

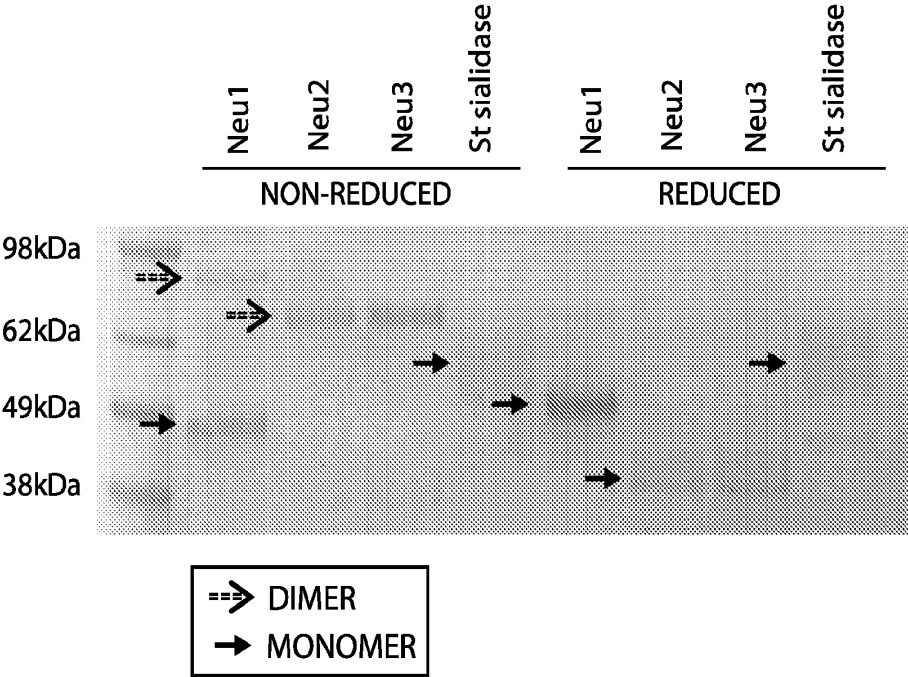


FIGURE 1

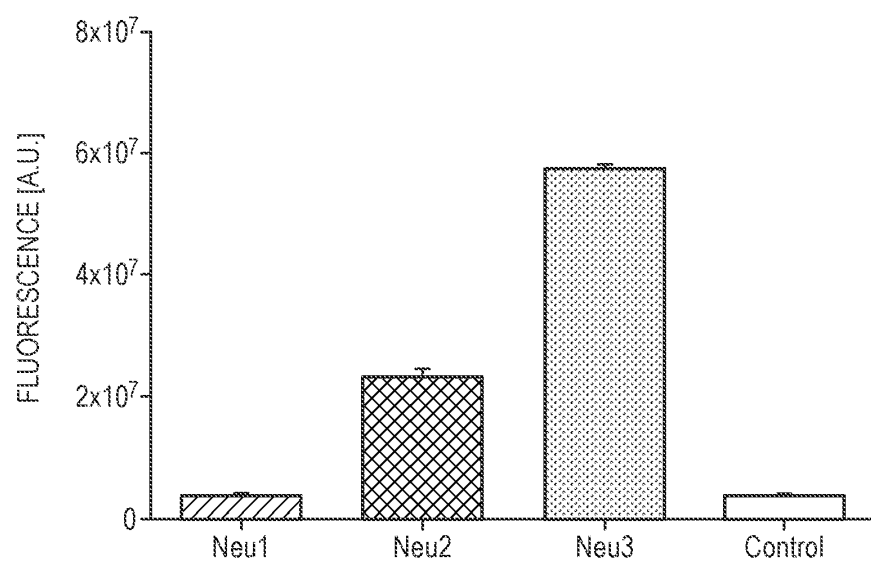


FIGURE 2

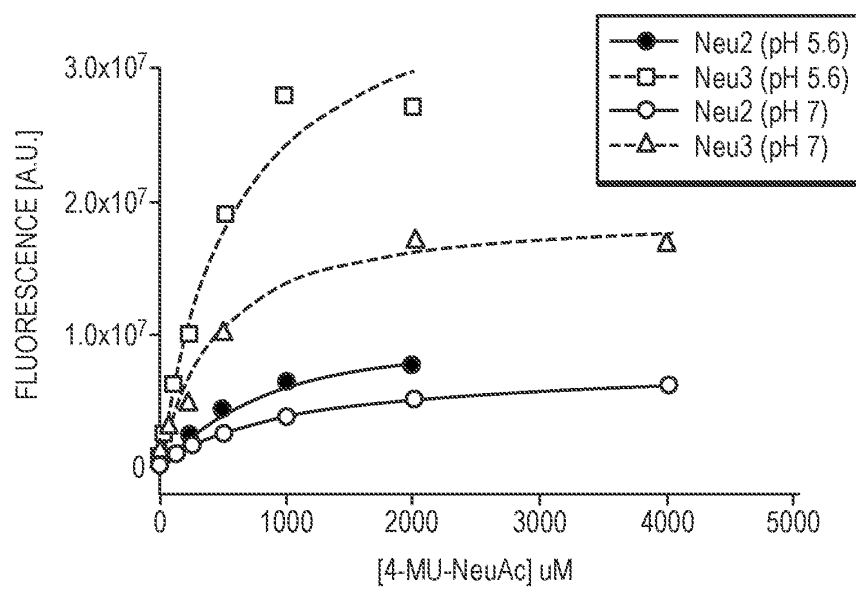


FIGURE 3

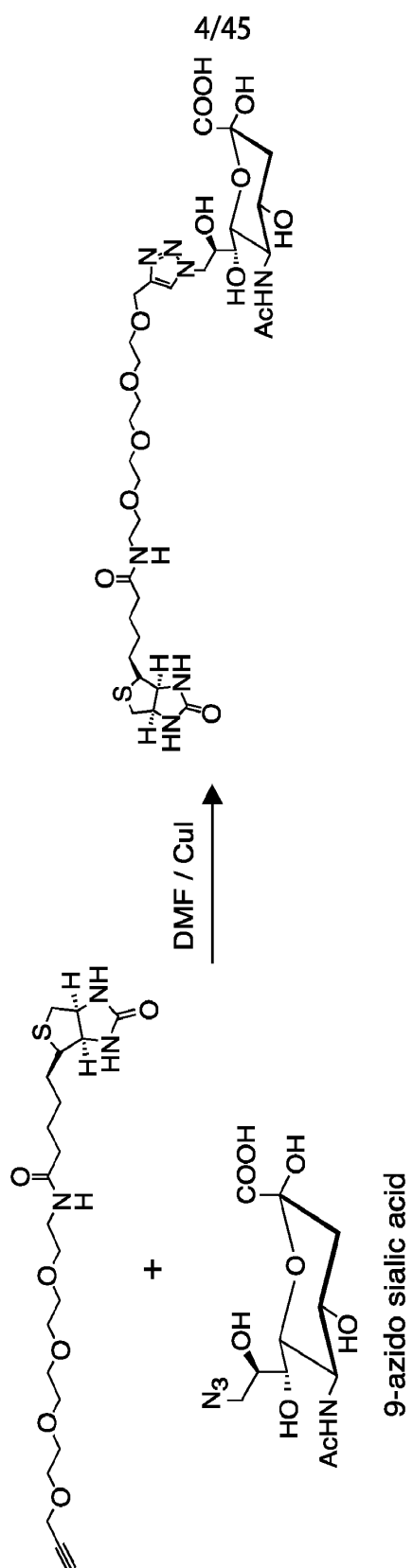


FIGURE 4

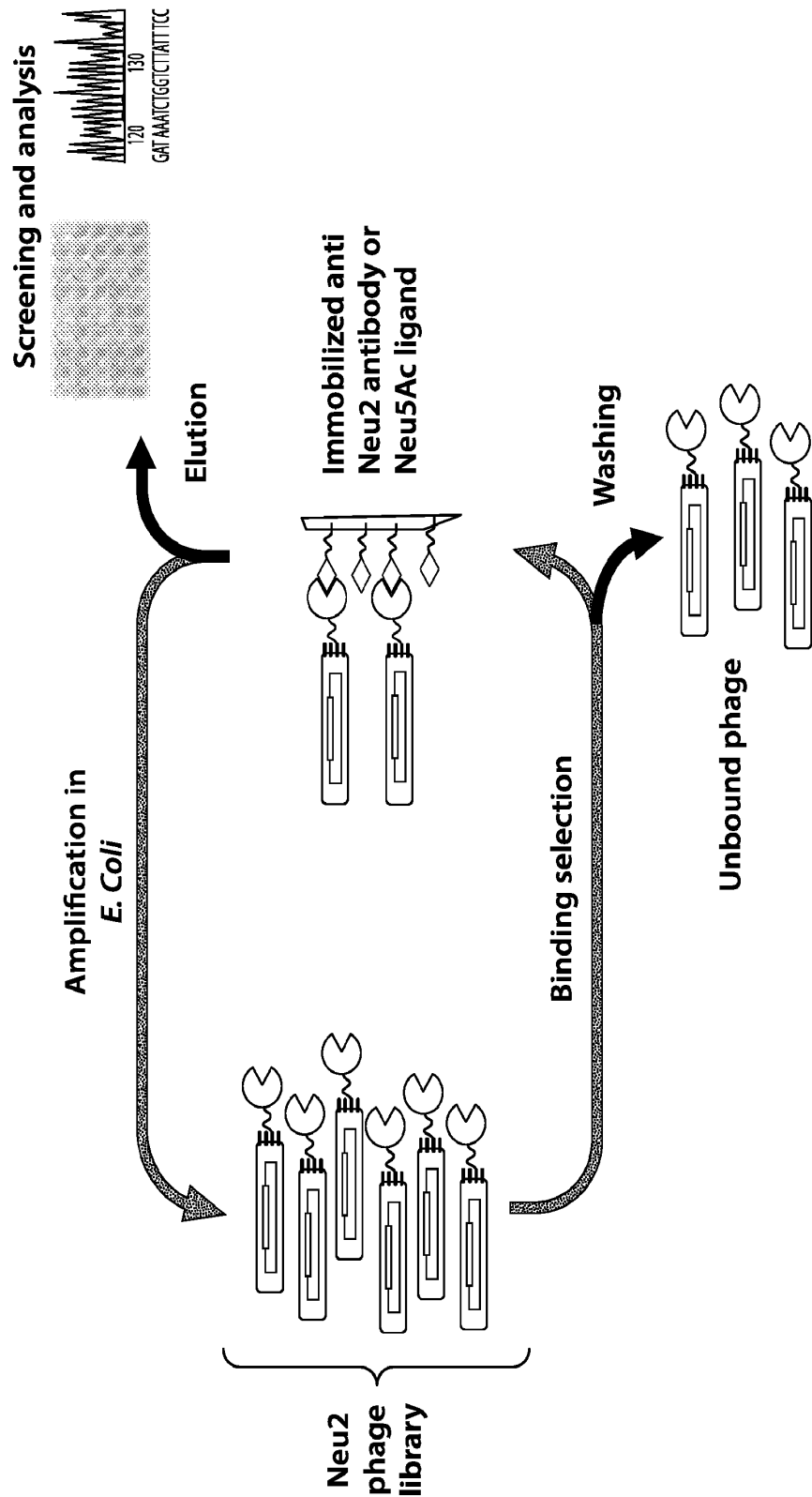


FIGURE 5

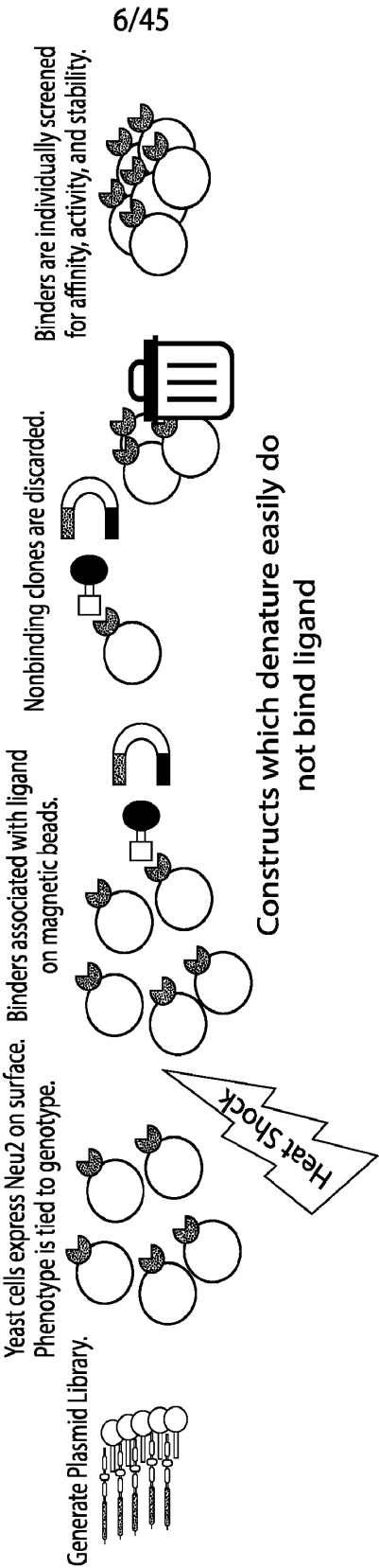


FIGURE 6

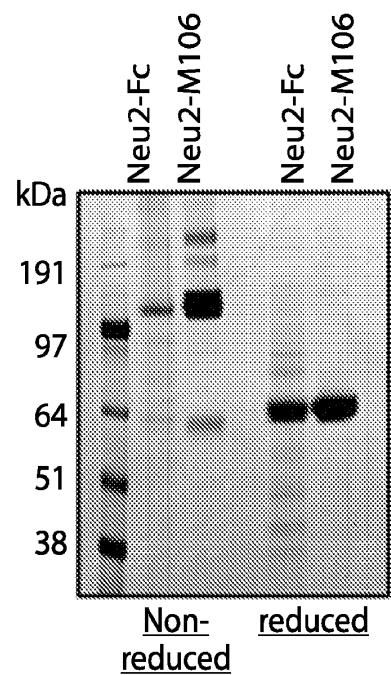


FIGURE 7A

8/45

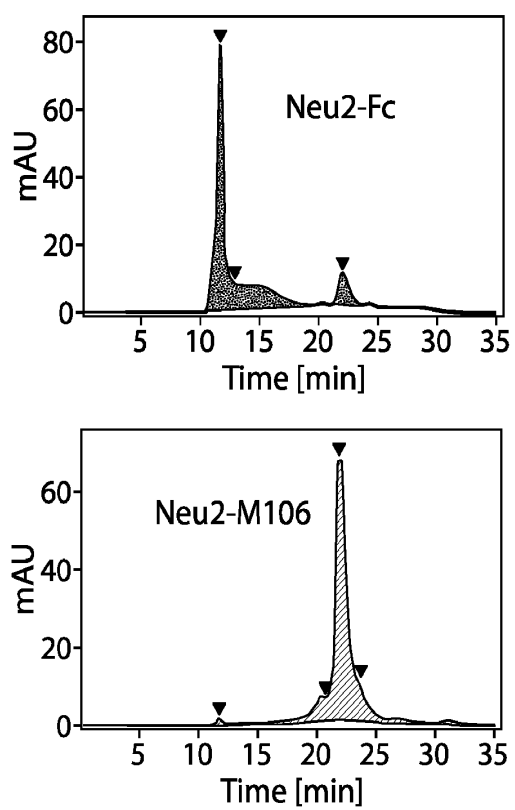


FIGURE 7B

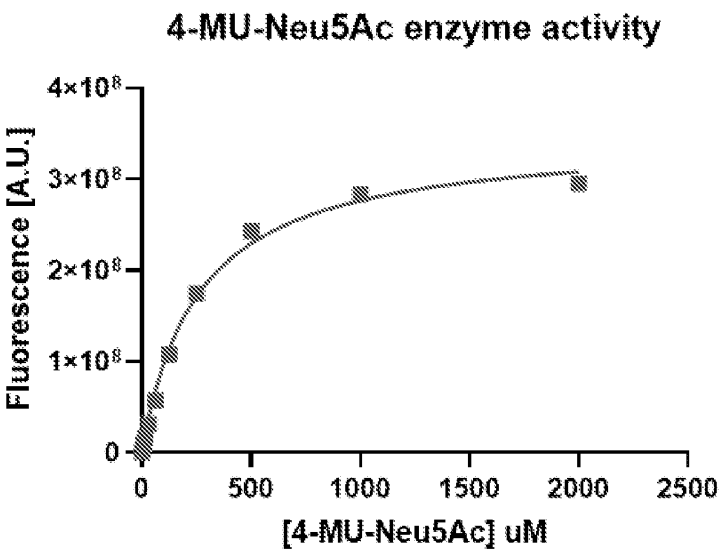


FIGURE 8

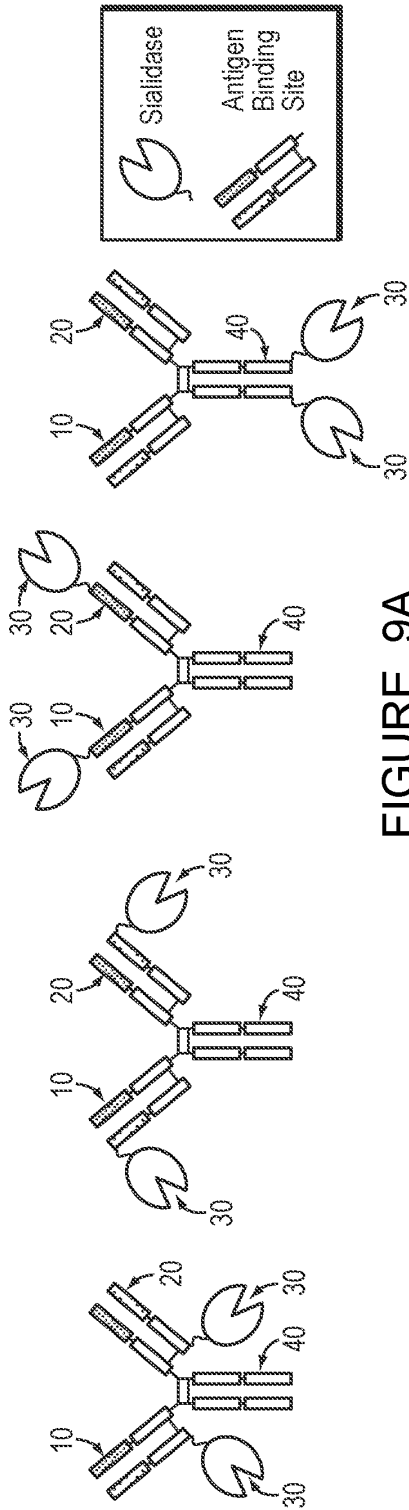


FIGURE 9A

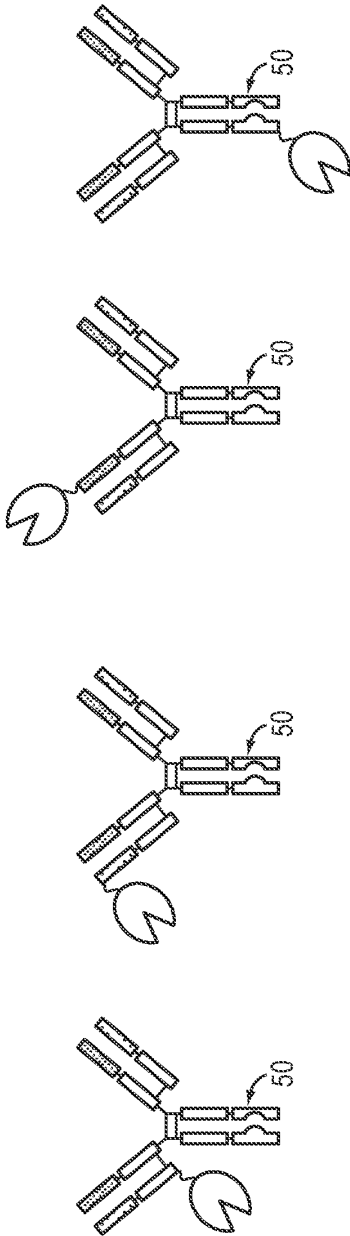


FIGURE 9B

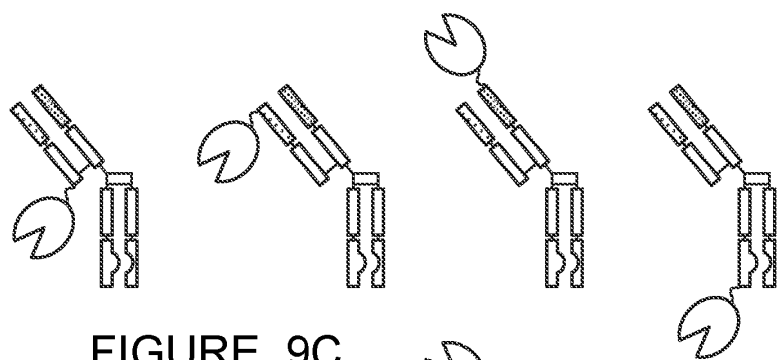


FIGURE 9C

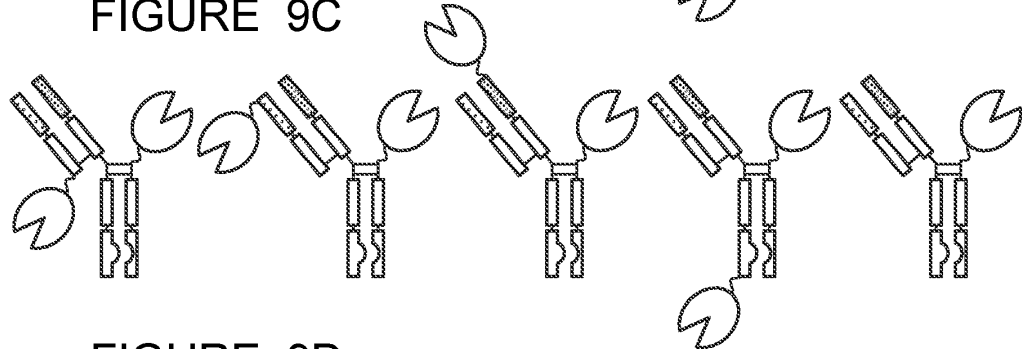


FIGURE 9D

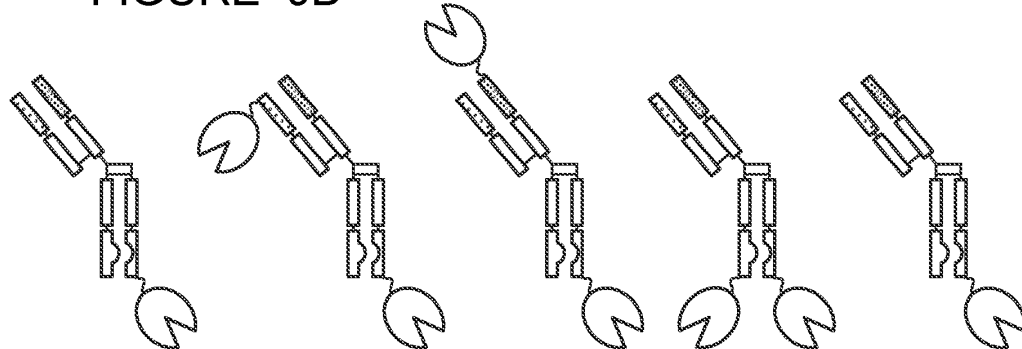


FIGURE 9E

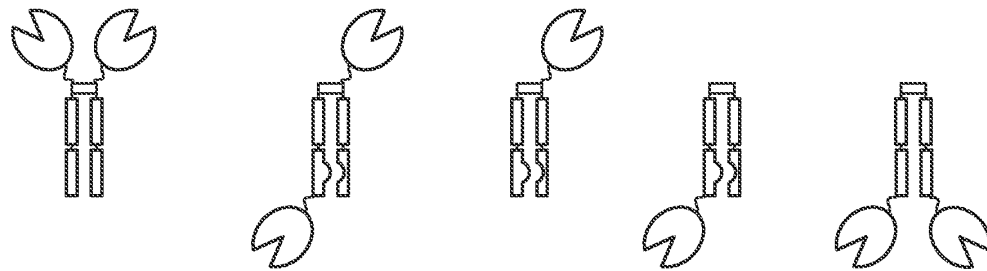


FIGURE 9F

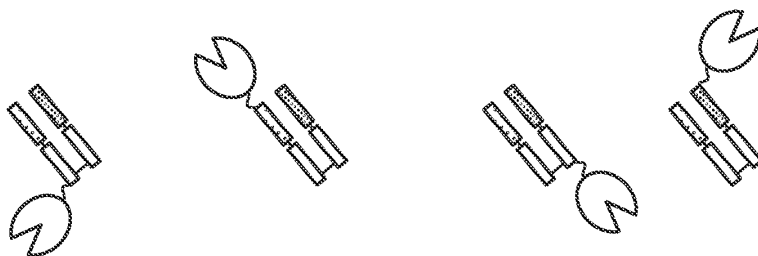


FIGURE 9G

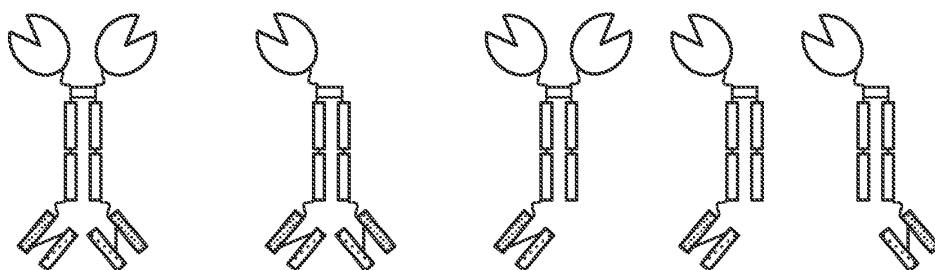


FIGURE 9H

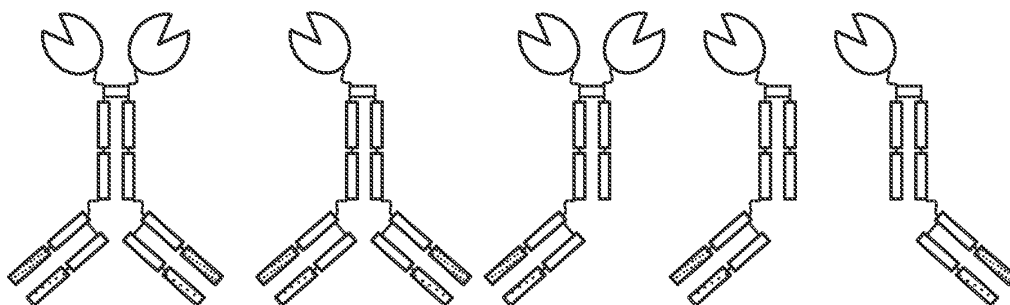


FIGURE 9I

13/45

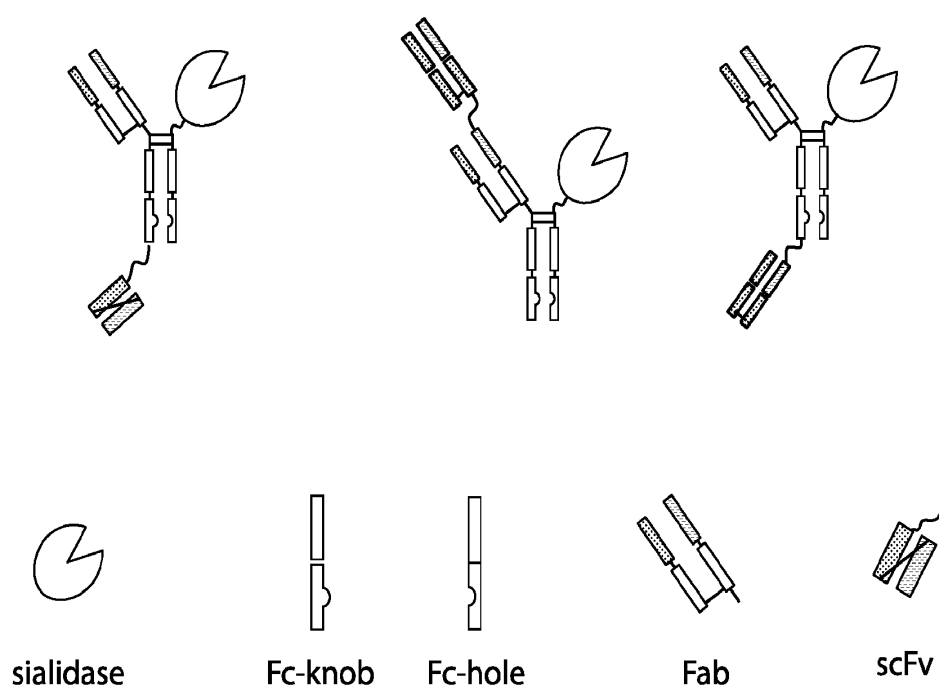
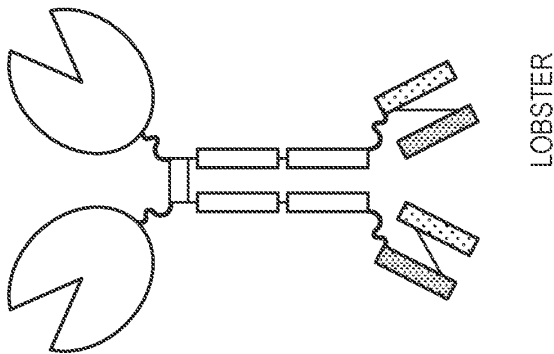
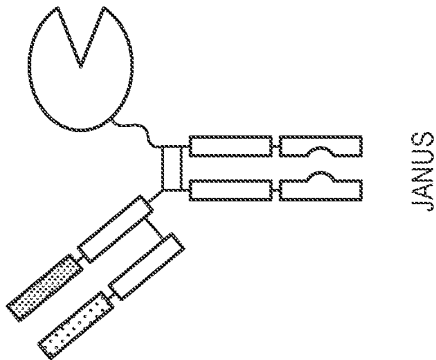


FIGURE 10



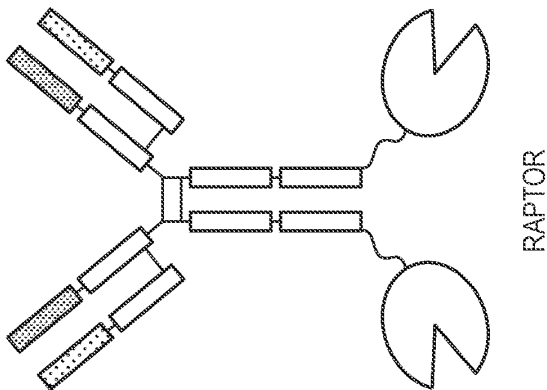
LOBSTER

FIGURE 11C



JANUS

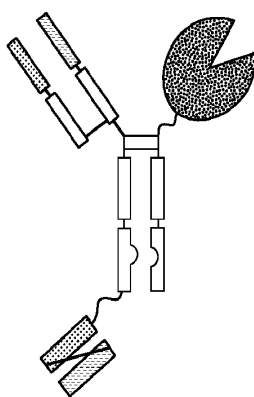
FIGURE 11B



RAPTOR

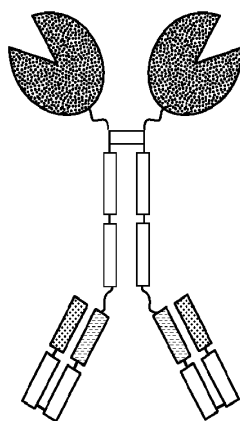
FIGURE 11A

15/45



BUNK

FIGURE 11D



LOBSTER-FAB

FIGURE 11E

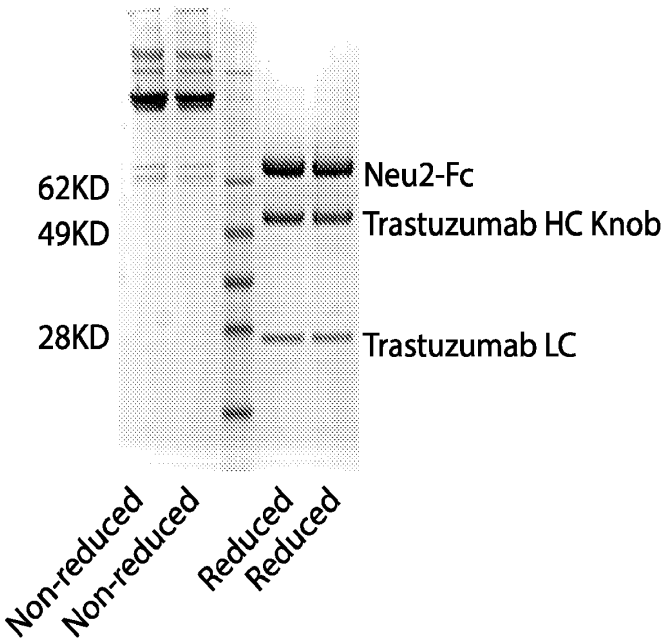


FIGURE 12

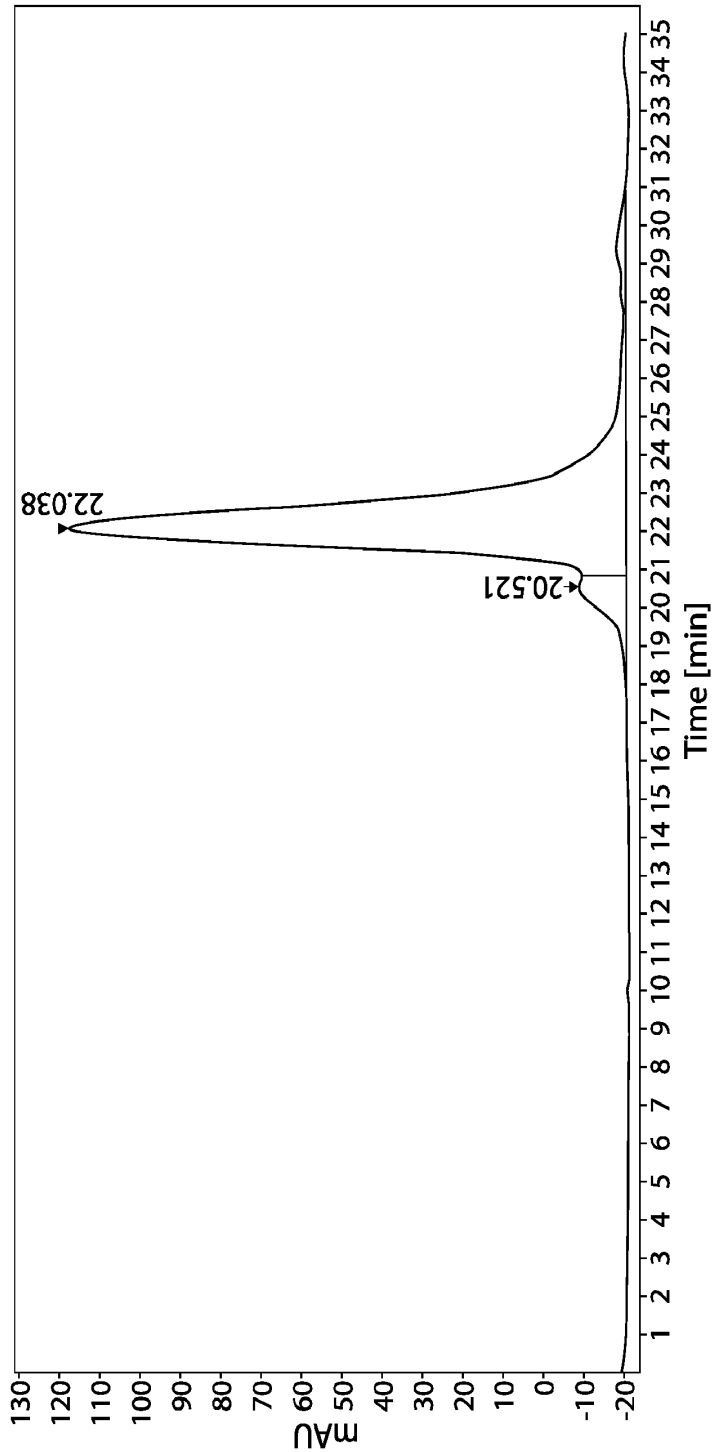


FIGURE 13

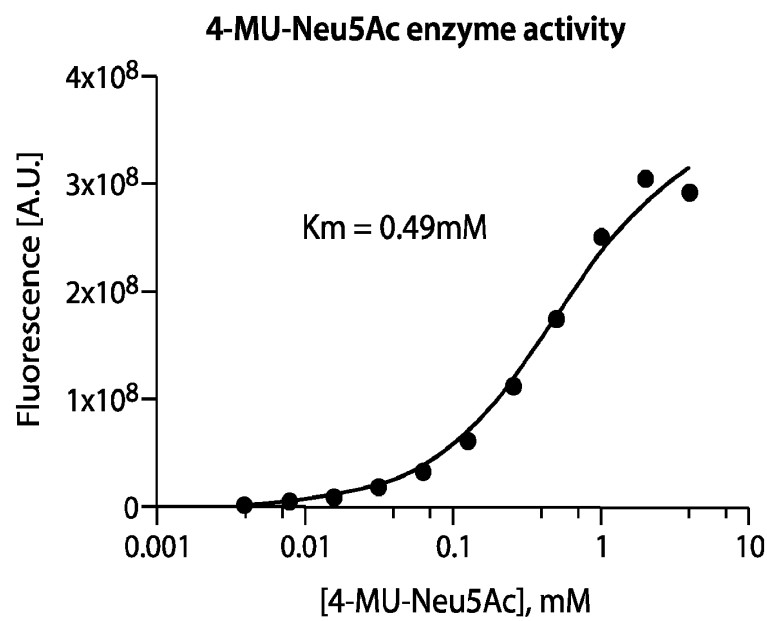


FIGURE 14

19/45

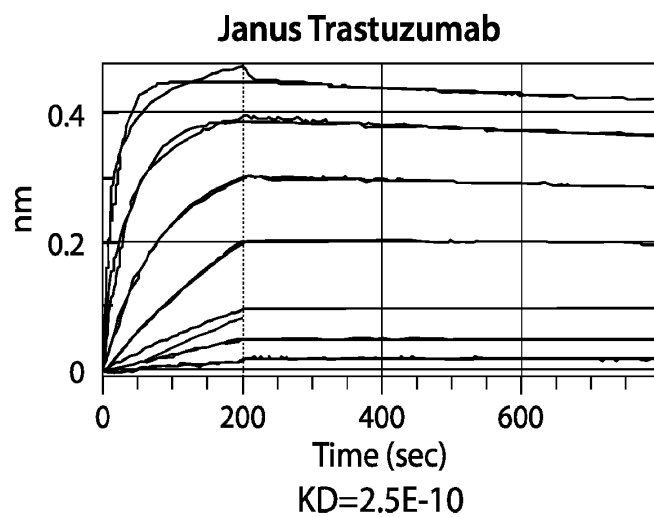
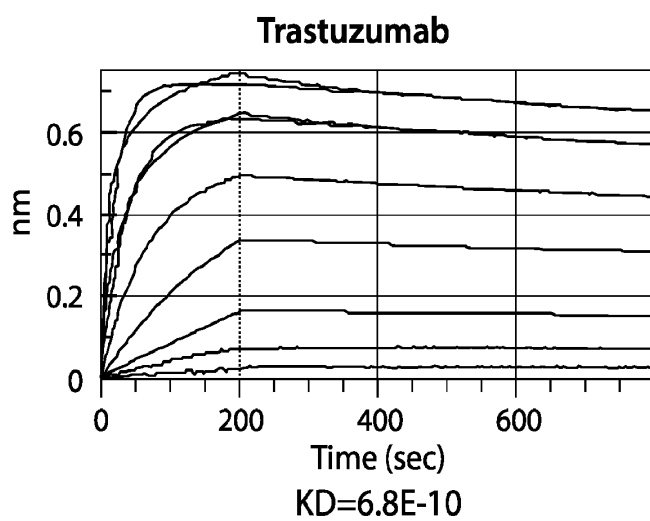


FIGURE 15

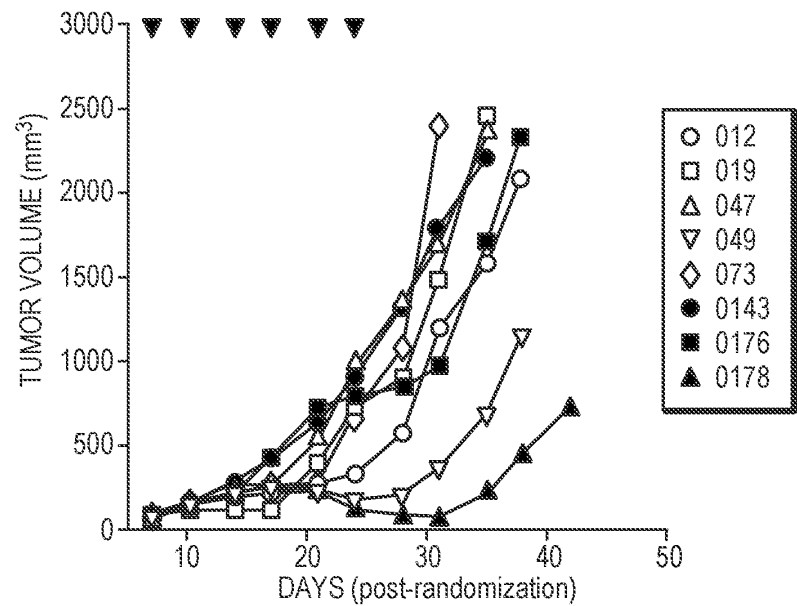


FIGURE 16A

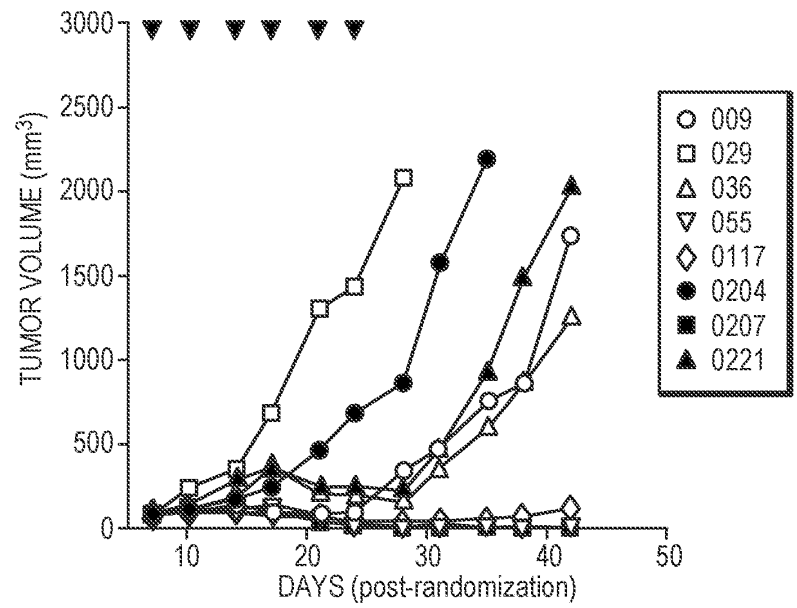


FIGURE 16B

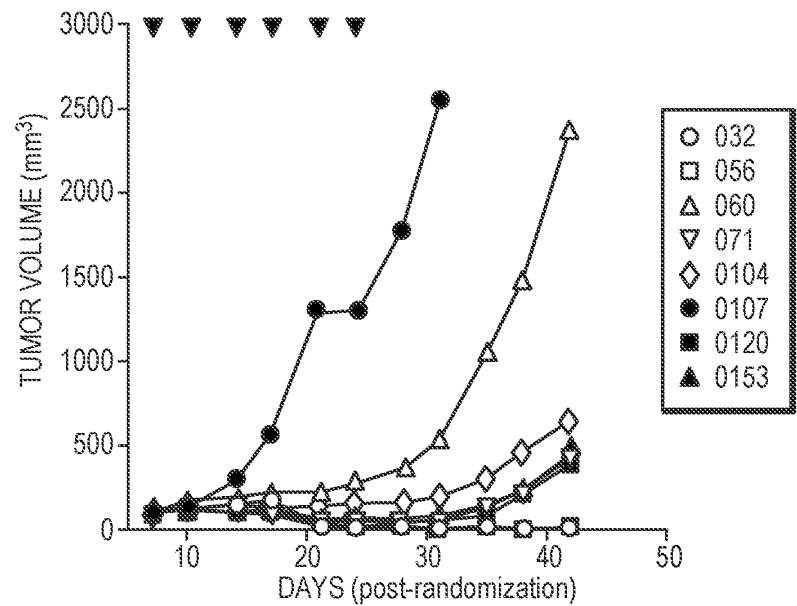


FIGURE 16C

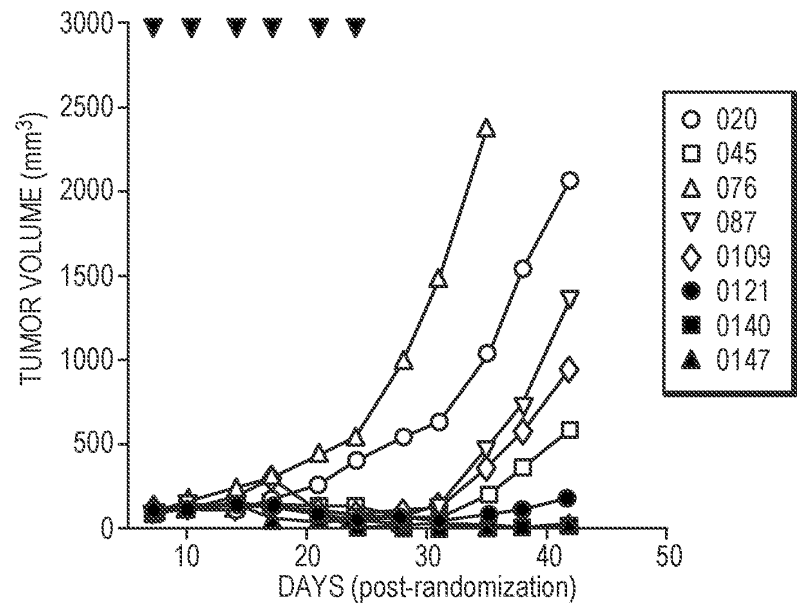


FIGURE 16D

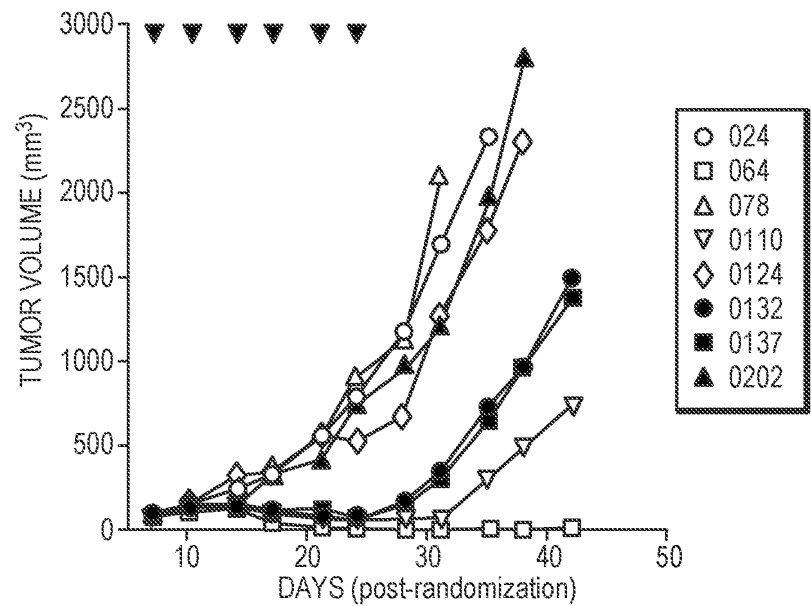


FIGURE 17A

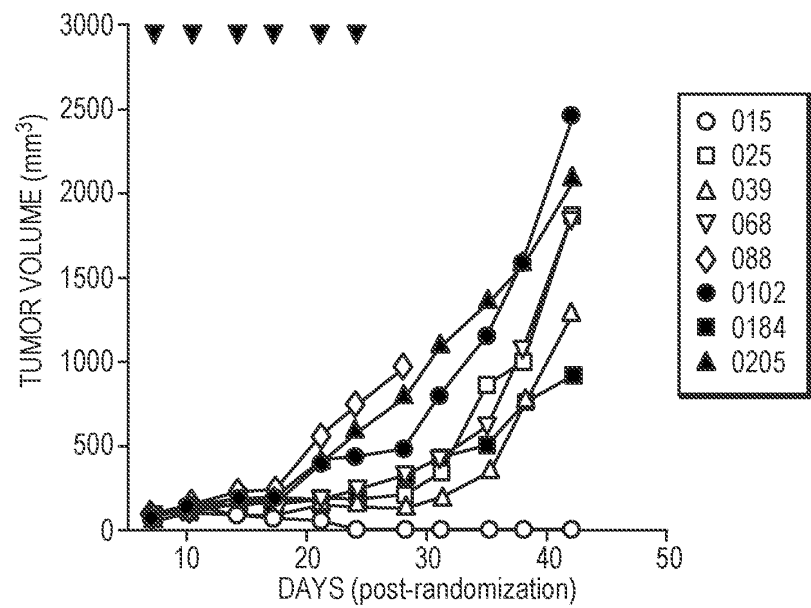


FIGURE 17B

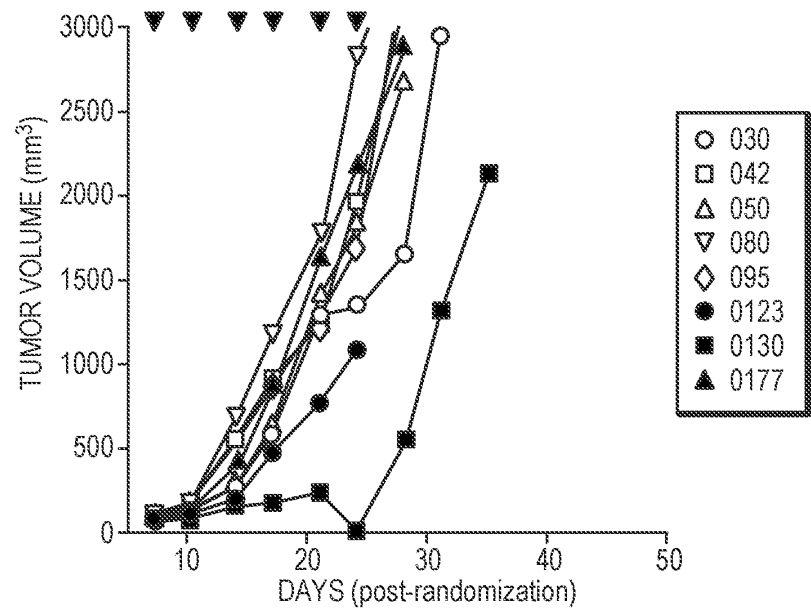


FIGURE 17C

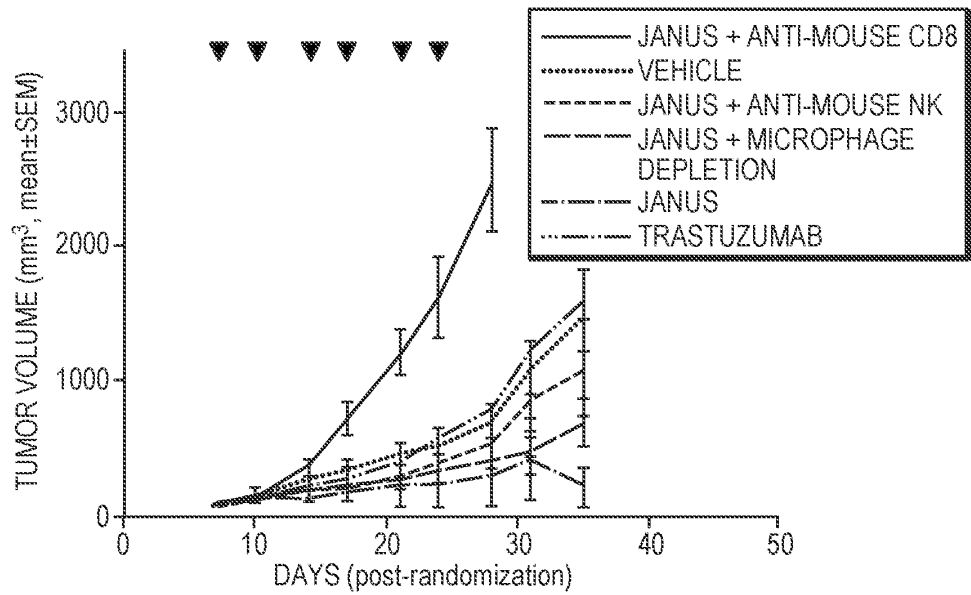


FIGURE 17D

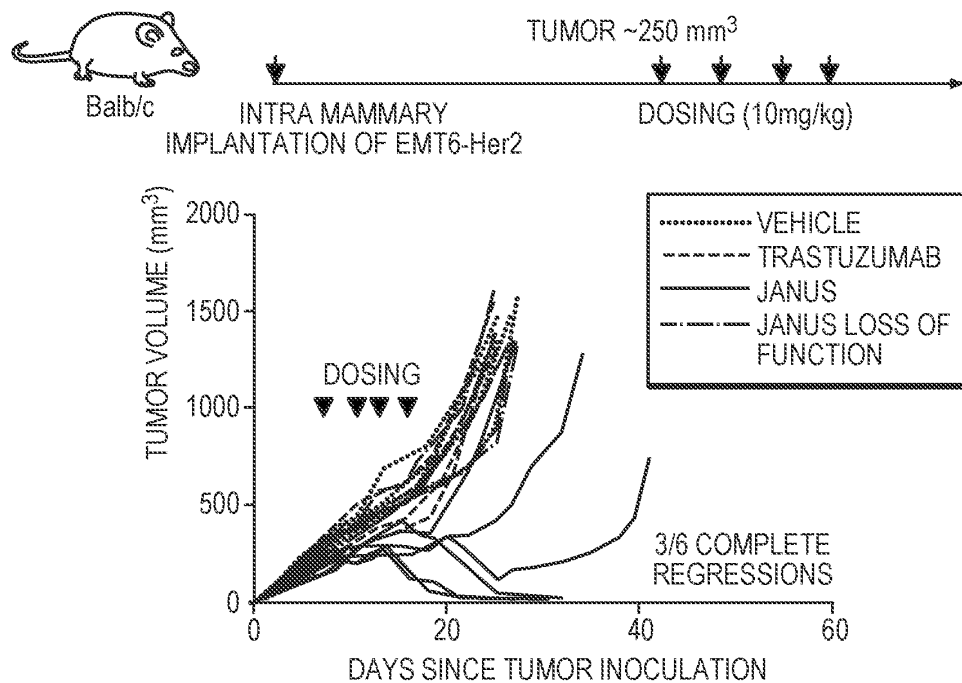


FIGURE 18A

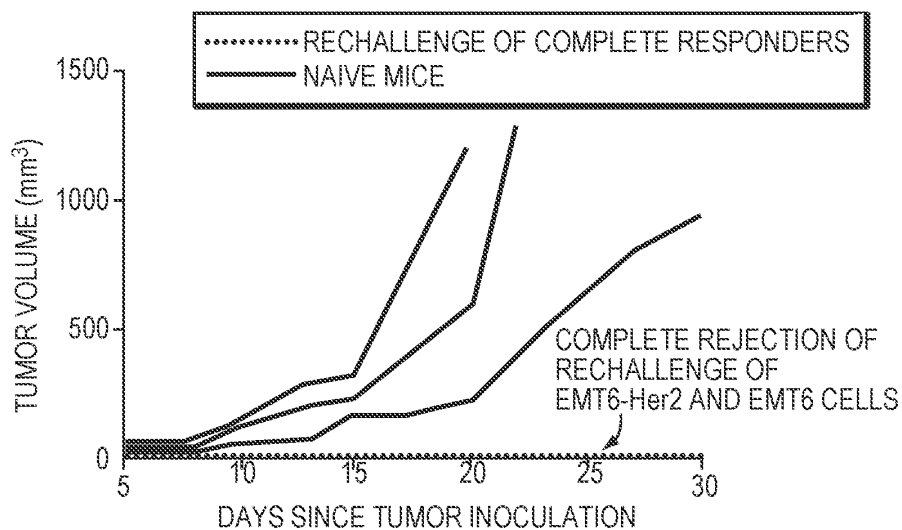


FIGURE 18B

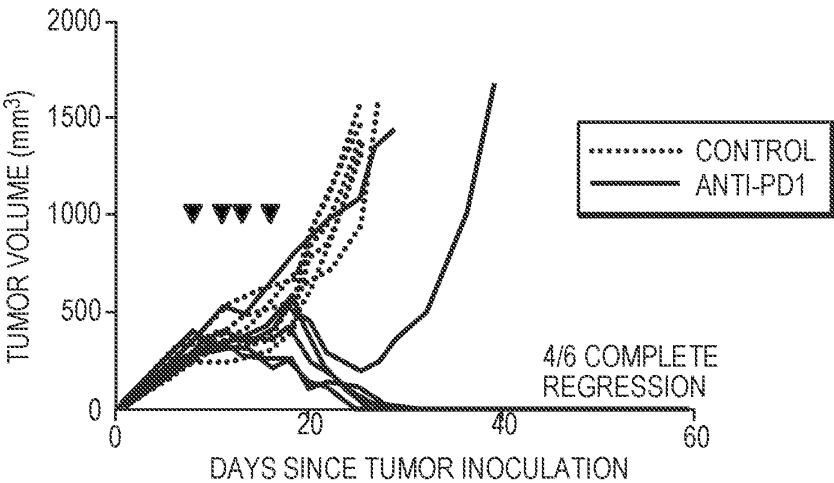


FIGURE 19A

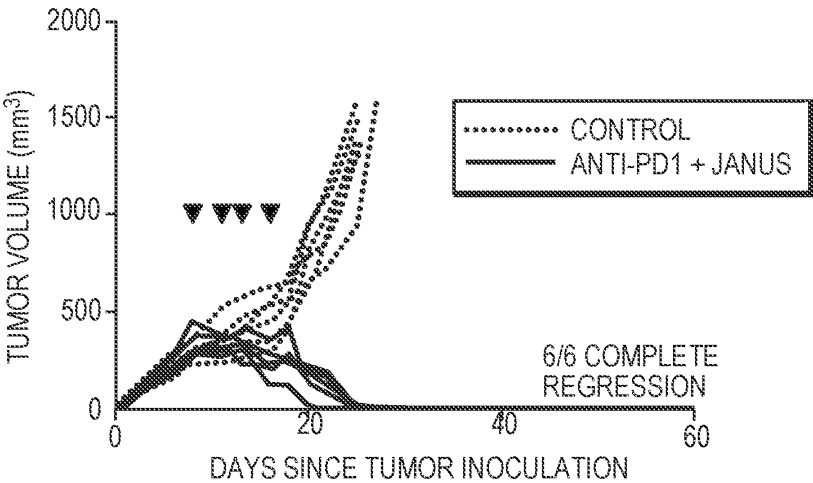


FIGURE 19B

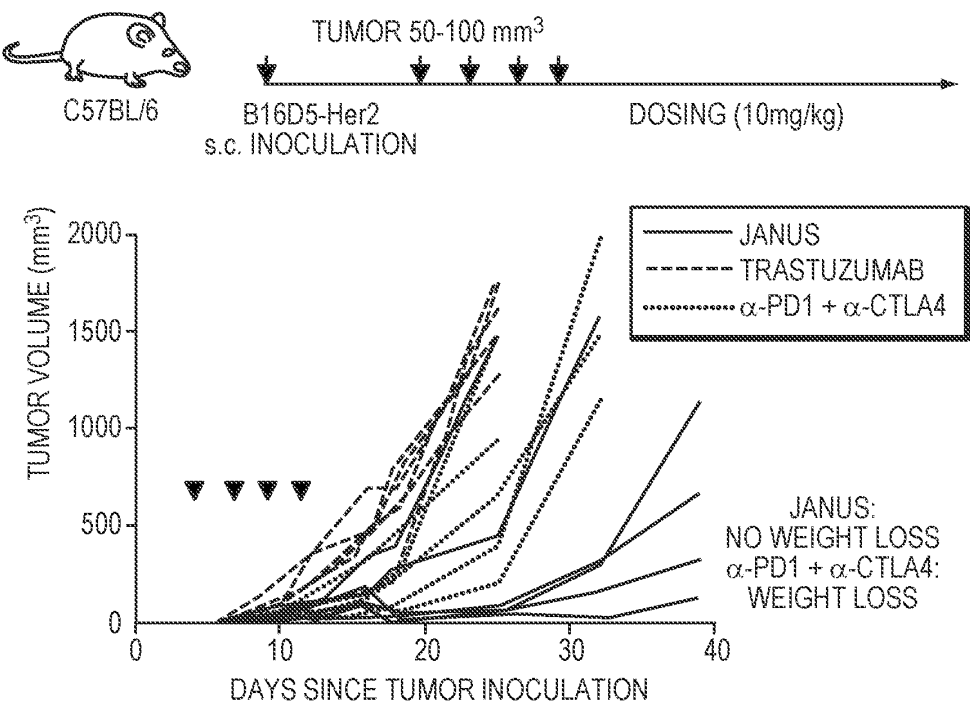


FIGURE 20

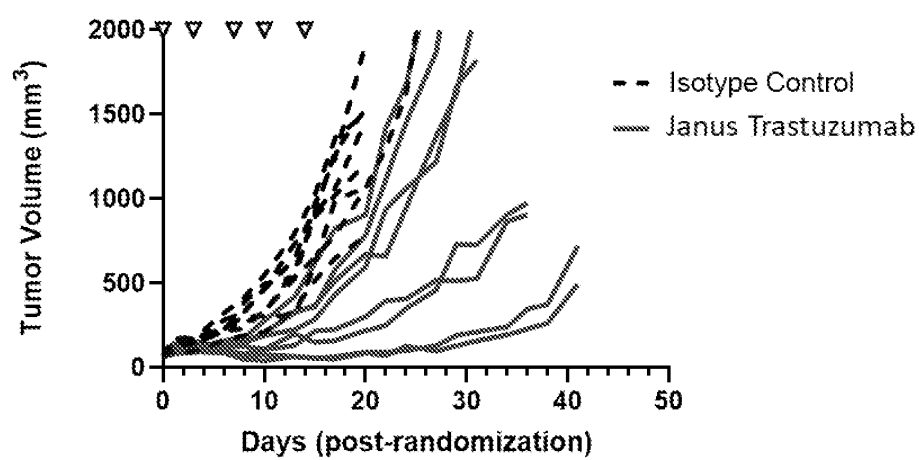


FIGURE 21

28/45

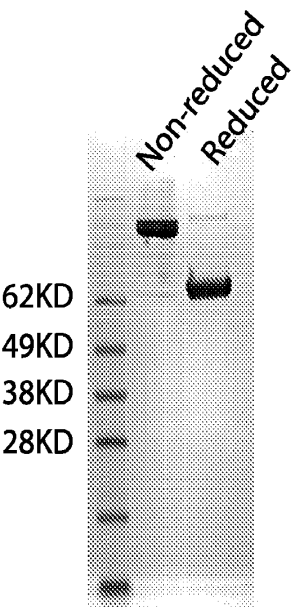


FIGURE 22A

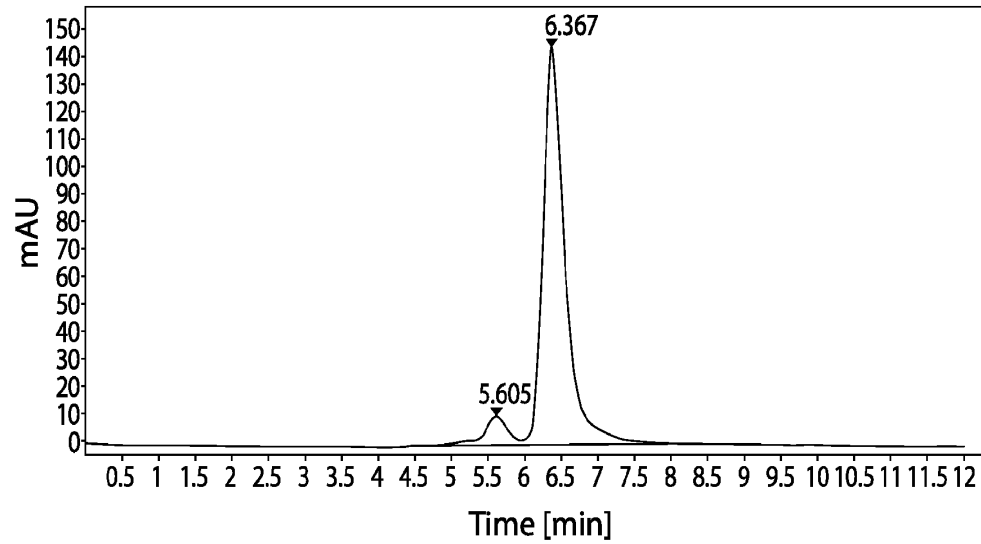


FIGURE 22B

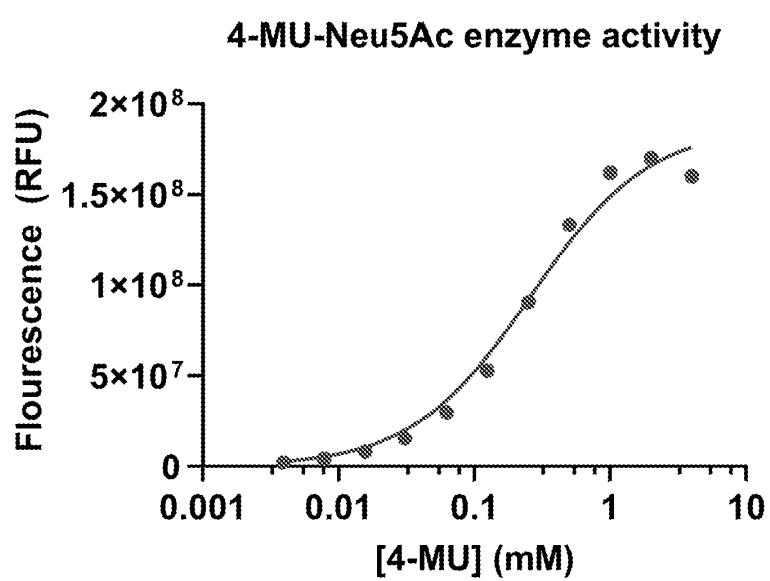


FIGURE 23

30/45

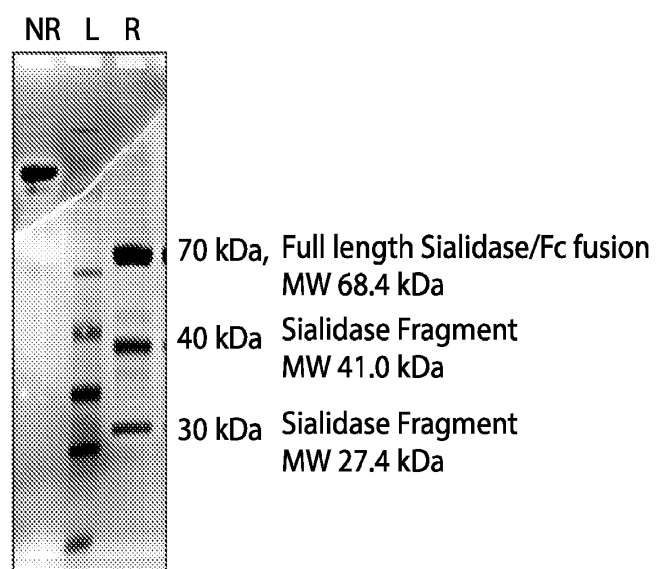


FIGURE 24A

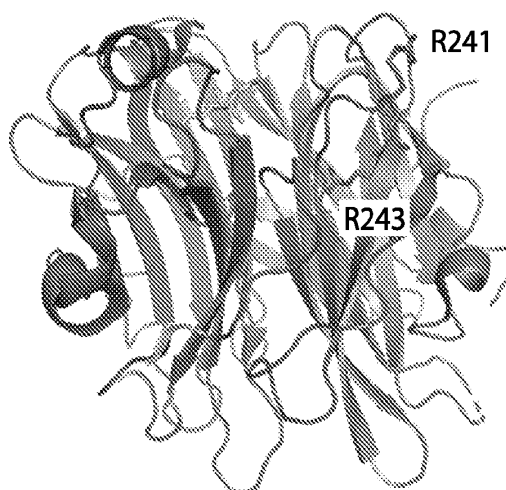


FIGURE 24B

31/45

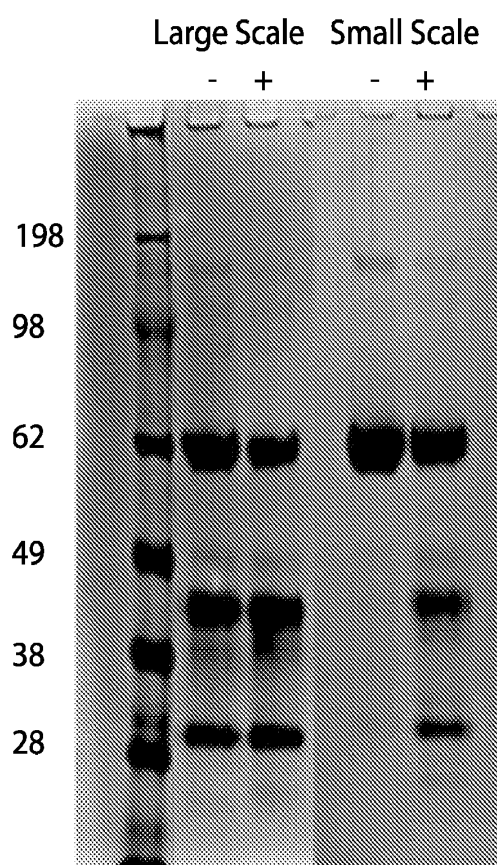


FIGURE 25

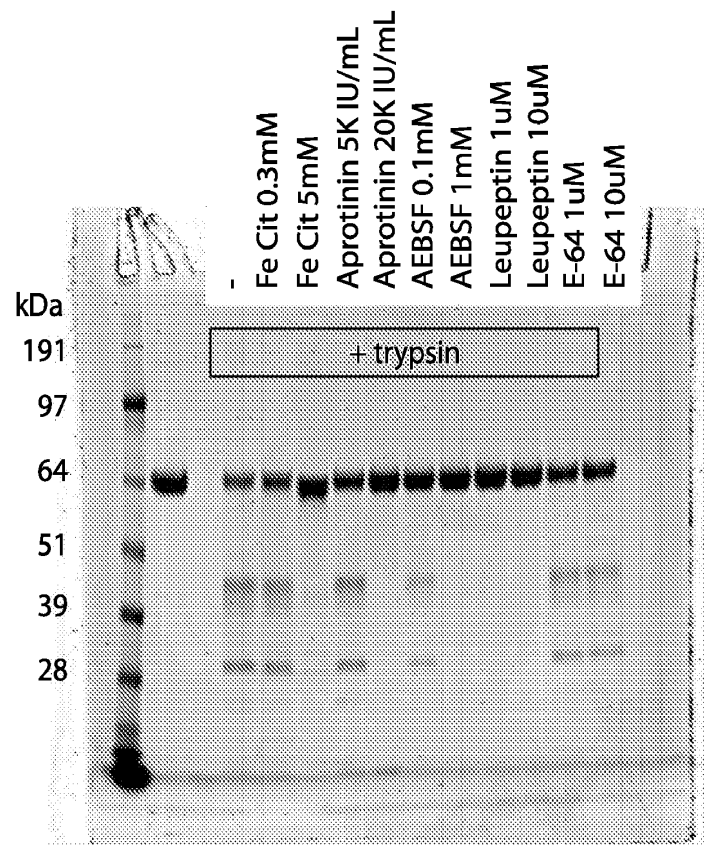


FIGURE 26

33/45

Conserved P1 Arginine

Conserved P1 Arginine

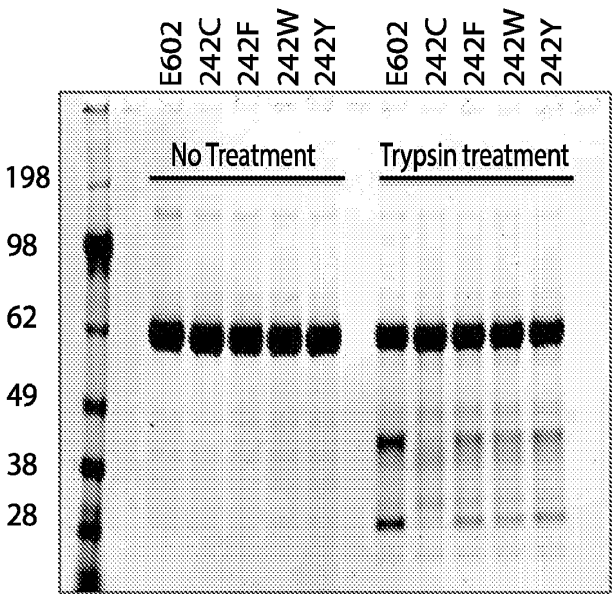
K0Q5Y5_PETMA/1-393	CHCRIVM	K0PUUO_STRPU/1-375	QATRQES
A0A1U7TTG9_TARSY/1-378	LRARVQA	K0Q6U1_PARLI/1-356	KKPHPRS
K0Q5Y7_SACKO/1-374	CRCRIIA	I3N3C4 ICTTR/1-388	RGARVQA
A0A0A9YMQ4_LYGHE/1-476	HPTHQGV	G1MSG2_MELGA/1-384	KGARIQA
NEUR2_RAT/1-379	IGARVQA	H0VEI5_CAVPO/1-381	QKARVQA
K0Q5Y3_BRAFL/1-383	CHCKAFL	F1SM45_PIG/1-379	LQARVQA
NEUR2_MOUSE/1-379	LGARVQA	J9P7D3_CANLF/1-378	RRARVQA
H2QJM5_PANTR/1-378	LQARVQA	K0PUQ5_STRPU/1-379	CSCRIQA
K0PUS8_XENTR/1-397	KHFRVEA	M3WEW5_FELCA/1-379	LRARVQA
A0A1D5PLC0_CHICK/1-379	RGARIQA	K0Q567-TAEGU/1-453	RGCRAVA
K0PUS2_ANOCA/1-423	DKSRAEA	H0ZAF2_TAEGU/1-378	RGARIQA
F7BZE1_ORNAN/1-404	RGSRVQA	A0A1S2ZJU8_ERIEU/1-390	WGARIQA
K0Q1U9_BRAFL/1-393	CSCKAFFM	A0A0R4J224_MOUSE/1-385	LGARVQA
H3HXXK1_STRPU/1-378	CHCRLQS	Q8R0U7_MOUSE/1-334	LGARVQA
H3HXXK0_STRPU/1-380	CNCRIQA	Q3ULV6_MOUSE/1-379	LGARVQA
H0X8X5_OTOGA/1-376	LRARVQA	E9Q0I0_MOUSE/1-393	LGARVQA
A0A1U7RKK1_ALLSI/1-380	RGARVQA	K0Q1X8_XENTR/1-384	GKKRIEA
A0A0D9R225_CHLSB/1-381	LRARIQA	G1RWA2_NOMLE/1-380	LRARVQA
U3J2K3_ANAPL/1-405	KGARIQA	K0Q575_STRPU/1-409	QOTRAAI
H3AXU1_LATCH/1-381	LGSRVQA	F7G6S2_MACMU/1-381	LRARIQA
NEUR2_CRIGR/1-379	LGARVQA	G1T7Y0_RABIT/1-381	QGSRVQA
H3AXU0_LATCH/1-378	LGSRVQA	K0Q571_CHICK/1-470	LGFRVQA
A0A218UCK9_9PASE/1-380	RGARIQA	K0Q1X5_ANOCA/1-420	HKYRAGA
F6ZED6_CALJA/1-379	LRARVQA	Q5BK97_RAT/1-379	IGARVQA
W5QDI3_SHEEP/1-379	HQARVQA	A0A287CXJ5 ICTTR/1-388	RGARVQA
V8N5X3_OPHHA/1-310	DRYRVEA	A0A1S3FN43_DIPOR/1-379	RGARVQA
F6ZZS9_HORSE/1-379	LRARVQA	G5E5Q1_BOVIN/1-379	LRARVQA
Human Neu2 NEUR2_HUMAN/1-380	LRARVQA	K0PUR2_KARBR/1-427	--GRGVA
K0Q5Z5_XENTR/1-369	CGKRIEA	K0PUN9_ANOCA/1-405	ICSCRIVI
K0Q5Z7_BRAFL/1-398	HARRQQS	G1Q5N4_MYOLU/1-379	RGARIQA
K0Q5Z1_KARBR/1-368	--FFRITRT	G3QRW5_GORGO/1-380	LRARVQA
A0A1V4KA9_PATFA/1-379	RGARIQA	U3KGF1_FICAL/1-379	RGARIQA
K0Q6T6_SACKO/1-366	CKCRIFS	GT0S2_LOXAF/1-381	RRARVQA
K0PUP2_PETMA/1-352	CRCRIVI	Q0VGI4_MOUSE/1-379	LGARVQA
K0Q6T9_ANOCA/1-393	EQCRAEA		
K0Q1V9_SACKO/1-436	CSCRIIT		
K0Q5Z9_PETMA/1-397	HEFRVQA		
A0A1V4K4I9_PATFA/1-309	RGARIQA		
K0Q6T4_BRAFL/1-428	CNCKMIM		
A0A096NQR0_PAPAN/1-381	LRARIQA		
G3VZV5_SARHA/1-374	LGRRVQA		
F7F7Q7_MONDO/1-392	HKLRVQA		
A0A096NQQ9_PAPAN/1-373	LRARIQA		
D2H842_AILME/1-379	LRARVQA		
H9GQ66_ANOCA/1-394	DRYRAEA		
A0A1U8CDQ0_MESAU/1-393	LGARVQA		
A0A151NUY4_ALLMI/1-423	RGARVQA		
M3Y1P4_MUSPF/1-379	LGARVQA		
A0A0B5CU22_CASFI/1-378	LGARVQA		

Substrate Cleavage
Pn-----P4-P3-P2-P1# P1'-P2'-P3'-P4'-----Pm'

FIGURE 27A

		P2	P1	P1'	
240	241	242	243	244	245
L	R	A	R	V	Q
		C			
			K		
				I	
				P	
		C		K	
		R		R	
		R		H	
		T		P	
		Y		P	
		N		P	

FIGURE 27B



SDS PAGE reduced
FIGURE 28A

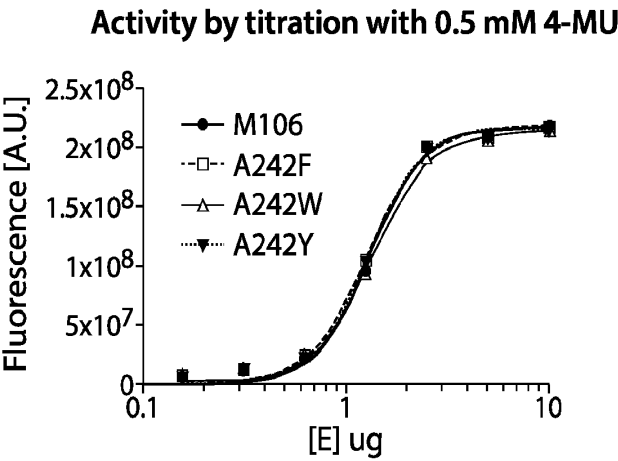


FIGURE 28B

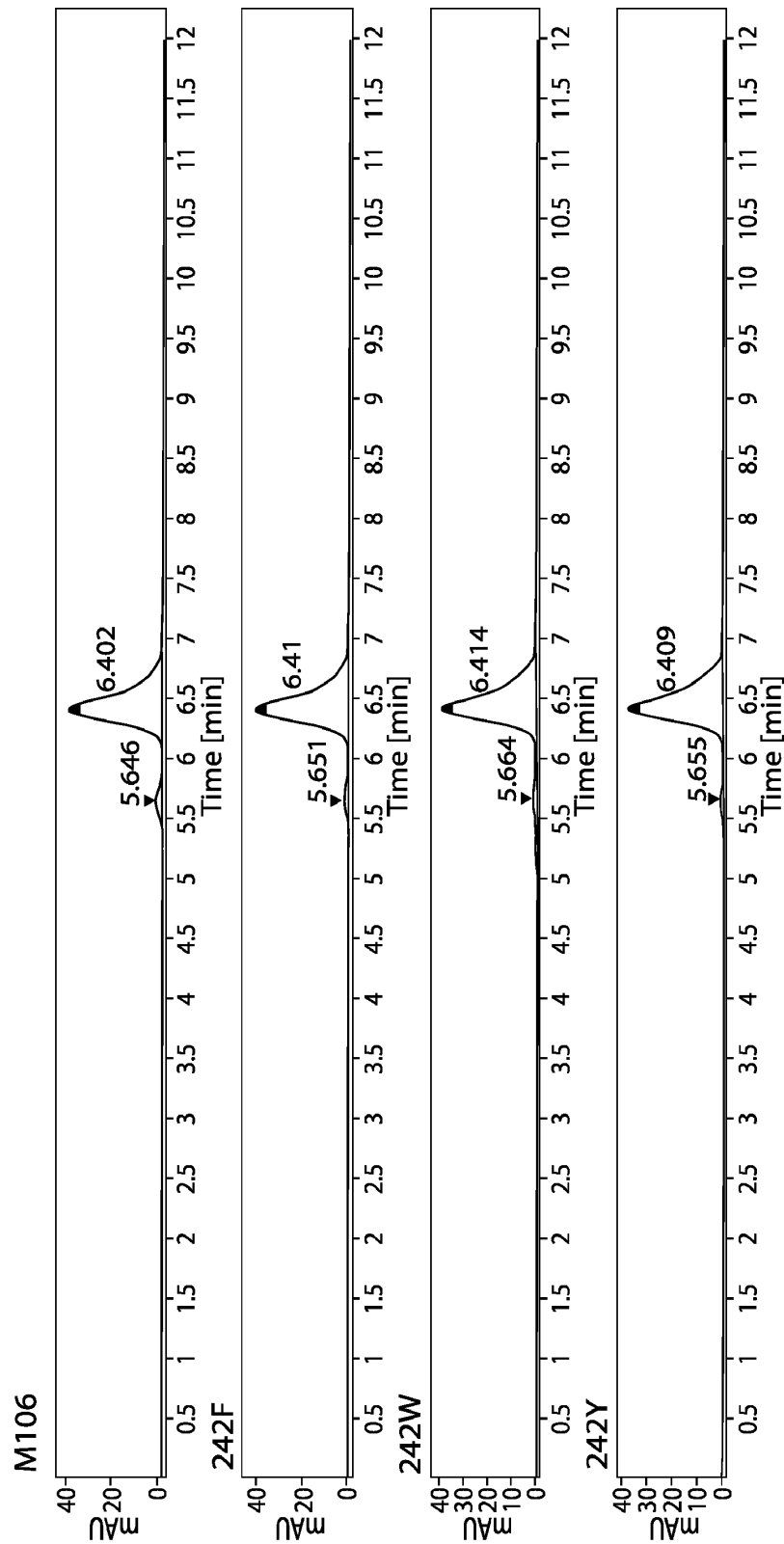


FIGURE 28C

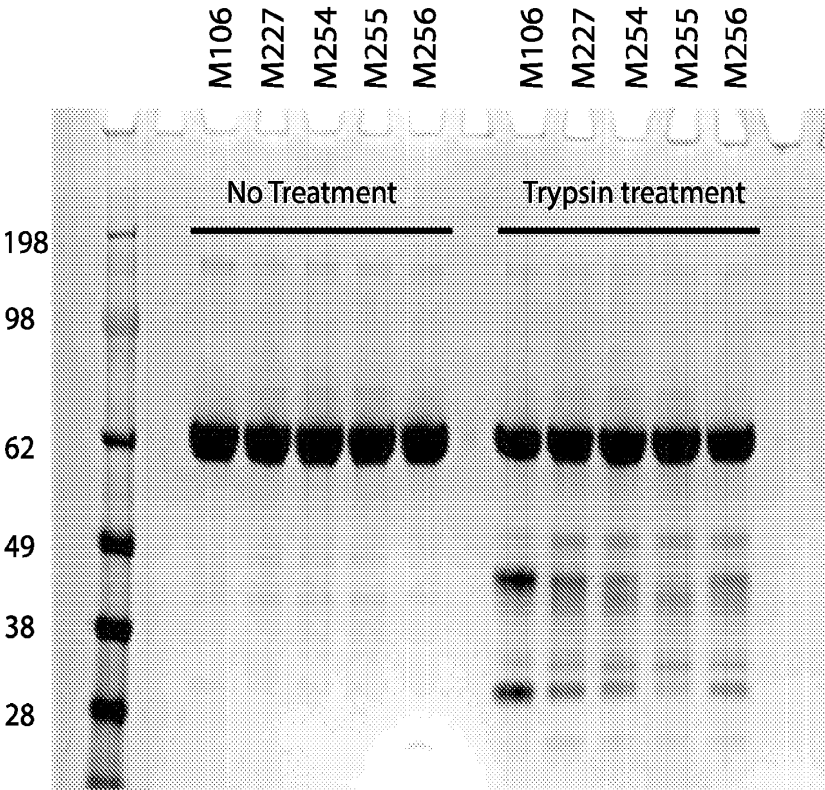


FIGURE 29

37/45

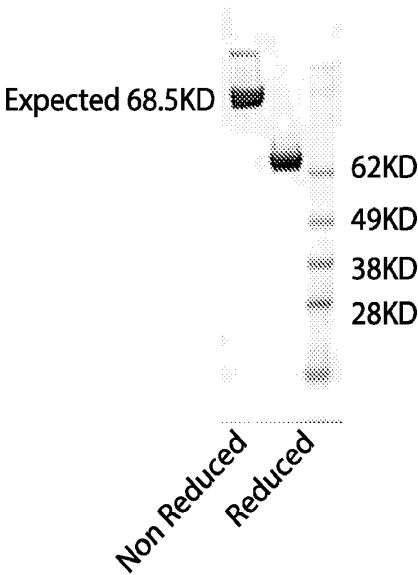


FIGURE 30A

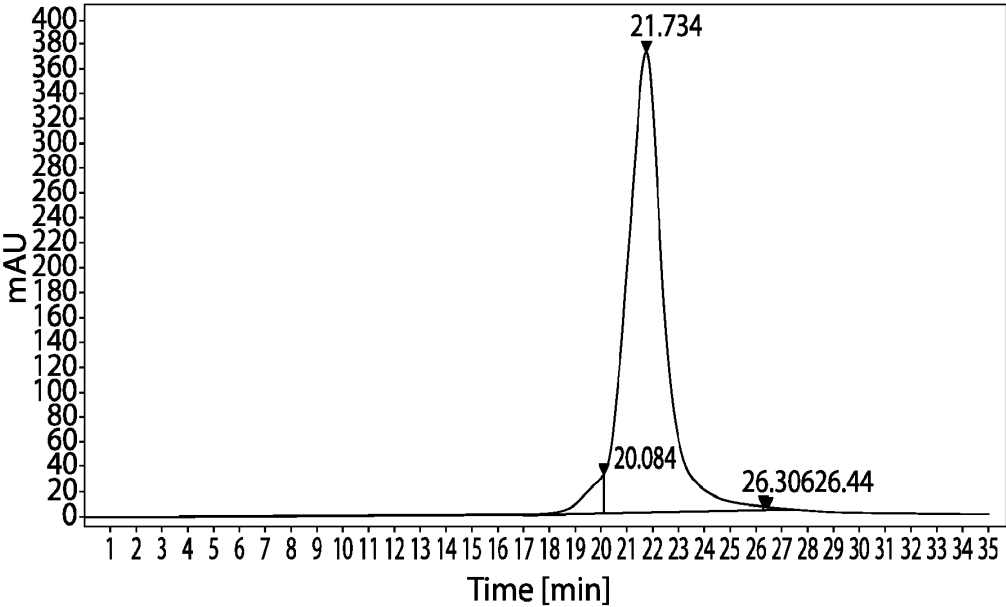


FIGURE 30B

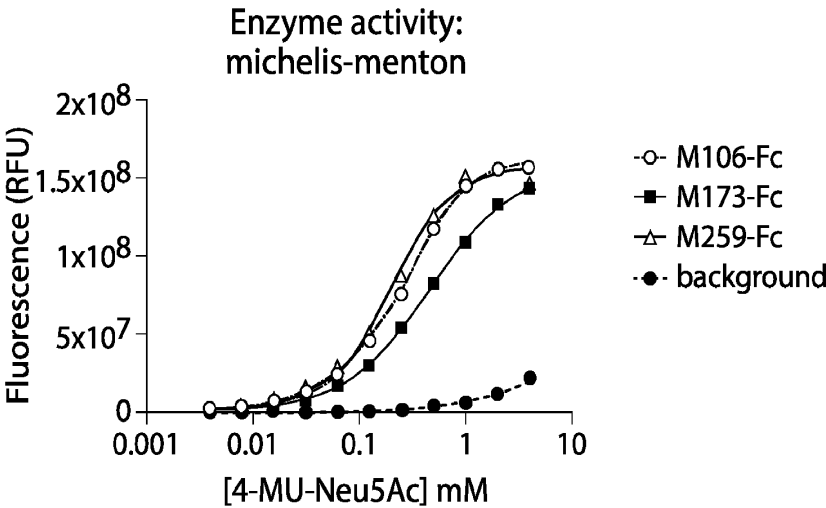


FIGURE 31A

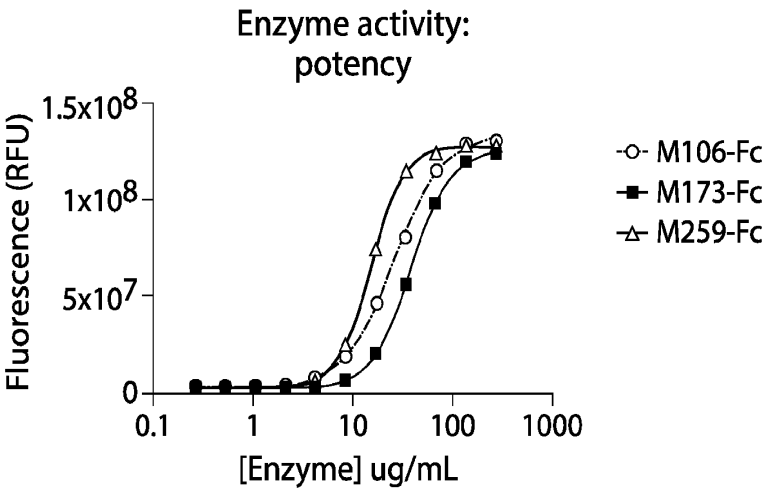


FIGURE 31B

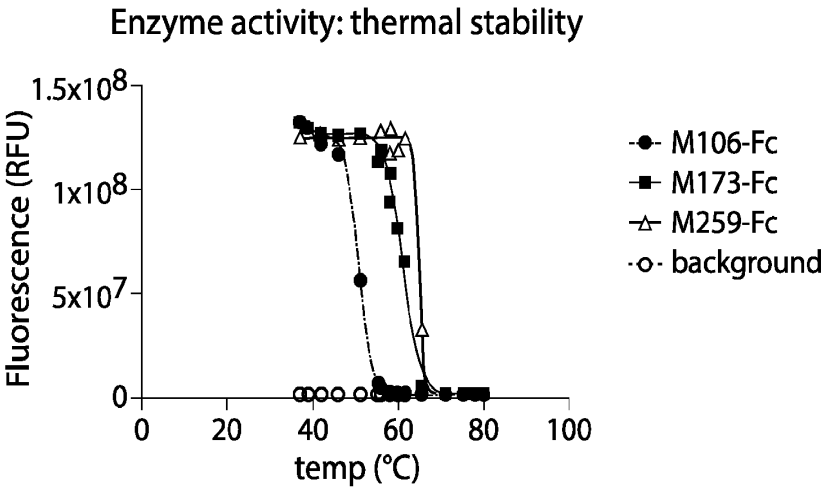


FIGURE 32

40/45

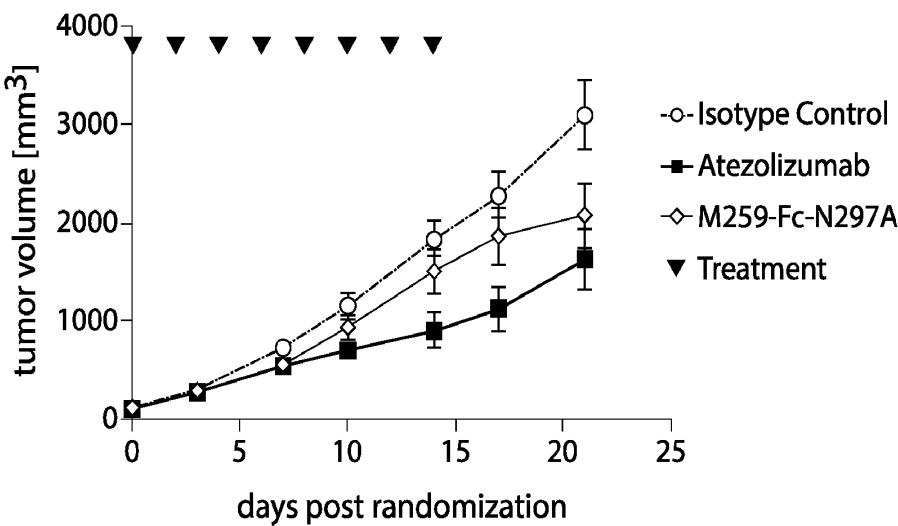


FIGURE 33A

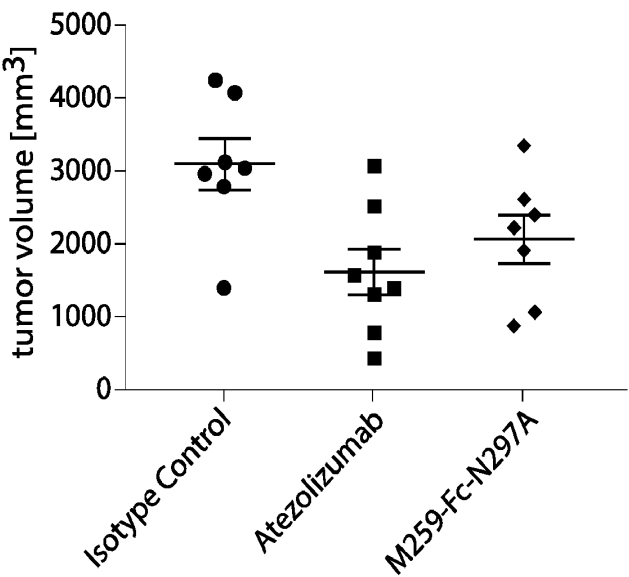


FIGURE 33B

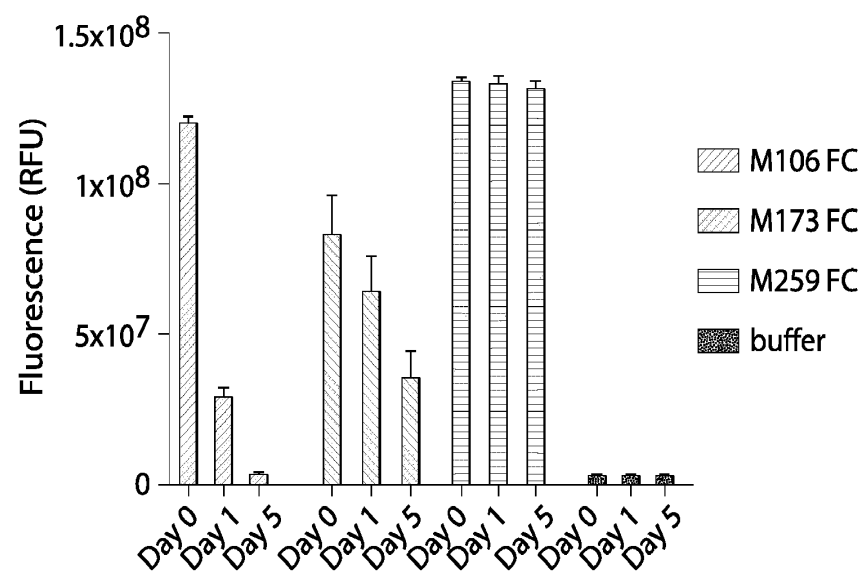


FIGURE 34

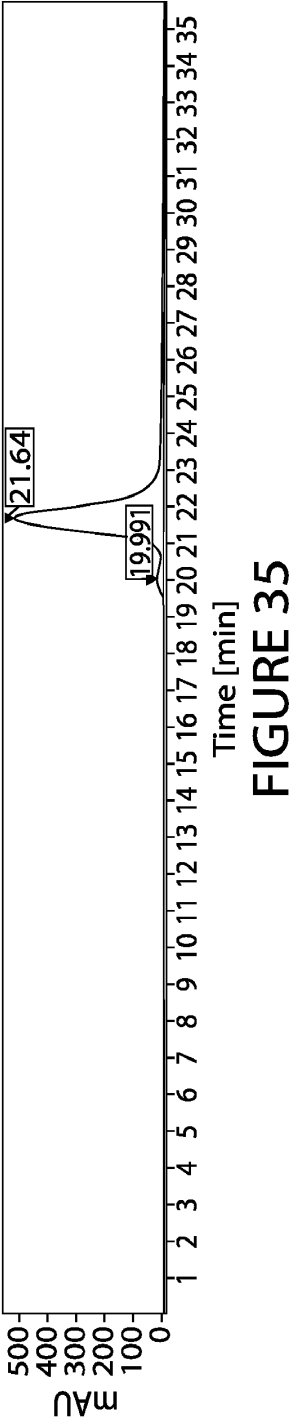


FIGURE 35

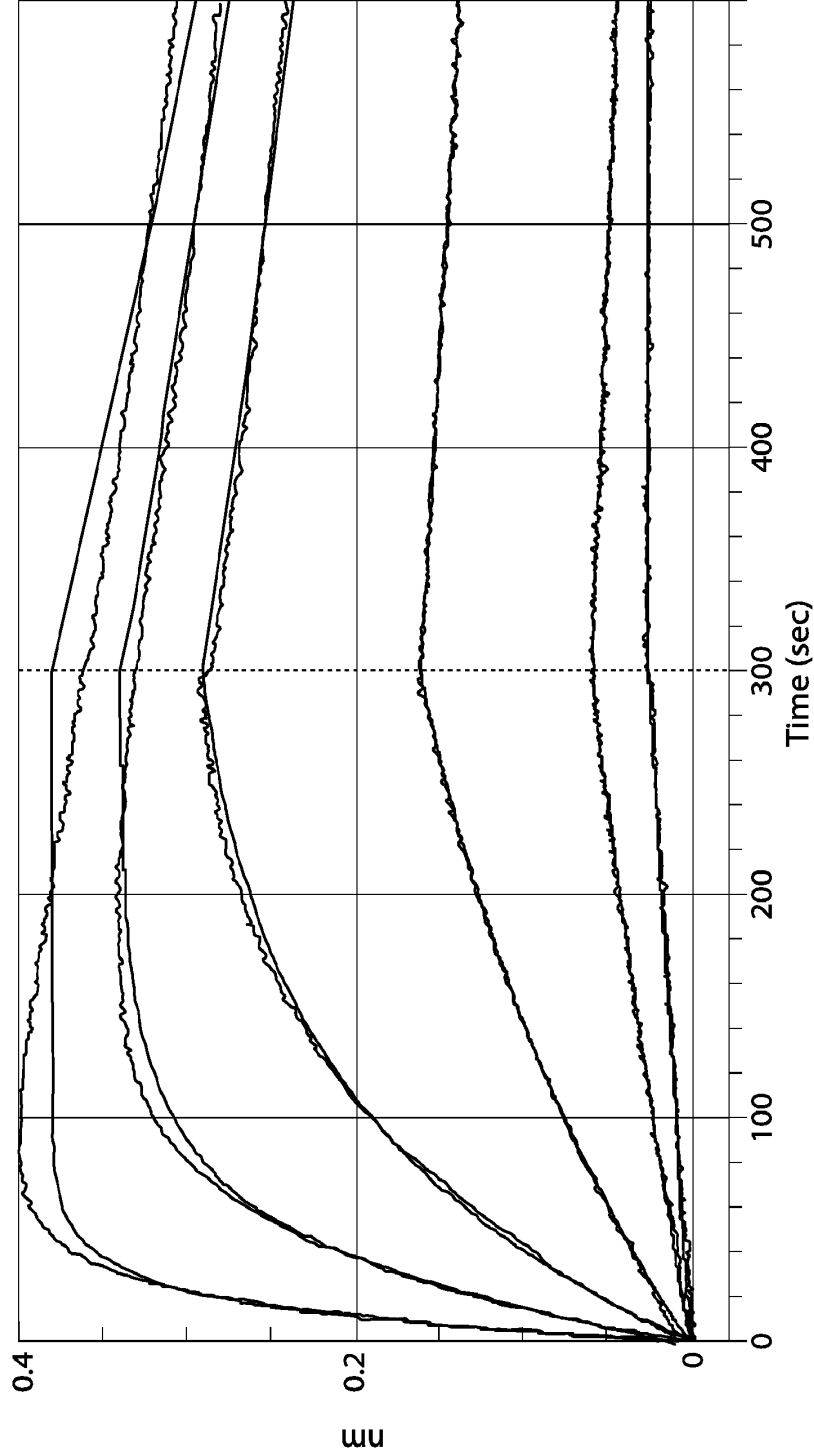


FIGURE 36

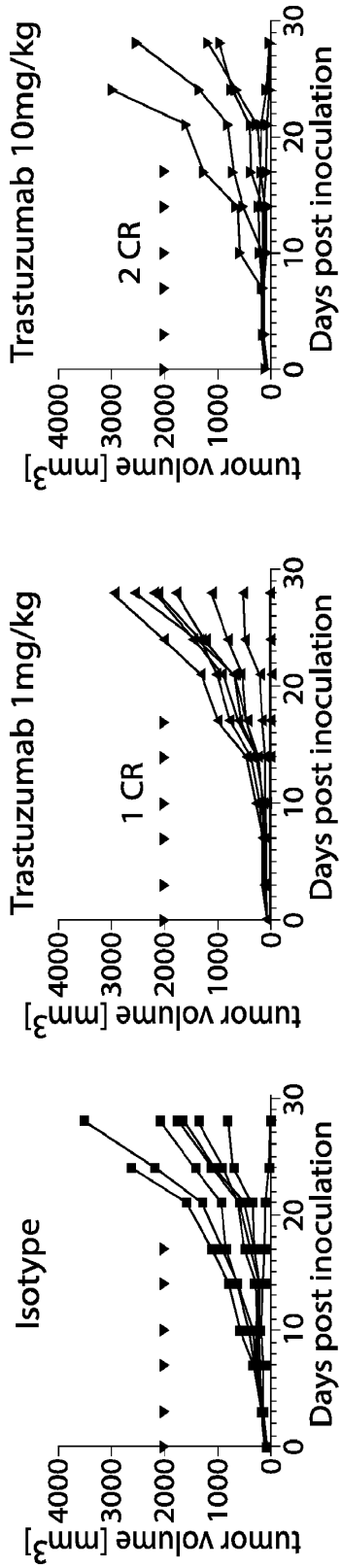


FIGURE 37A

FIGURE 37B

FIGURE 37C

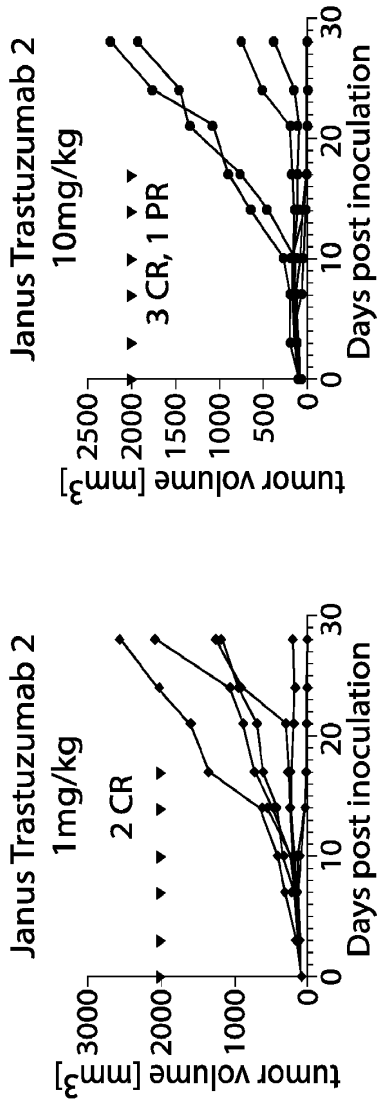


FIGURE 37D

FIGURE 37E

FIGURE 37F

45/45

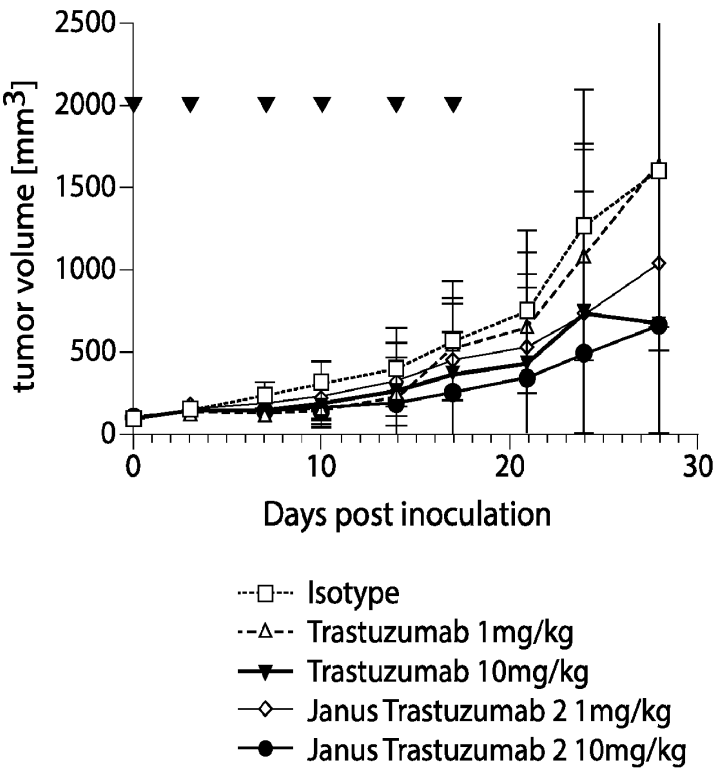


FIGURE 37F