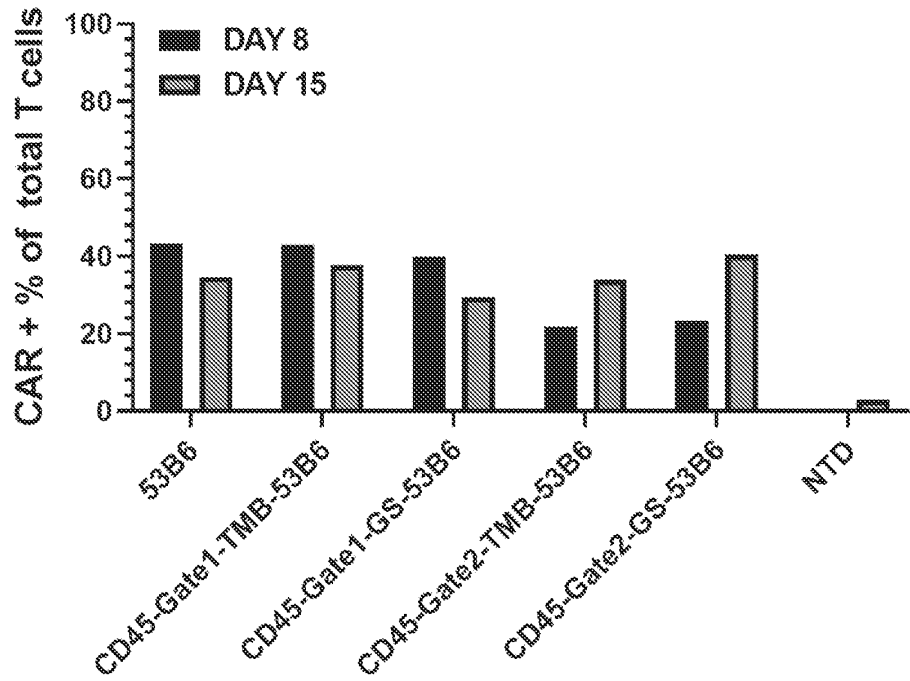


Fig. 2A

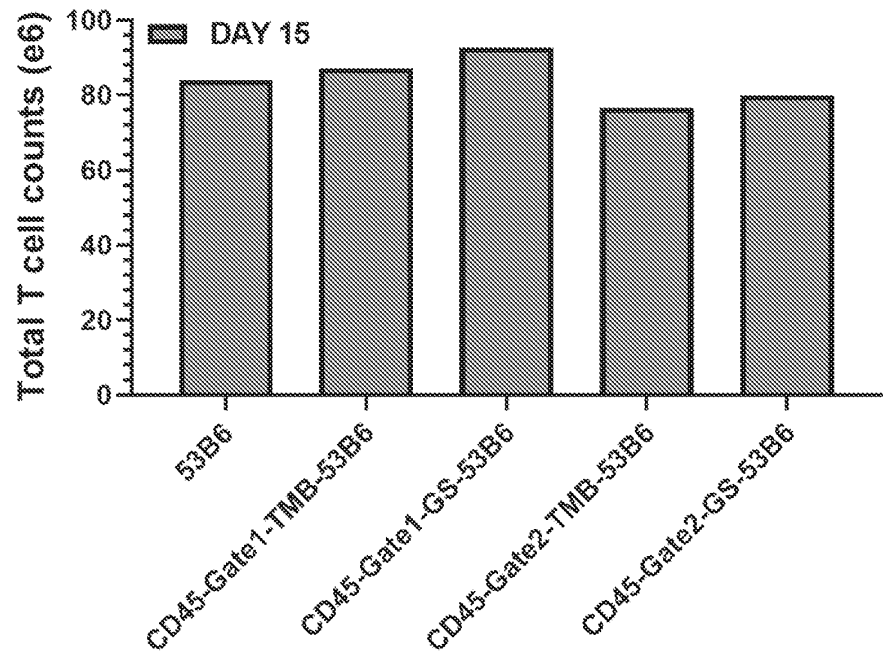


Fig. 2B

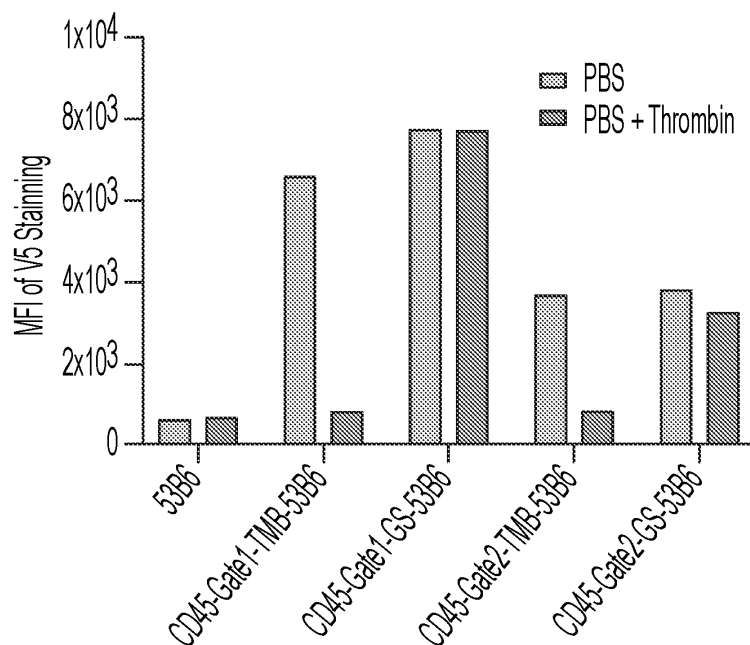


Fig. 3A

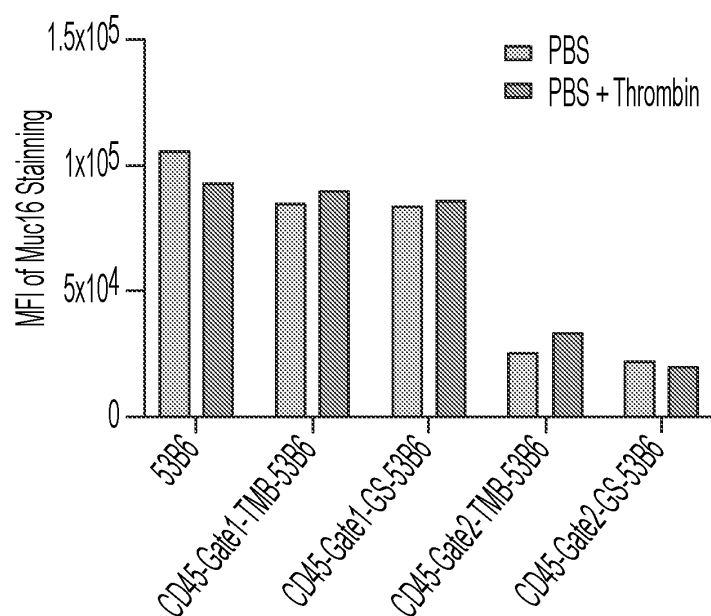


Fig. 3B

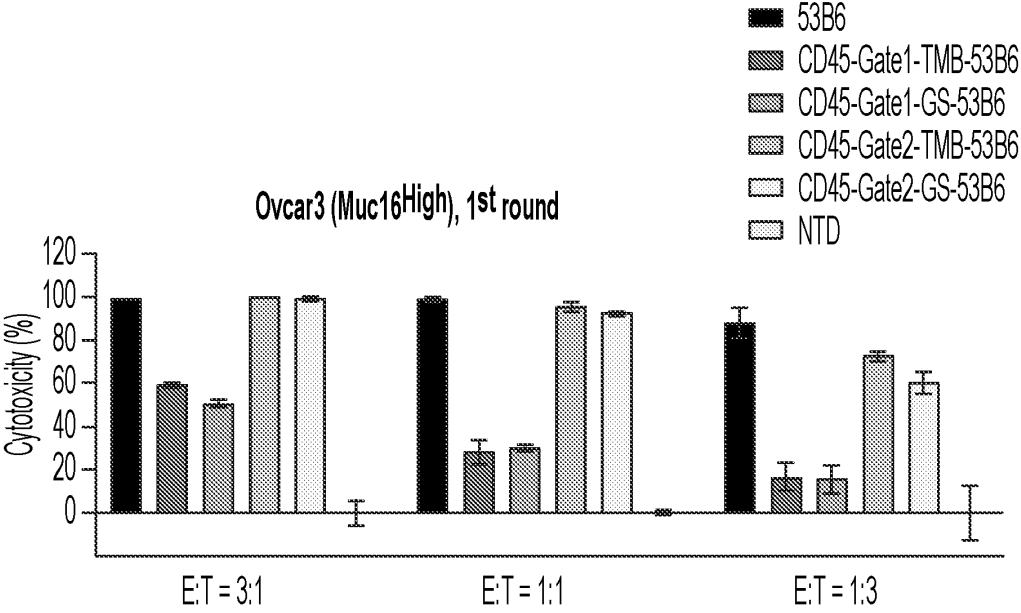


Fig. 4A

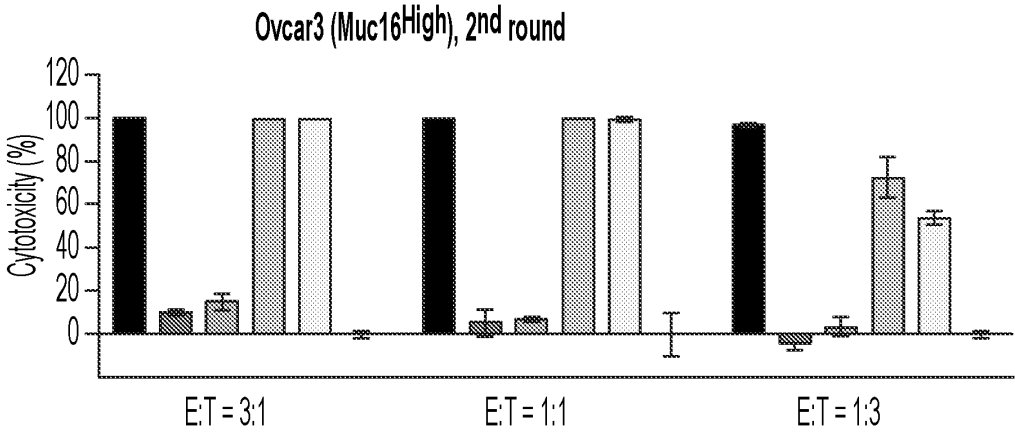


Fig. 4B

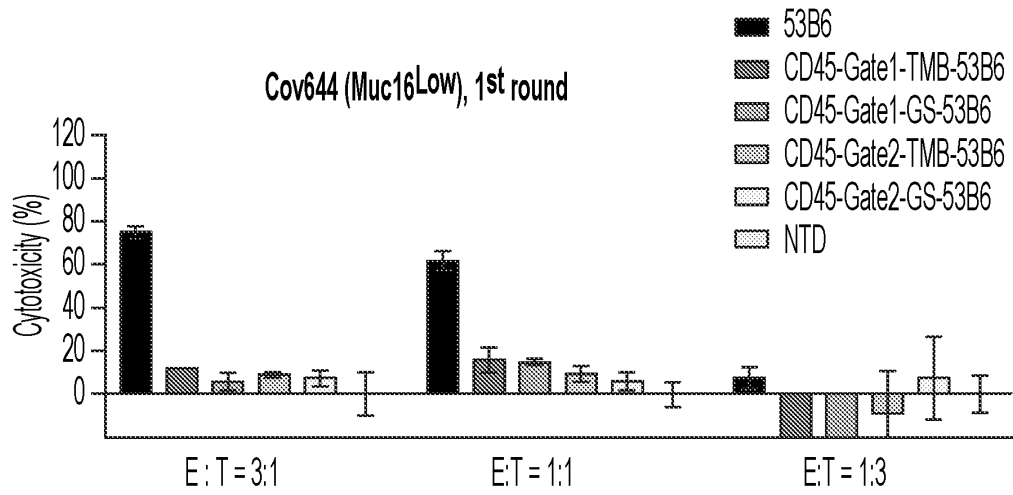


Fig. 5A

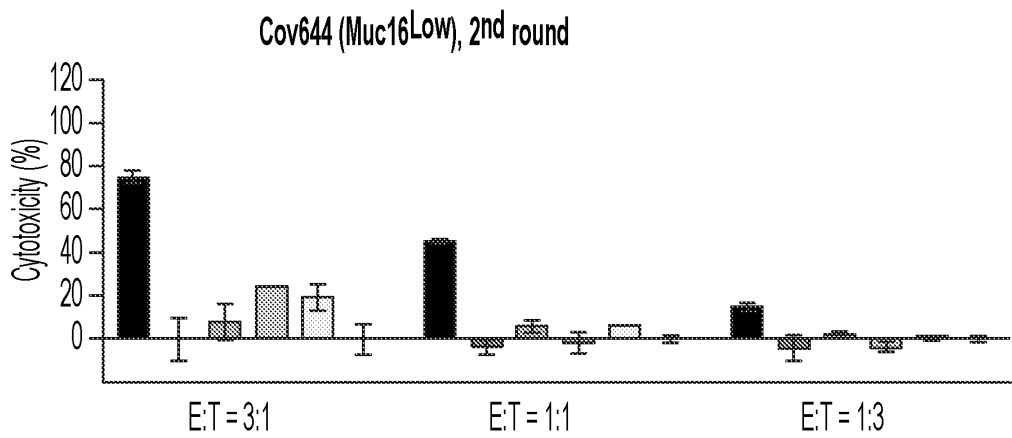


Fig. 5B

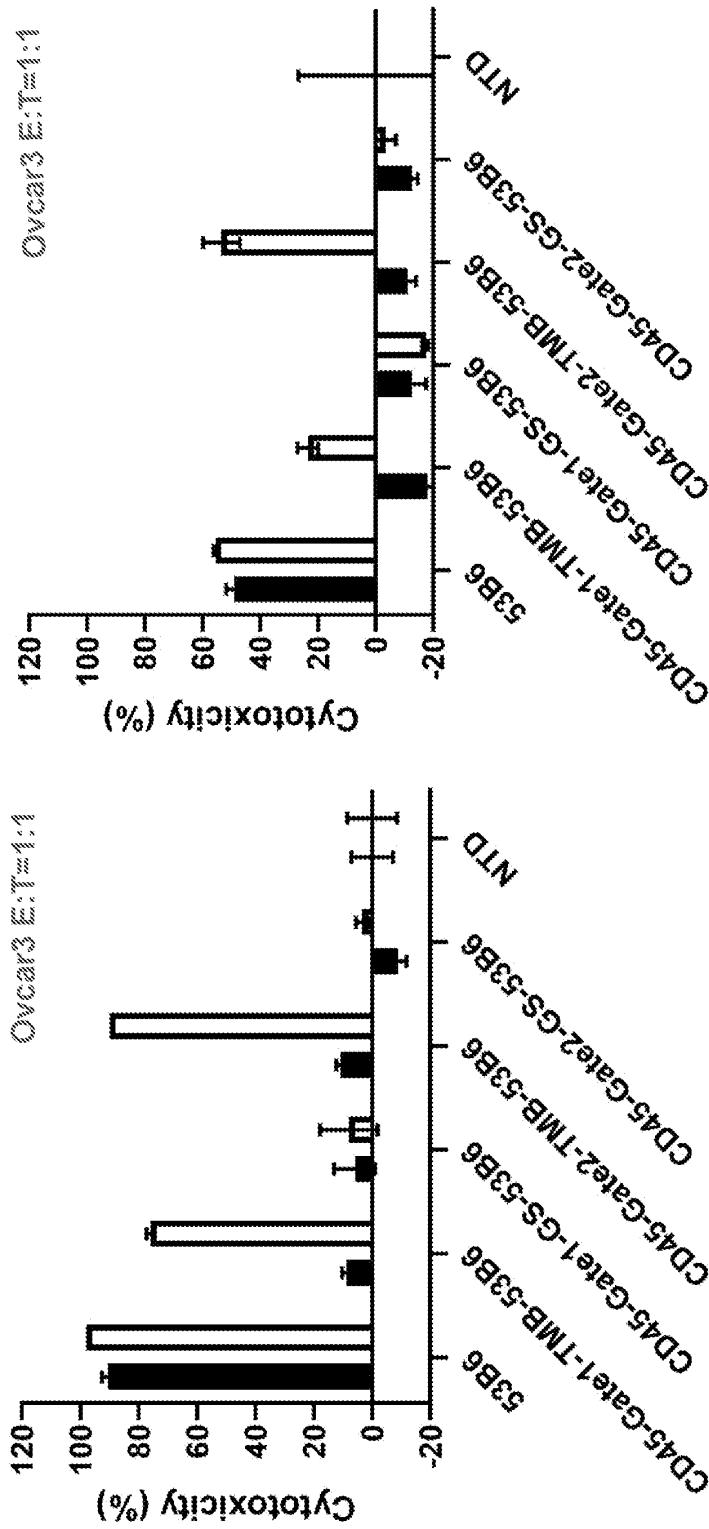


Fig. 6B

Fig. 6A

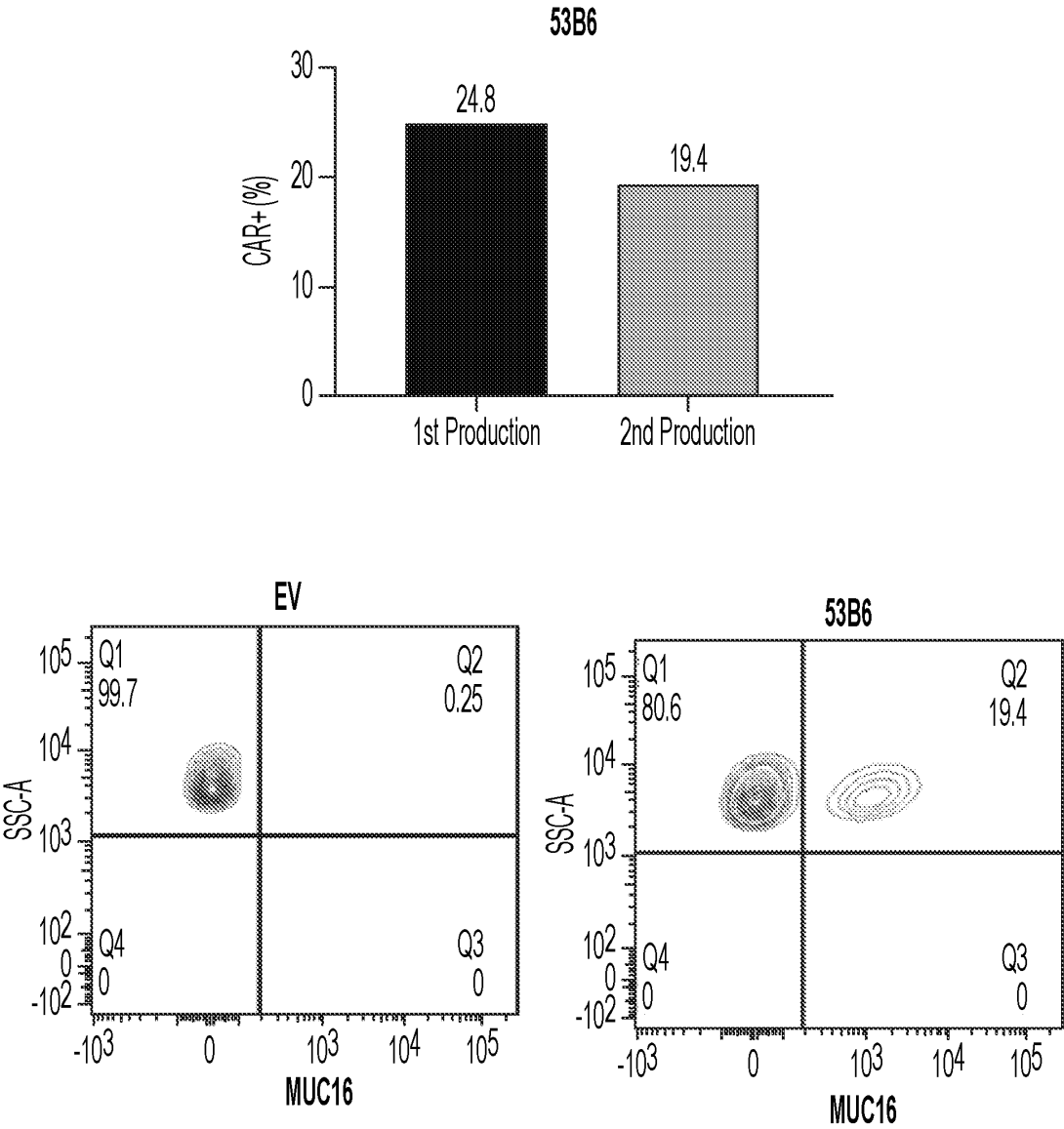


Fig. 7A

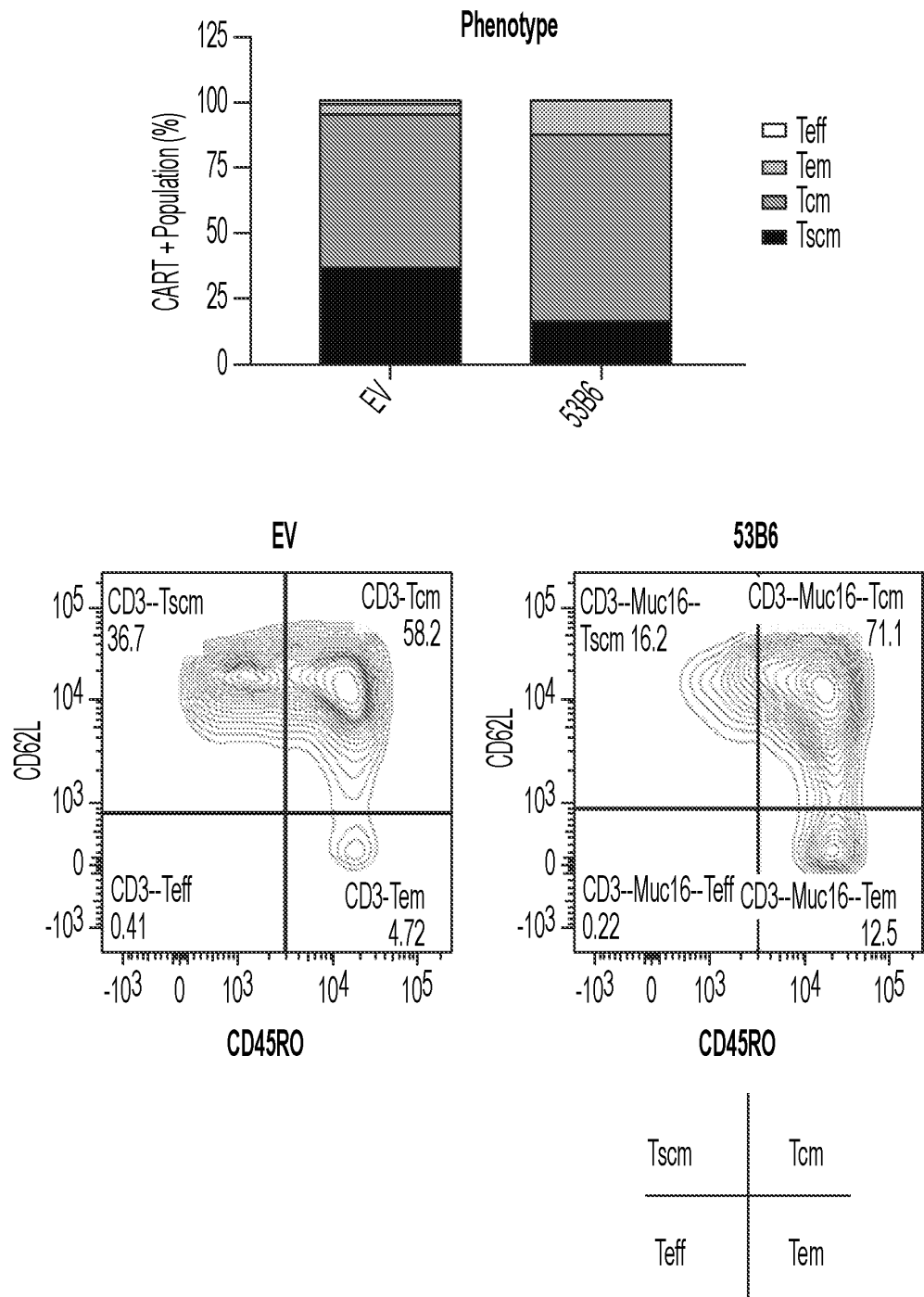


Fig. 7B

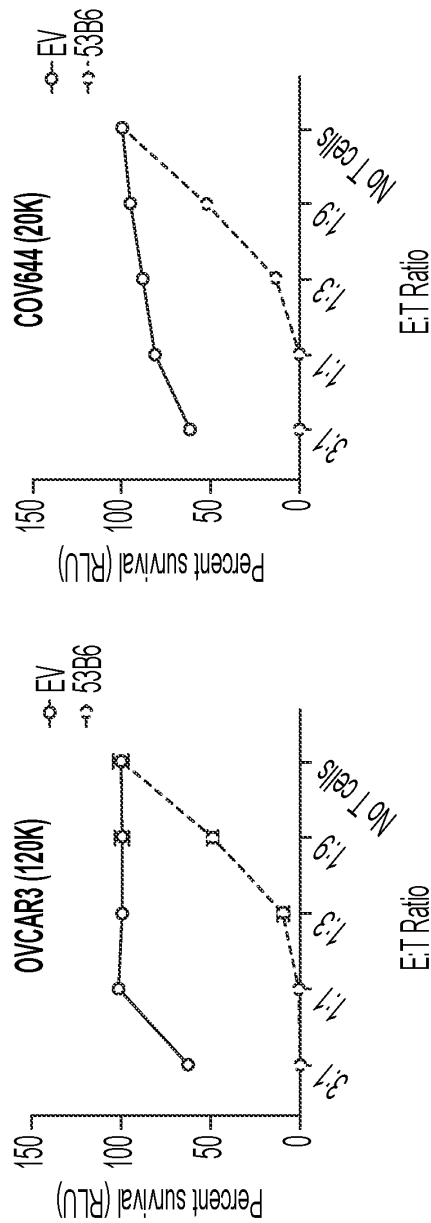


Fig. 8A

Fig. 8B

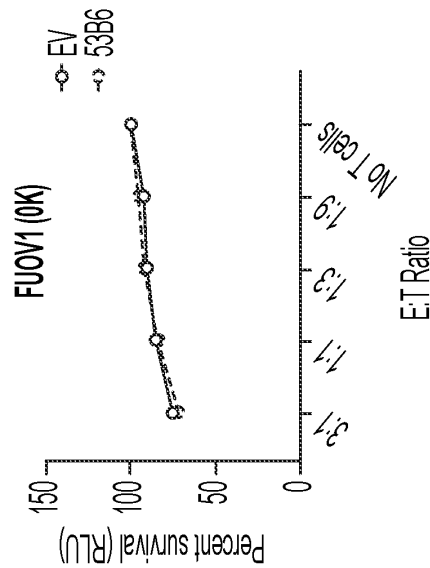


Fig. 8C

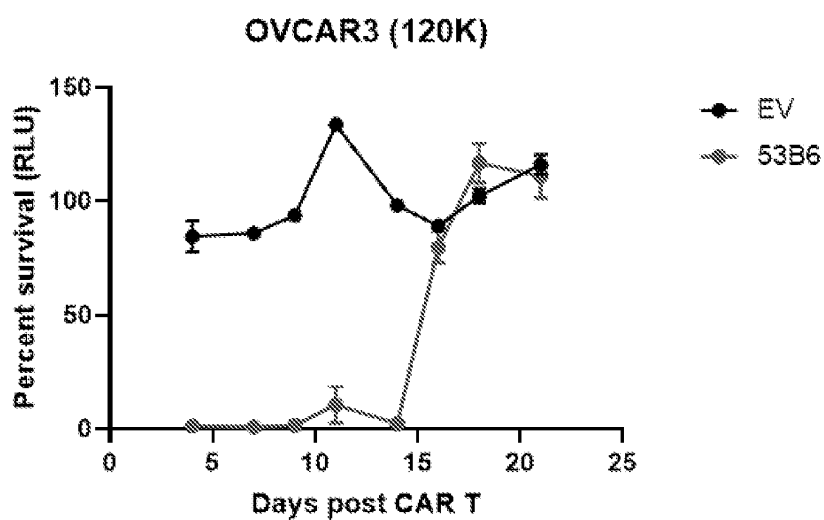


Fig. 9A

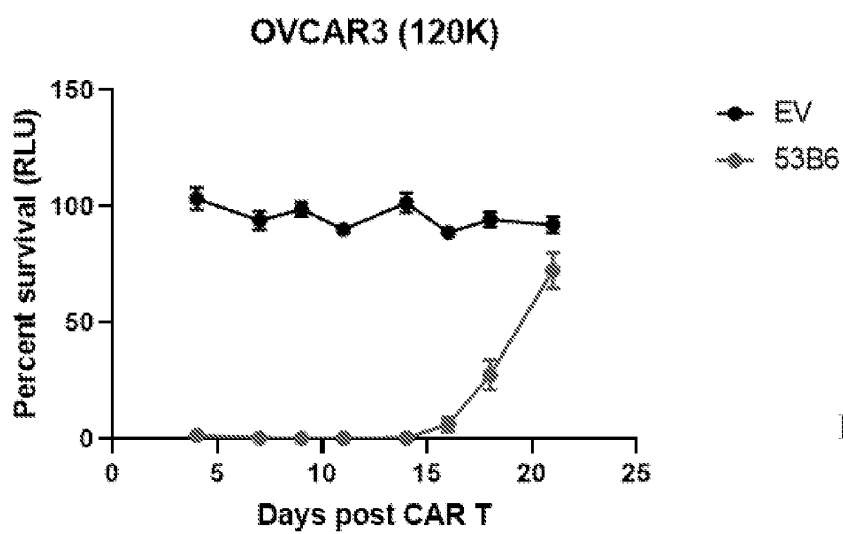


Fig. 9B

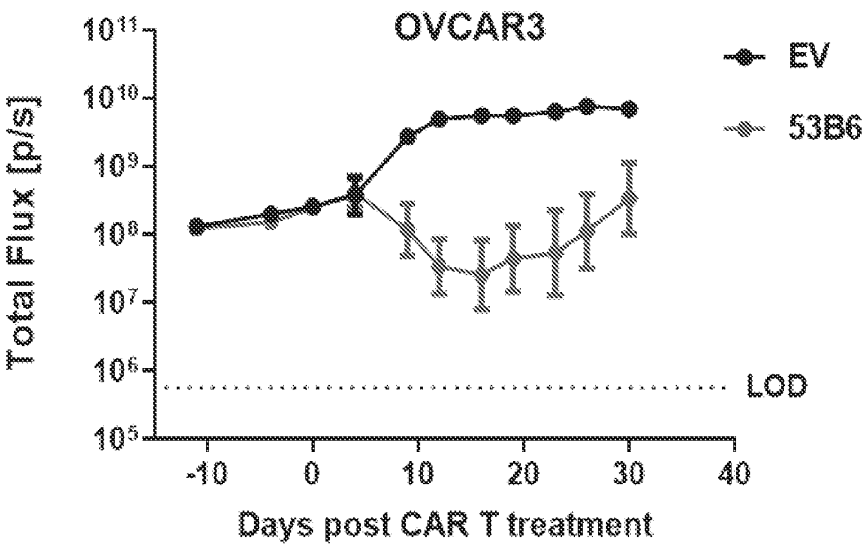


Fig. 10A

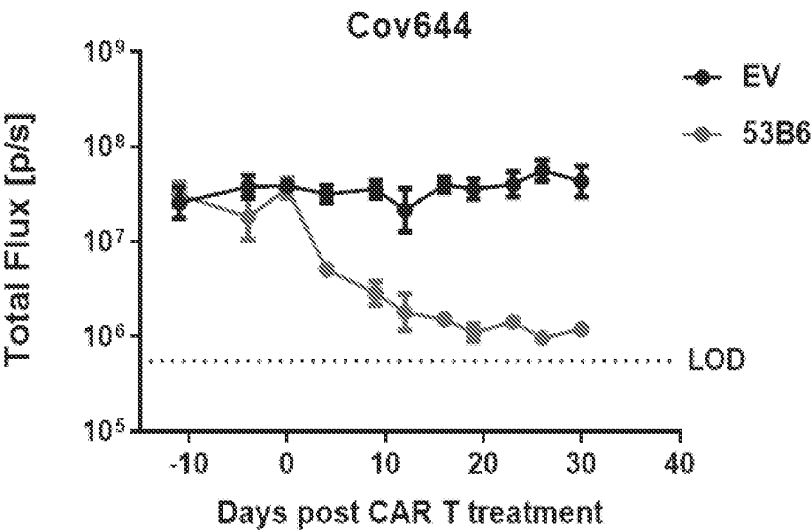


Fig. 10B

FIG. 11

Description	Matriptase cleavage site	MMP cleavage site	uPA cleavage site	Linker length	Schematic
53B6 naked CAR				None	
Non-cleavable GS				30aa	
Non-cleavable V5				45aa	
2xTPS3	✓	✓	✓	45aa	
TPS4	✓	✓		45aa	
TPS6	✓			45aa	
2xTPS6	✓			45aa	
2xTPS6	✓			40aa	
2xTPS6	✓			35aa	
2xTPS6	✓			30aa	
2xTPS6	✓			25aa	

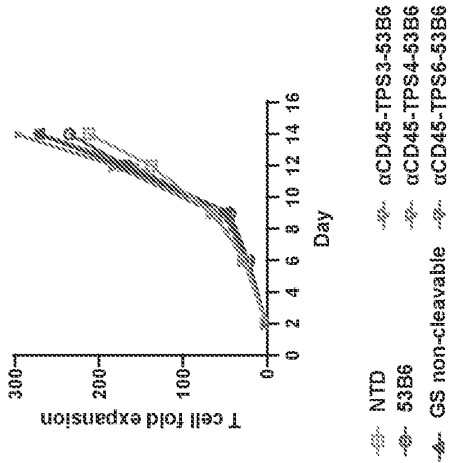


FIG. 12B

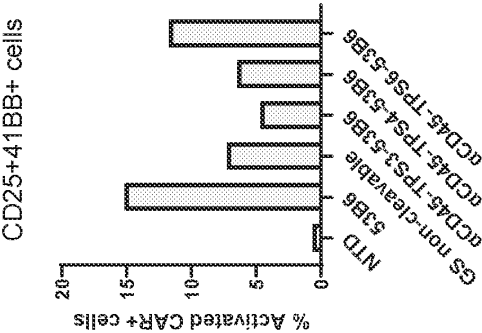


FIG. 12D

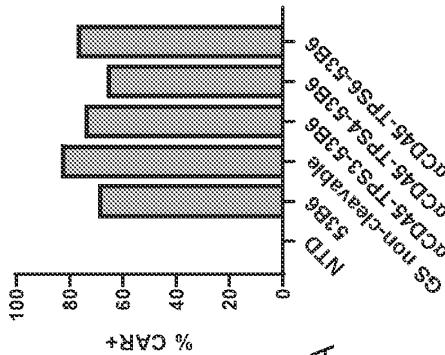


FIG. 12A

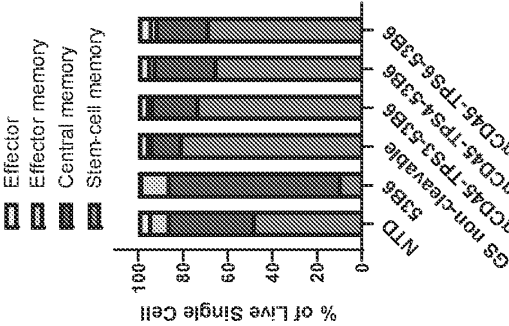


FIG. 12C

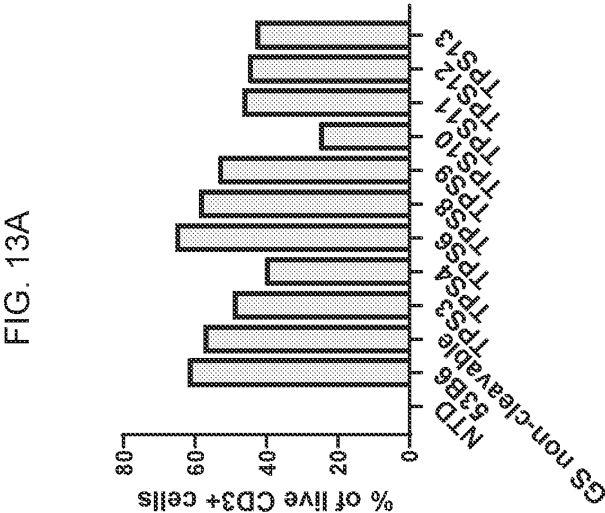
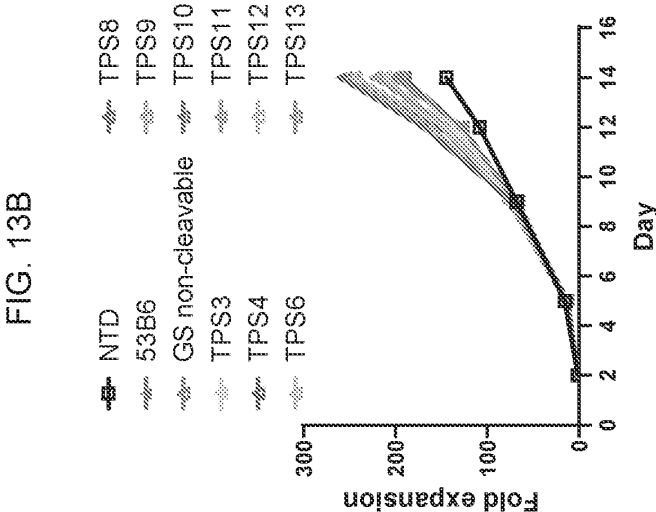


FIG. 13D

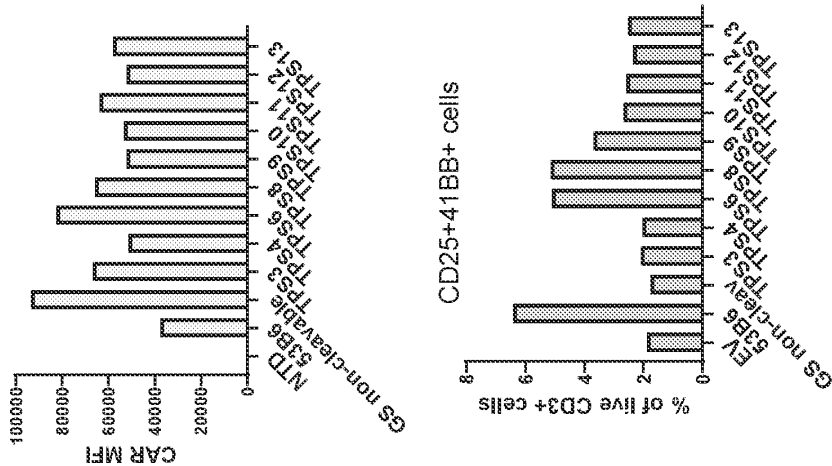
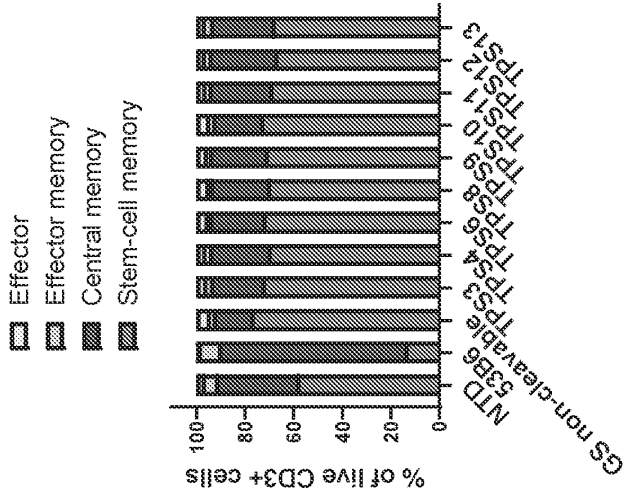


FIG. 13C



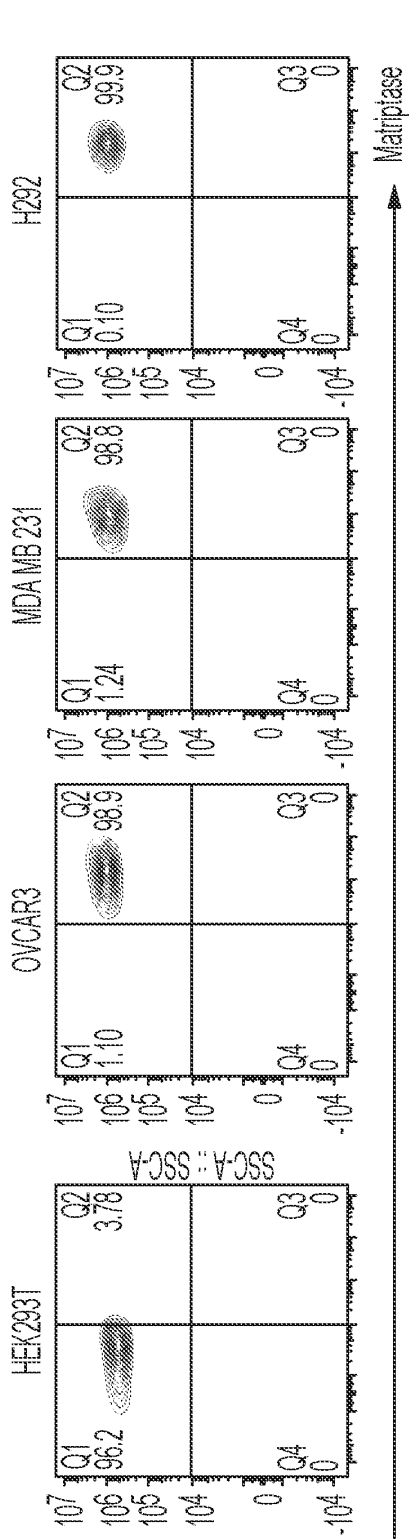


Fig. 14A

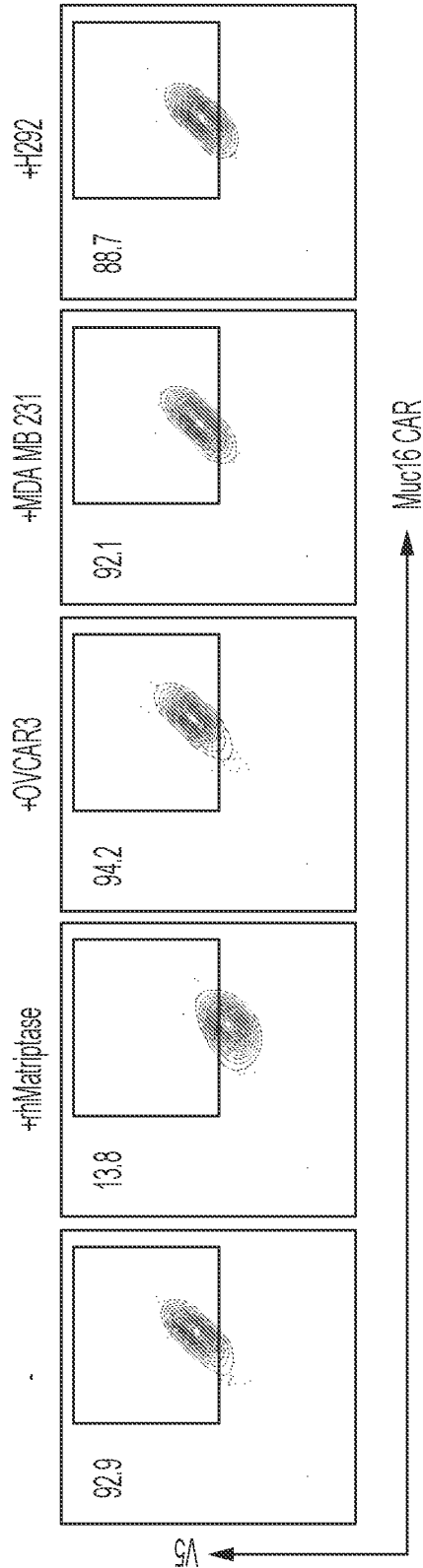


Fig. 14B

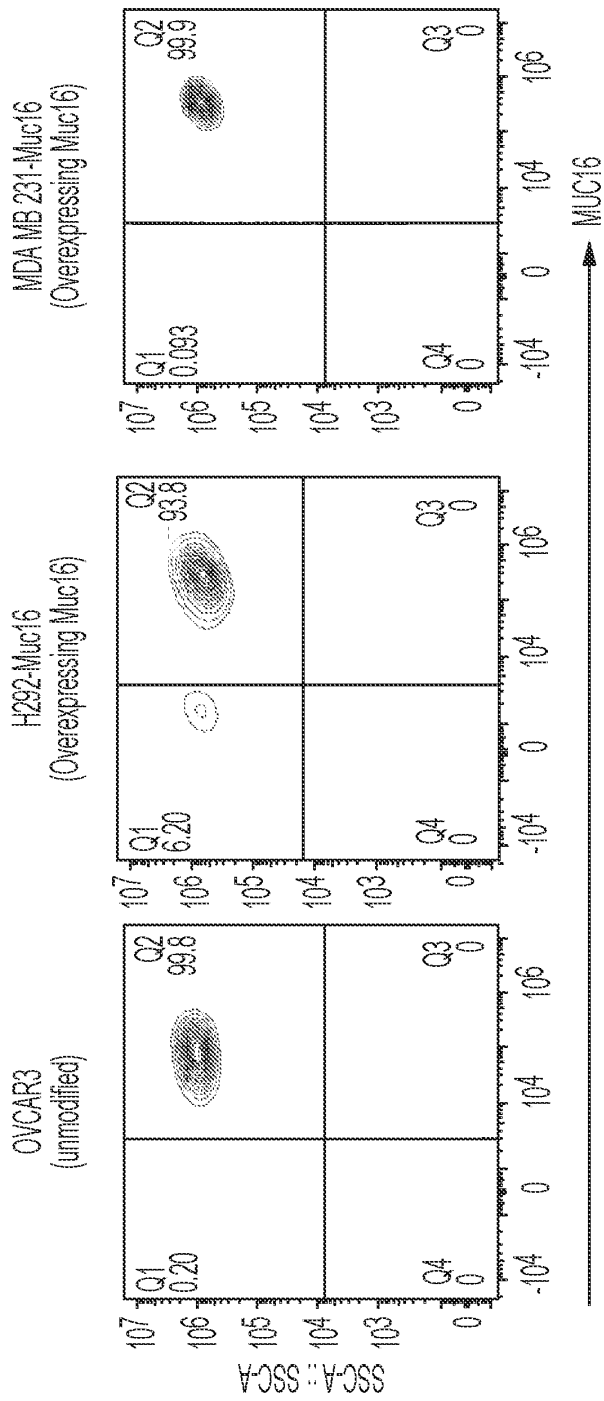


Fig. 14C

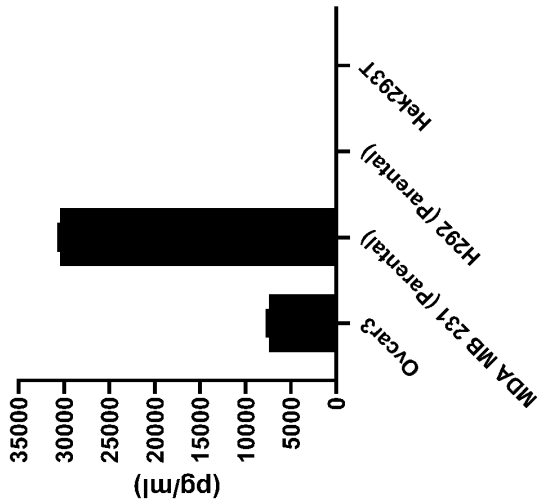
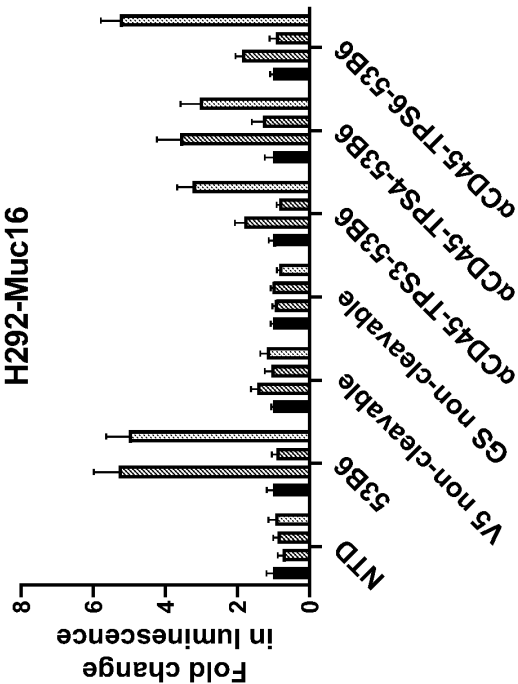
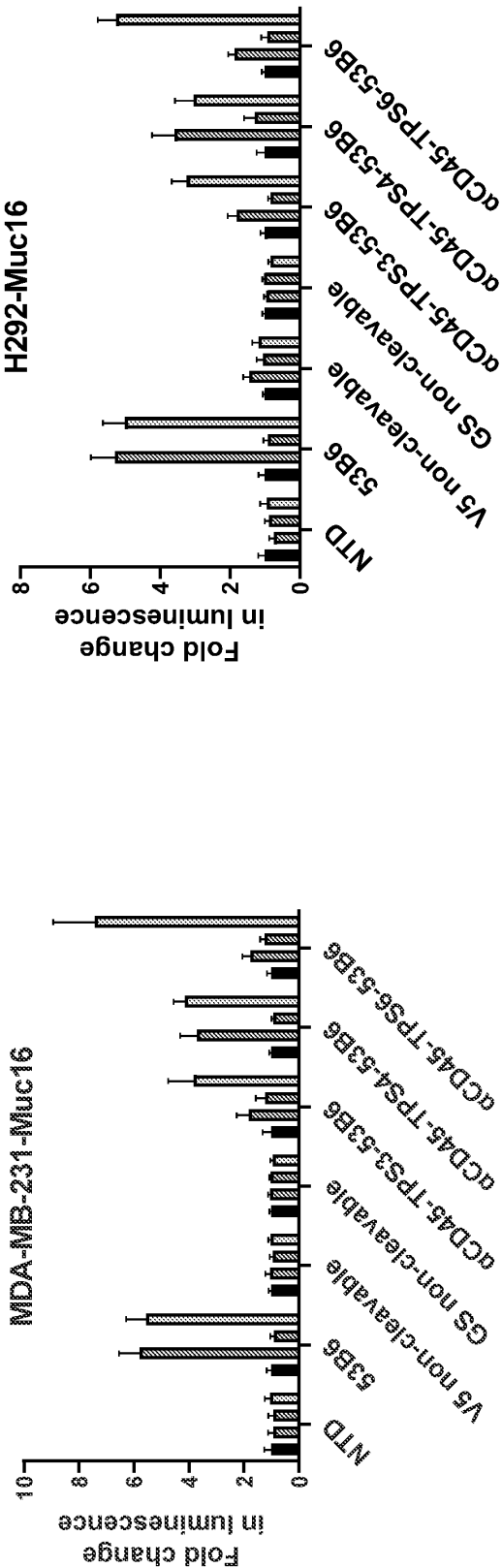
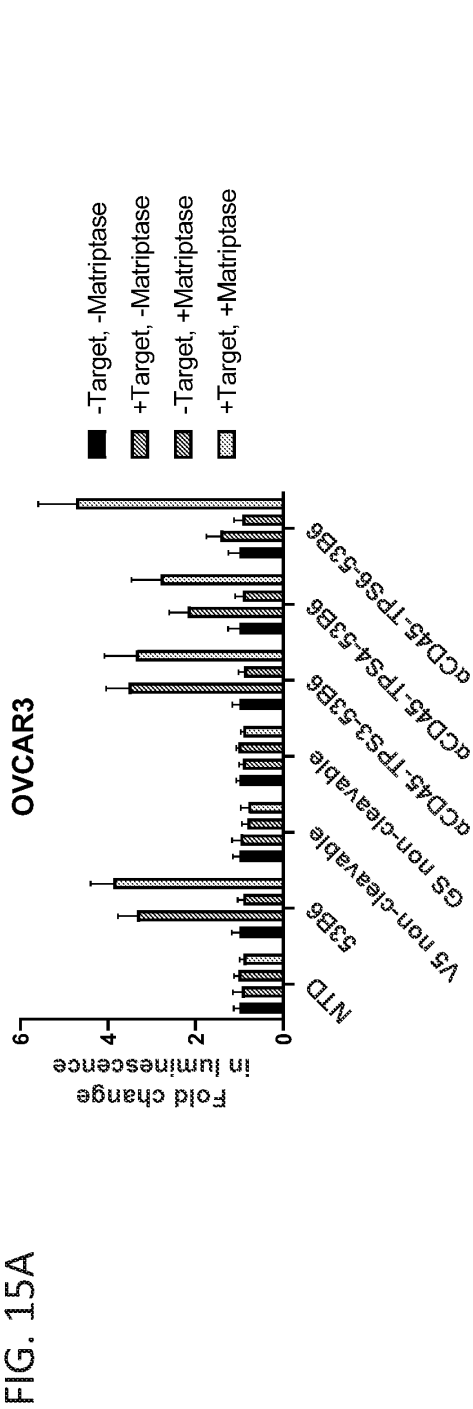


FIG. 14D

	Target expression	Protease detection in vitro			
	MUC16	Matriptase (membrane-bound)	uPA	MMP-9	
OVCAR3	Endogenous (122K)	+/++	+	-	
MDA-MB-231-Muc16	Overexpressed	++	+++	-	
H292-Muc16	Overexpressed	++	-	-	

FIG. 14E



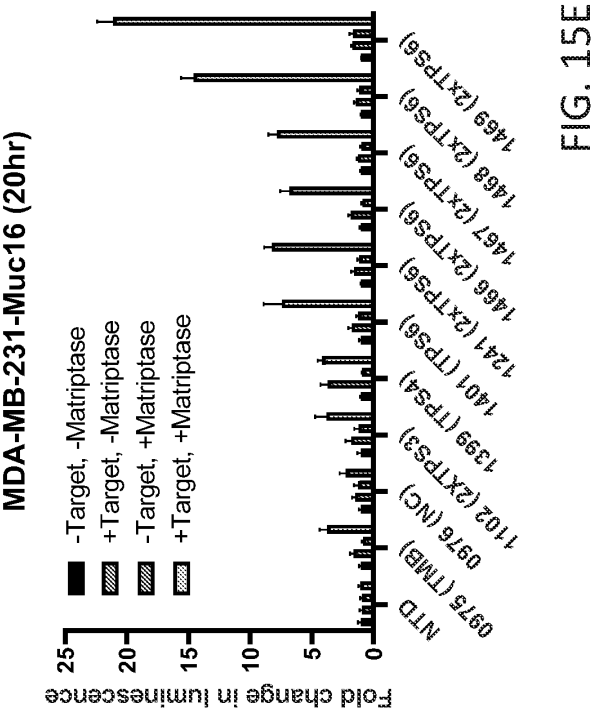


FIG. 15E

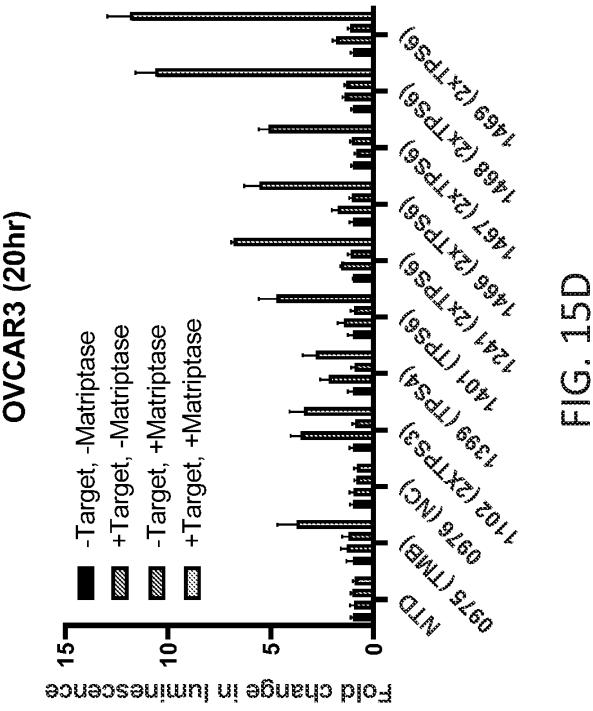


FIG. 15D

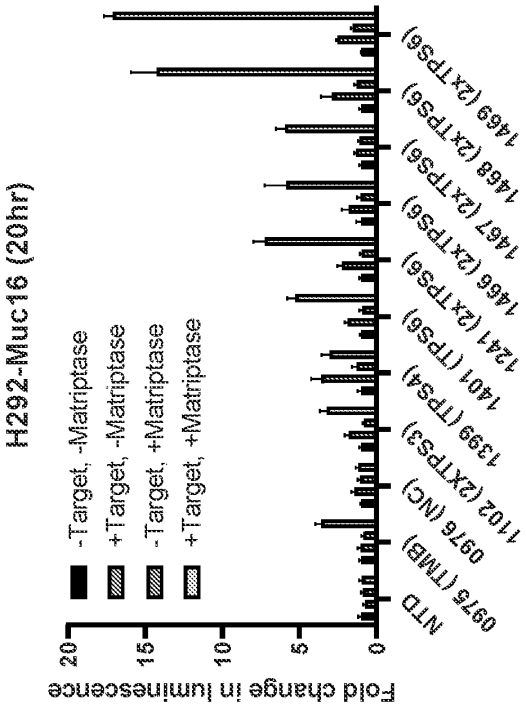


FIG. 15F

FIG. 16B

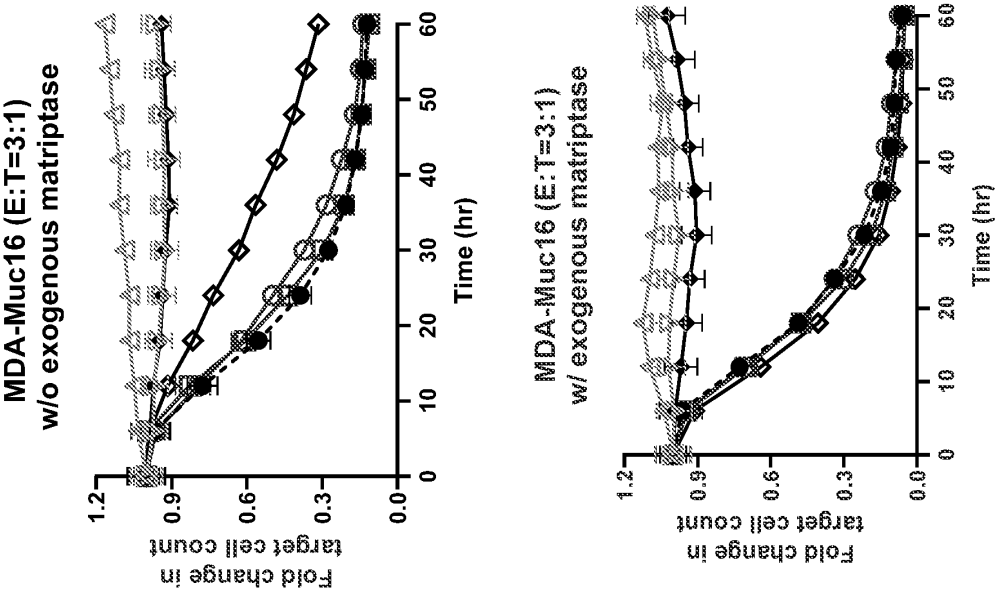


FIG. 16A

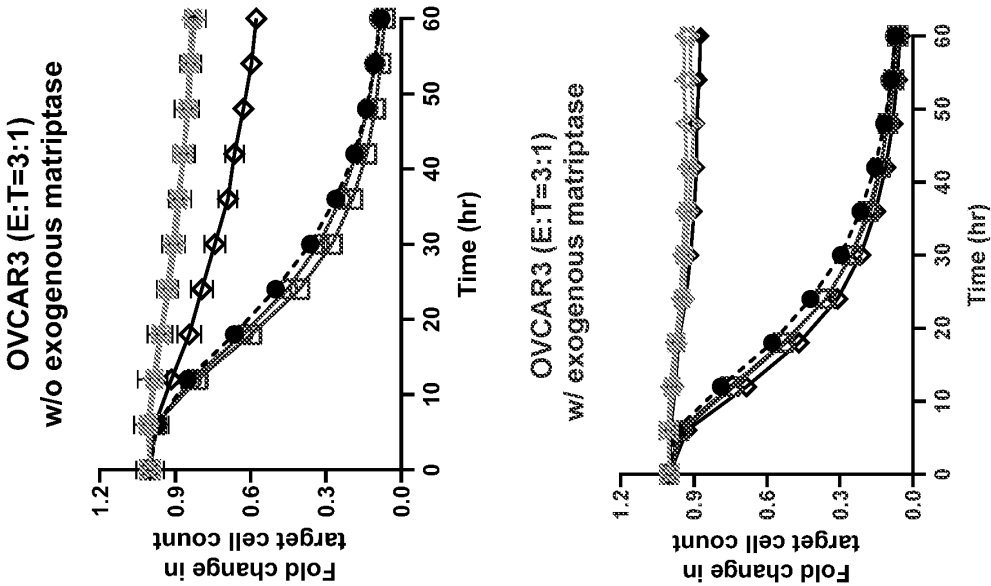


FIG. 16D

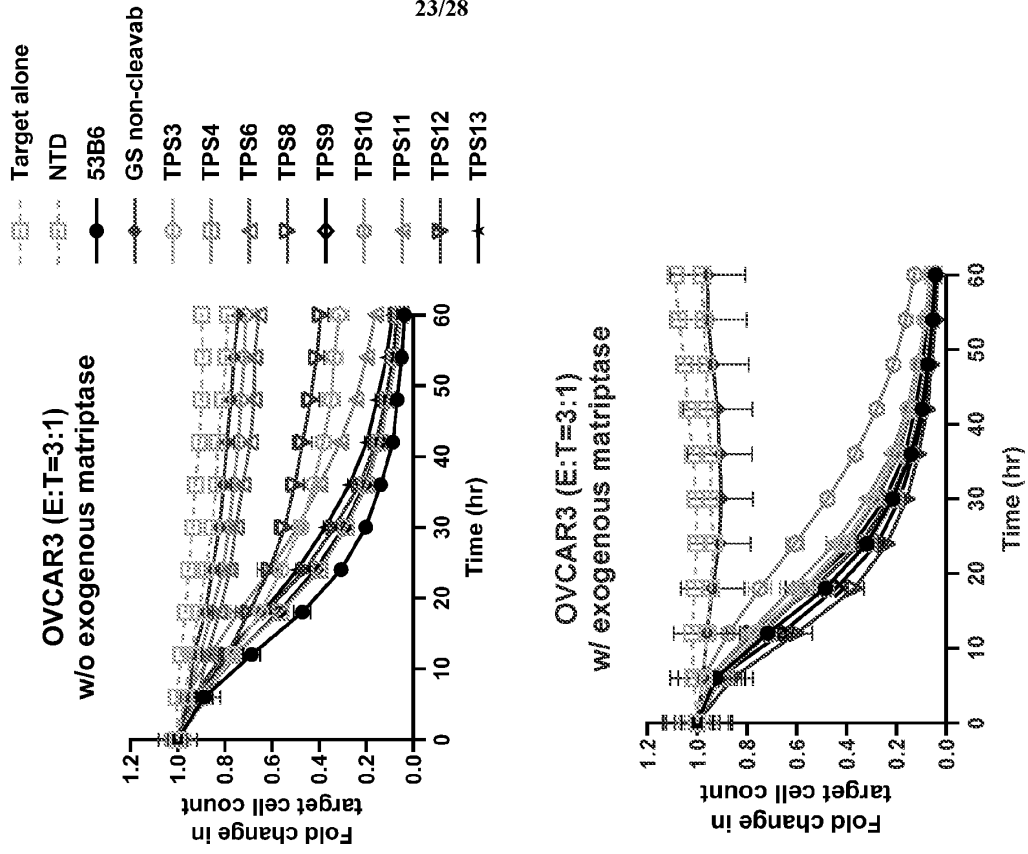


FIG. 16C

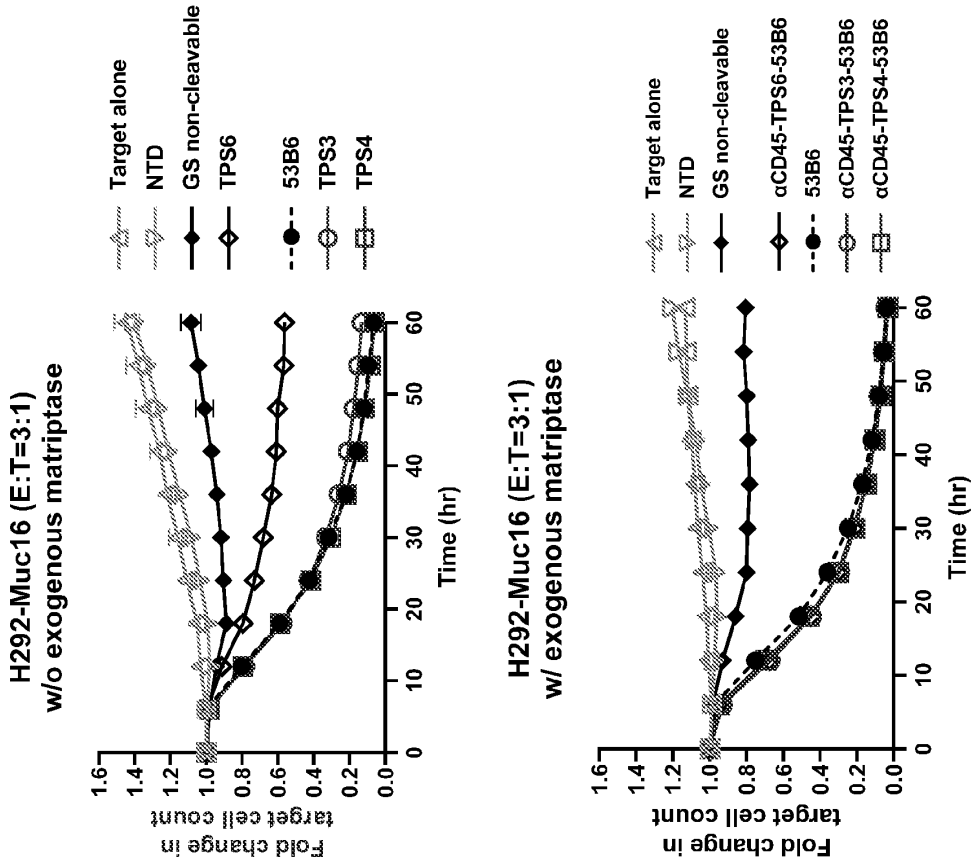


FIG. 16F

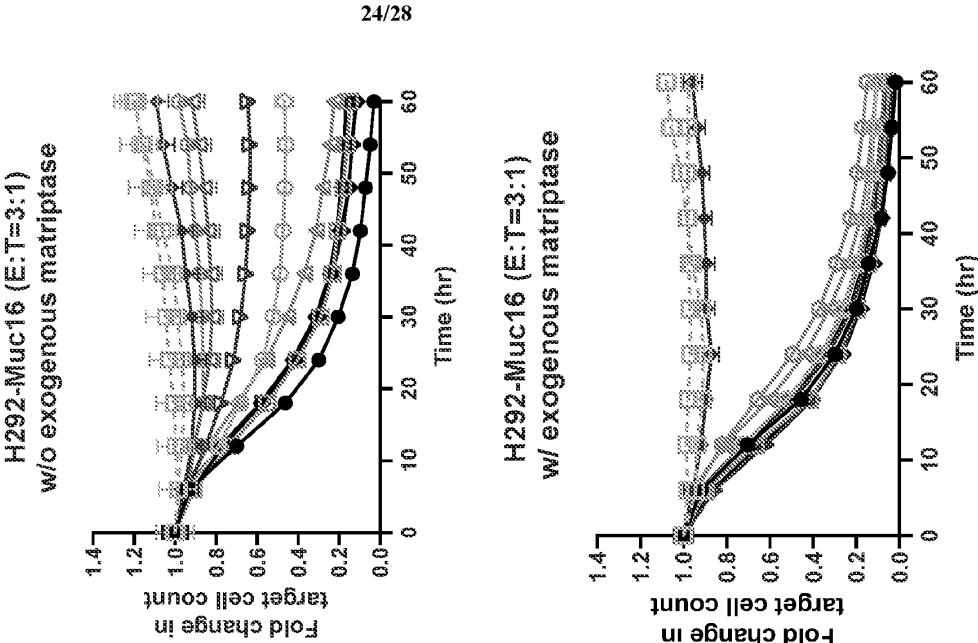


FIG. 16E

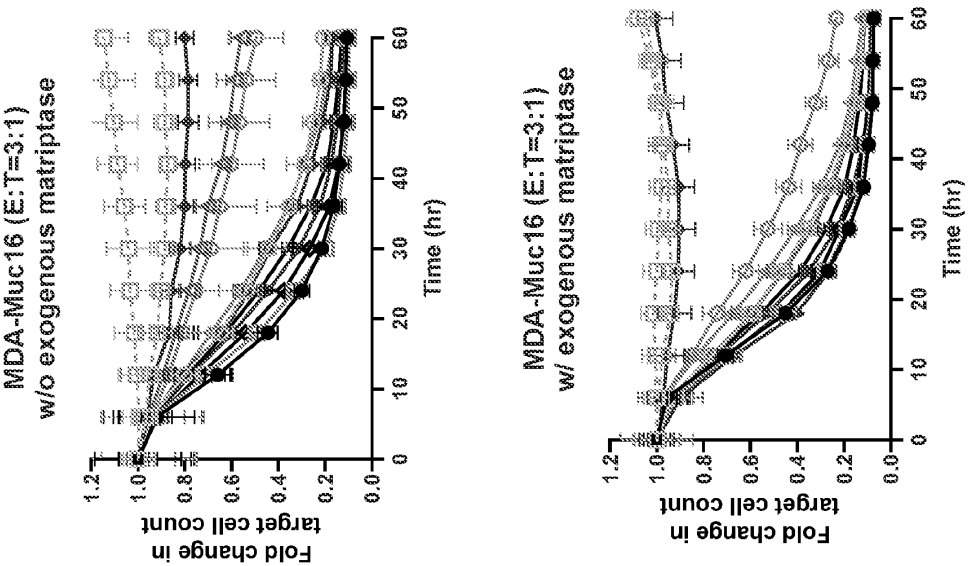


FIG. 17A

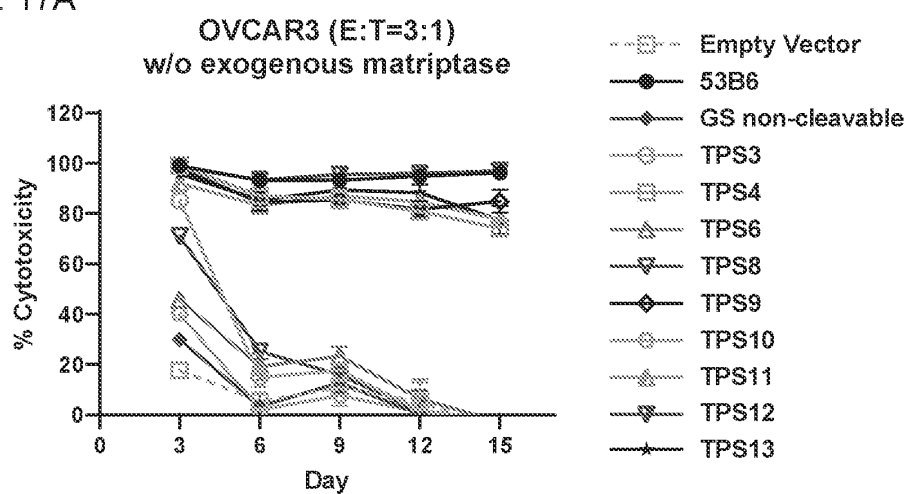
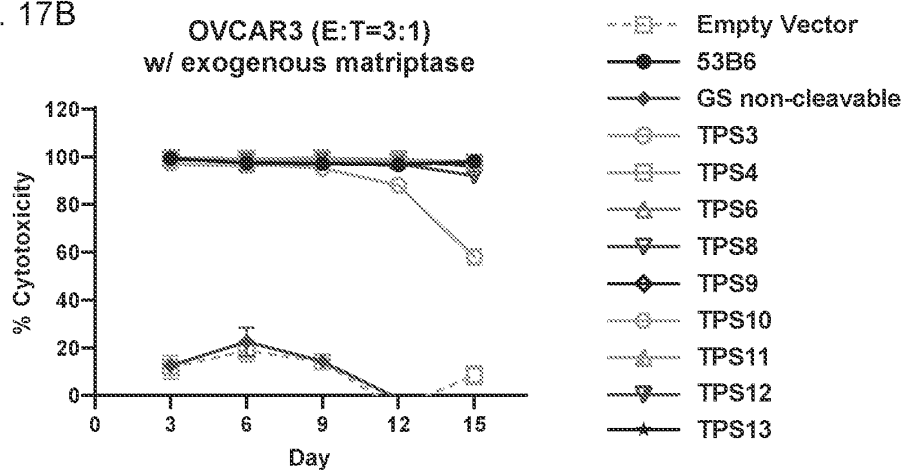


FIG. 17B



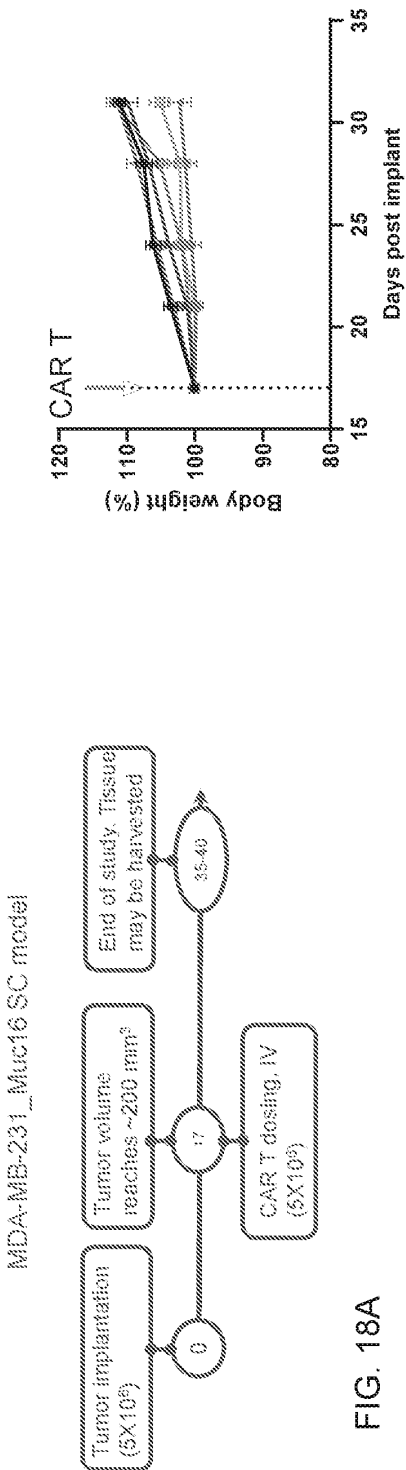


FIG. 18C

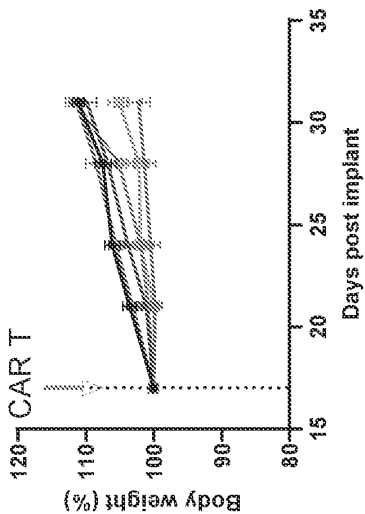
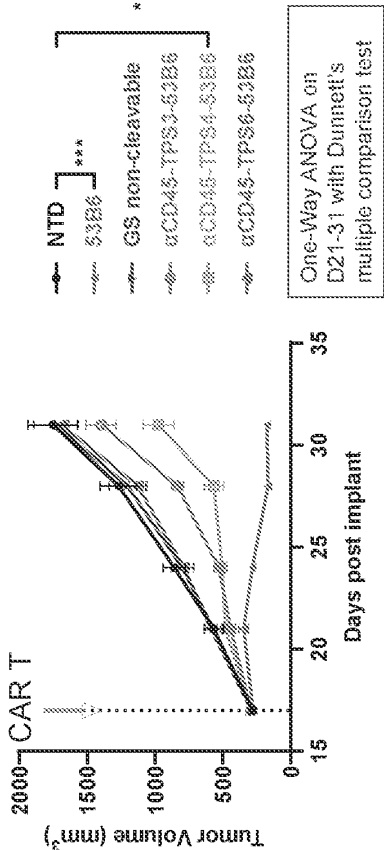
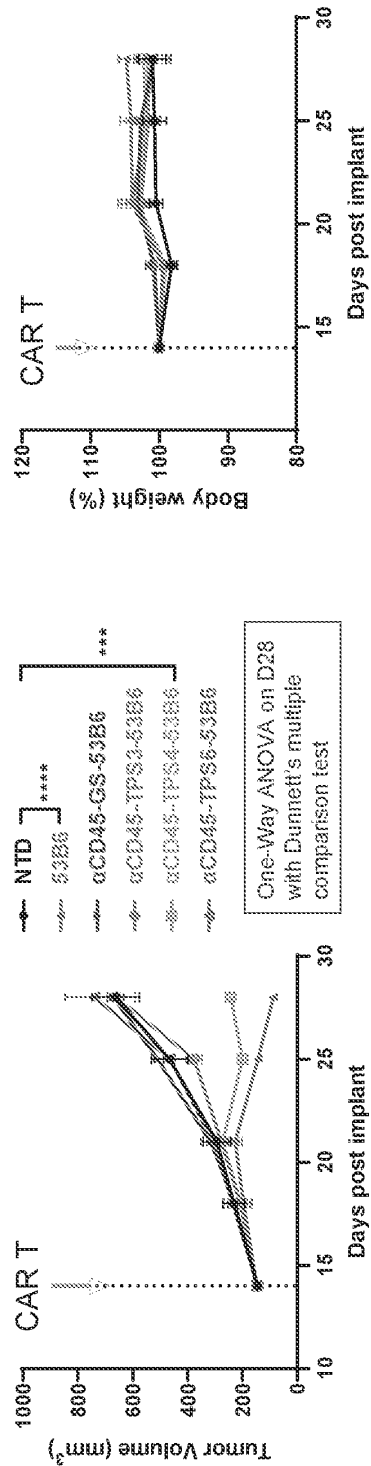
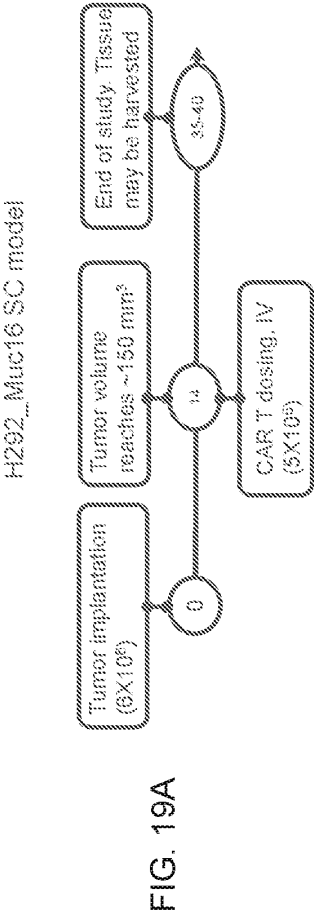


FIG. 18B





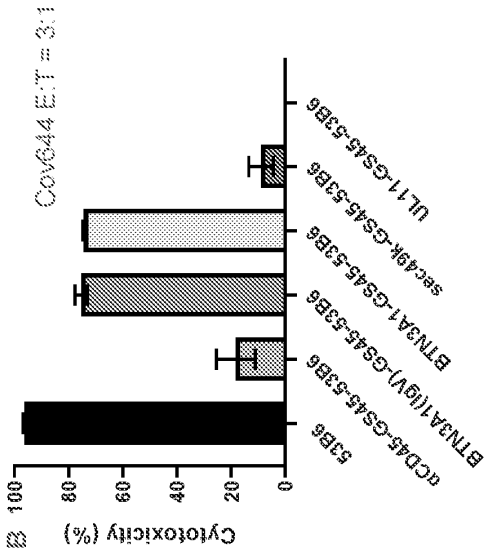


FIG. 20B

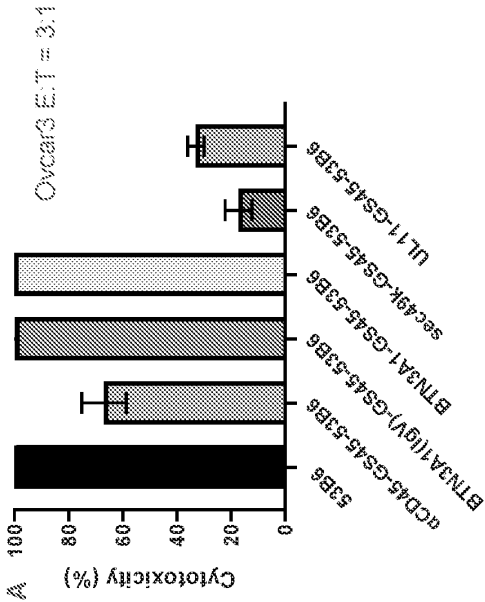


FIG. 20A