

	HCDR1 (SEQ ID NO:)	HCDR2 (SEQ ID NO:)	HCDR3 (SEQ ID NO:)	SEQ ID NO:
19B6HC	QVQLVDSGAEVKKPGASVKVSCKAS GYTFTGYYMH (1)	WVRQAPGGGLEWMG IINPSGGSTSYAOKFEQ (2)	RVTWTRDTSTVYVMESSLRSSEDAVYYCAK TAGYDWLP SGLGMDV (3)	WGQGTITVTVSS 4
19B10HC	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYAMH (5)	WVRQAPGKGLEWVS GISNSGGITYADSVK (6)	RFTTSRONSKNTLYLQMNLSRAEDAVYYCAR DNVYYVMDV (7)	WGKGTITVTVSS 8
23A8HC	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSAMH (9)	WVRQAPGKGLEWVS GISGSGSTTYADSVK (10)	RFTTSRONSKNTLYLQMNLSRAEDAVYYCAR DNNVYYVMDV (11)	WGKGTITVTVSS 12
23A11HC	QVQLVDSGAEVKKPGSSVKVSCKAS GYTFTDYSLLH (13)	WVRQAPGGGLEWMG EVIPMFDTAYAQTEQ (14)	RVTITADESTAYMELSSLRSSEDAVYYCAR EPFTWVRGGRYYYVGM (15)	WGQGTITVTVSS 16
23H9HC	QVQLVDSGAEVKKPGSSVKVSCKAS GGTFSSSVIS (17)	WVRQAPGGGLEWMG GIIPFGTANYAOKFEQ (18)	RVTITADESTAYMELSSLRSSEDAVYYCAR EGLGCSGGSCYSGYYVGM (19)	WGQGTITVTVSS 20
24H9HC	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYVMS (21)	WVRQAPGKGLEWVS AISGSGSTTYADSVK (22)	RFTTSRONSKNTLYLQMNLSRAEDAVYYCAS SPLQWV (23)	WGQGTITVTVSS 24
	LCDR1 (SEQ ID NO:)	LCDR2 (SEQ ID NO:)	LCDR3 (SEQ ID NO:)	SEQ ID NO:
19B6LC	DIQMTQSPSSLSASVGDRVTITC RASQISNWL (25)	WYQOKPGKAPKLLIY YASSLOS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQGVSVPLS FGQGTKLEIK (26)	WYQOKPGKAPKLLIY YASSLOS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQGVSVPLS FGQGTKLEIK (27)	28
19B10LC	DIQMTQSPSSLSASVGDRVTITC RASQSVSTWL (29)	WYQOKPGKAPKLLIY AASNLET GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQTYSTPYT FGQGTKLEIK (30)	WYQOKPGKAPKLLIY AASNLET GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQTYSTPYT FGQGTKLEIK (31)	32
23A8LC	DIQMTQSPSSLSASVGDRVTITC RASQSIGTWL (33)	WYQOKPGKAPKLLIY AASTLRS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQSYSTPYT FGQGTKLEIK (34)	WYQOKPGKAPKLLIY AASTLRS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQSYSTPYT FGQGTKLEIK (35)	36
23A11LC	DIQMTQSPSSLSASVGDRVTITC RASQINKNLN (37)	WYQOKPGKAPKLLIY DASNLOS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QHSET FGQGTKVEIK (38)	WYQOKPGKAPKLLIY DASNLOS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QHSET FGQGTKVEIK (39)	40
23H9LC	DIQMTQSPSLPVTGPASIS RSSQLLSHNGYNYLD (41)	WYQOKPGKAPKLLIY LSHRAS GVPSRFSGSGSGTDFLTISLQPEDFATYYC MQGAHWPT FGQGTKVEIK (42)	WYQOKPGKAPKLLIY LSHRAS GVPSRFSGSGSGTDFLTISLQPEDFATYYC MQGAHWPT FGQGTKVEIK (43)	44
24H9LC	DIQMTQSPSSLSASVGDRVTITC RASQIGSNWL (45)	WYQOKPGKAPKLLIY SASSLOS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQANSFPT FGPGTKVDIK (46)	WYQOKPGKAPKLLIY SASSLOS GVPSRFSGSGSGTDFLTISLQPEDFATYYC QQANSFPT FGPGTKVDIK (47)	48

FIG. 1A

Light chain of 23H9 and 23H9 variants

	LCDR1 (SEQ ID NO:)	LCDR2 (SEQ ID NO:)	LCDR3 (SEQ ID NO:)	SEQ ID NO:
23H9LC	DIWMTQSPISLSPVTGPEPASISC RSSQSLHSGNGNYLD WYLOKPGQSPQLLIY LSSHRAS GVPDRFSGSGSGTDFTLKISRVEAEDVGVYVC MQGAHWPYT FGQGTKVEIK	(41)	(42)	44
31B1LC	DIWMTQSPISLSPVTGPEPASISC RSSQSLHSGNGNYLD WYLOKPGQSPQLLIY EASSLHS GVPDRFSGSGSGTDFTLKISRVEAEDVGVYVC MQGTHWPYT FGQGTKVEIK	(41)	(43)	51
33C4LC	DIWMTQSPISLSPVTGPEPASISC RSSQSLHSGNGNYLD WYLOKPGQSPQLLIY EASSLHT GVPDRFSGSGSGTDFTLKISRVEAEDVGVYVC MQGSHWPYT FGQGTKLEIK	(41)	(50)	54
33G8LC	DIWMTQSPISLSPVTGPEPASISC RSSQSLHSGNGNYLD WYLOKPGQSPQLLIY QASTLGS GVPDRFSGSGSGTDFTLKISRVEAEDVGVYVC MQGTHWPYT FGQGTKLEIK	(41)	(53)	57
34C1LC	DIWMTQSPISLSPVTGPEPASISC RSSESLYSNGNTYLD WYLOKPGQSPQLLIY EVSNRAS GVPDRFSGSGSGTDFTLKISRVEAEDVGVYVC MQGTRWPYT FGQGTKVEIK	(41)	(56)	61
Motif	DIWMTQSPISLSPVTGPEPASISC RSSX ₁ SLLY ₂ SNGX ₃ X ₄ YLD WYLOKPGQSPQLLIY X ₅ X ₆ SX ₇ X ₈ X ₉ X ₁₀ GVPDRFSGSGSGTDFTLKISRVEAEDVGVYVC MQGX ₁₁ X ₁₂ WPYT FGQGTKVEIK	(58)	(60)	65
		(62)	(64)	

FIG. 1B

Light chain of 24H9 and 24H9 variants

	LCDR1 (SEQ ID NO:)	LCDR2 (SEQ ID NO:)	LCDR3 (SEQ ID NO:)	SEQ ID NO:
24H9LC	DIQWTQSPSSLSASVGDRTTTC RASQGISWLA WYQOKPGKAPKLLIY SASSLQS GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQANSFPFT FPGTKVDIK	(45)	(46)	48
32A11LC	DIQWTQSPSSLSASVGDRTTTC RASESISWLA WYQOKPGKAPKLLIY DASNLET GVPDRFSGSGSGTNTLTISLQPEDFATYVC QQADSFPFT FPGTKVDIK	(45)	(47)	69
32D11LC	DIQWTQSPSSLSASVGDRTTTC RASQISINWLA WYQOKPGKAPKLLIY DASNLET GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQGYSFPFT FPGTKVDIK	(45)	(68)	72
32D2LC	DIQWTQSPSSLSASVGDRTTTC RASQISRWLA WYQOKPGKAPKLLIY EASTLOS GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQAYSFPFT FGQGTKVDIK	(45)	(71)	76
32G6LC	DIQWTQSPSSLSASVGDRTTTC RASQISWLA WYQOKPGKAPKLLIY DASNLET GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQANSFPFT FPGTKVDIK	(45)	(75)	79
38A10LC	DIQWTQSPSSLSASVGDRTTTC RASQISWLA WYQOKPGKAPKLLIY DASRLQN GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQGDSFPFT FPGTKVDIK	(45)	(47)	83
38A11LC	DIQWTQSPSSLSASVGDRTTTC RASQISWLA WYQOKPGKAPKLLIY DASNLET GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQGNSFPFT FPGTKVDIK	(45)	(82)	85
38A4LC	DIQWTQSPSSLSASVGDRTTTC RASQISWLA WYQOKPGKAPKLLIY DASNLET GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQANSFPFT FGQGTKLEIK	(45)	(84)	87
38A6LC	DIQWTQSPSSLSASVGDRTTTC RASQISRWLG WYQOKPGKAPKLLIY AASTLOS GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQANSFPFT FPGTKLEIK	(45)	(47)	90
38A8LC	DIQWTQSPSSLSASVGDRTTTC RASESISWLA WYQOKPGKAPKLLIY DASNLET GVPDRFSGSGSGTDFTLTISLQPEDFATYVC QQANSFPFT FPGTKVDIK	(45)	(47)	91
		(66)	(47)	

FIG. 1C

38B1LC	DIQMTQSPSSLSASVGRVTITC	RASQISTWLA	WYQKPGKAPKLLIY	EASKLER	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQAYSFPFT	FGPGTKVDIK	93
		(80)		(92)		(75)		
38B10LC	DIQMTQSPSSLSASVGRVTITC	RASQISTWLA	WYQKPGKAPKLLIS	DASTLQT	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQGYSFPFT	FGPGTKVDIK	95
		(80)		(94)		(71)		
38B2LC	DIQMTQSPSSLSASVGRVTITC	RASESSWLA	WYQKPGKAPKLLIY	DASSLES	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQGDSFPFT	FGGTRLEIK	98
		(96)		(97)		(82)		
38C1LC	DIQMTQSPSSLSASVGRVTITC	RASQISRWLA	WYQKPGKAPKLLIS	DASTVQS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGPGTKVDIK	101
		(99)		(100)		(47)		
38C6LC	DIQMTQSPSSLSASVGRVTITC	RAGDINKWA	WYQKPGKAPKLLIY	DASSLOS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPA	FGGTRVEIK	105
		(102)		(103)		(104)		
38G1LC	DIQMTQSPSSLSASVGRVTITC	RASEISRWLA	WYQKPGKAPKLLIY	DASSLOS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGPGTKVDIK	107
		(106)		(103)		(47)		
38G9LC	DIQMTQSPSSLSASVGRVTITC	RVSQISWLA	WYQKPGKAPKLLIY	DASSLOS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGPGTKVDIK	109
		(108)		(103)		(47)		
38H3LC	DIQMTQSPSSLSASVGRVTITC	RASQISTWLA	WYQKPGKAPKLLIY	EASRLQS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQAYSFPFT	FGPGTKVDIK	112
		(110)		(111)		(75)		
39A3LC	DIQMTQSPSSLSASVGRVTITC	RASQISSWLA	WYQKPGKAPKLLIY	DASSLOS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQGDSFPLT	FGGTRVEIK	114
		(77)		(103)		(113)		
39B1LC	DIQMTQSPSSLSASVGRVTITC	RASQISSWLA	WYQKPGKAPKLLIY	EASRLQS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGPGTKVDIK	115
		(77)		(111)		(47)		
39B3LC	DIQMTQSPSSLSASVGRVTITC	RASQISGPWLA	WYQKPGKAPKLLIY	DASNLET	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGPGTKVDIK	117
		(116)		(67)		(47)		
39B6LC	DIQMTQSPSSLSASVGRVTITC	RASEDSHWA	WYQKPGKAPKLLIY	DAKDLHP	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGGTRLEIK	120
		(118)		(119)		(47)		
39F1LC	DIQMTQSPSSLSASVGRVTITC	RASQISTWLA	WYQKPGKAPKLLIY	DASTLOS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGPGTKVDIK	121
		(80)		(78)		(47)		
39G5LC	DIQMTQSPSSLSASVGRVTITC	RASONWLA	WYQKPGKAPKLLIY	DASSLOS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGPGTKVDIK	123
		(122)		(103)		(47)		
39G8LC	DIQMTQSPSSLSASVGRVTITC	RASQISPLWA	WYQKPGKAPKLLIY	DASKLET	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQAYSFPFT	FGGTRVEIK	126
		(124)		(125)		(75)		
39H1LC	DIQMTQSPSSLSASVGRVTITC	RASQISGIWVA	WYQKPGKAPKLLIY	DASNLOS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQADSFPFT	FGGTRVEIK	128
		(127)		(38)		(68)		
39H2LC	DIQMTQSPSSLSASVGRVTITC	RASONGPWLA	WYQKPGKAPKLLIY	DASTLHS	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQANSFPFT	FGGTRLEIK	131
		(129)		(130)		(47)		
39H7LC	DIQMTQSPSSLSASVGRVTITC	RASQISWLA	WYQKPGKAPKLLIY	DASNLOA	GVPSRFSGSGGTDFTLTISSLQPEDFATYYC	QQAYSFPFT	FGPGTKVDIK	134
		(132)		(133)		(75)		
Motif: DIQMTQSPSSLSASVGRVTITC RX ₁₃ X ₁₄ X ₁₅ X ₁₆ IX ₁₇ X ₁₈ WX ₁₉ X ₂₀ WYQKPGKAPKLLIY X ₂₁ AX ₂₂ X ₂₃ X ₂₄ X ₂₅ X ₂₆ GVPSRFSGSGGTDFTLTISSLQPEDFATYYC QQX ₂₇ X ₂₈ SFPY ₂₉ X ₃₀ FGPGTKVDIK 138								
		(135)		(136)		(137)		

FIG. 1C (Cont.)

	HCDR1	HCDR2	HCDR3	SEQ ID NO:
	(SEQ ID NO:)	(SEQ ID NO:)	(SEQ ID NO:)	
R3A9HC	QVQLVQSGAEVKKPGASVKYSCKAS GHTFTSYTH WYQAPGGGLEWM GIINPSGGSTVAQVEQG RVITMDTSTIVMELSSLRSEDTAVYYCAR DRAYGGAGDY WGQGLTIVTSS (139) (140) (141)			142
	HCDR1	HCDR2	HCDR3	SEQ ID NO:
	(SEQ ID NO:)	(SEQ ID NO:)	(SEQ ID NO:)	
R3A9LC	DIQMTQSPSSLASVGDRTITC RASQSVGTWLA (143) WYQKPGKAPKLLIY (144) SASTLQS (144) GVPSRFGSGSGDFTLTISLQPEDFATYYC (145) QQSYSAPLT FGGGTKVEIK (146)			146
m3A7LC	DIQMTQSPSSLASVGDRTITC RASRSINWLA (147) WYQKPGKAPKLLIY (148) AASLQS (148) GVPSRFGSGSGDFTLTISLQPEDFATYYC (149) QQSYSAPT FGGGTKVEIK (150)			150
m2C1LC	DIQMTQSPSSLASVGDRTITC RASRTSSWLA (151) WYQKPGKAPKLLIY (152) AASLQS (152) GVPSRFGSGSGDFTLTISLQPEDFATYYC (153) QQSYSPAT FGGGTKVEIK (153)			153
m2A1LC	DIQMTQSPSSLASVGDRTITC RASRTSSWLA (154) WYQKPGKAPKLLIY (155) AASLQS (155) GVPSRFGSGSGDFTLTISLQPEDFATYYC (156) QQSYSPWT FGGGTKVEIK (156)			156
m4A5LC	DIQMTQSPSSLASVGDRTITC RASQSDTWLA (157) WYQKPGKAPKLLIY (158) AASLQS (158) GVPSRFGSGSGDFTLTISLQPEDFATYYC (159) QQSYRAPLT FGGGTKVEIK (159)			160
m4D1LC	DIQMTQSPSSLASVGDRTITC RASQSDTWLA (161) WYQKPGKAPKLLIY (162) KASLES (162) GVPSRFGSGSGDFTLTISLQPEDFATYYC (163) QQSYSPAT FGGGTKVEIK (163)			164
m3C6LC	DIQMTQSPSSLASVGDRTITC RASQSDTWLA (157) WYQKPGKAPKLLIY (165) EASLQG (165) GVPSRFGSGSGDFTLTISLQPEDFATYYC (166) QQSYTWT FGGGTKVEIK (166)			167

FIG. 1D

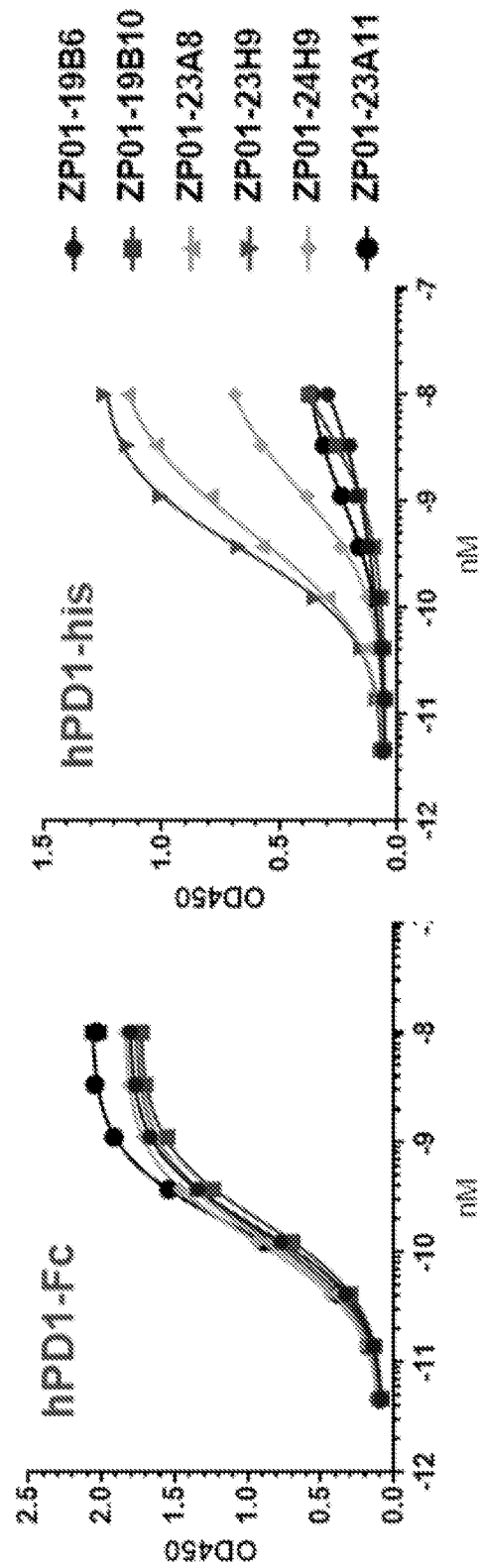
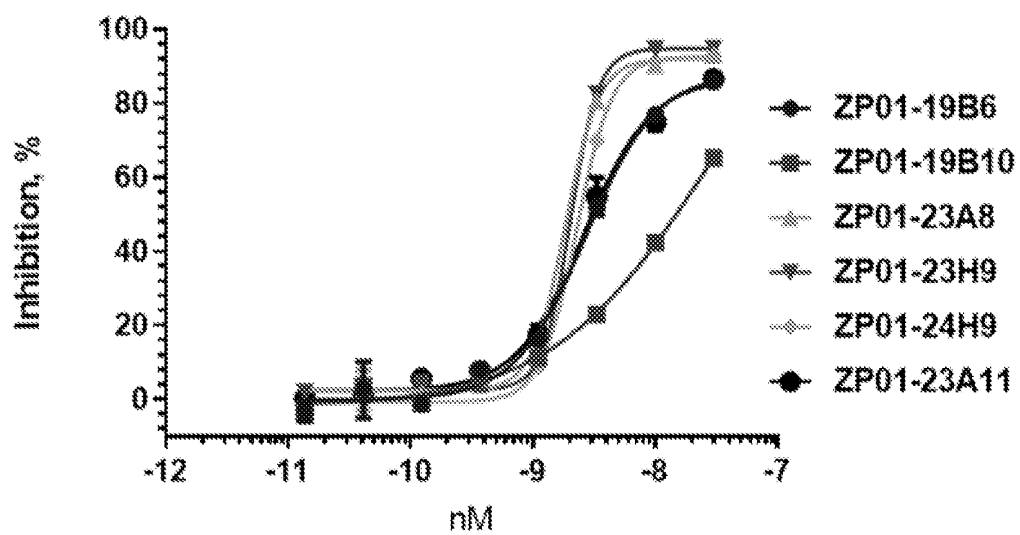


Fig. 2B

Fig. 2A

**Fig. 3**

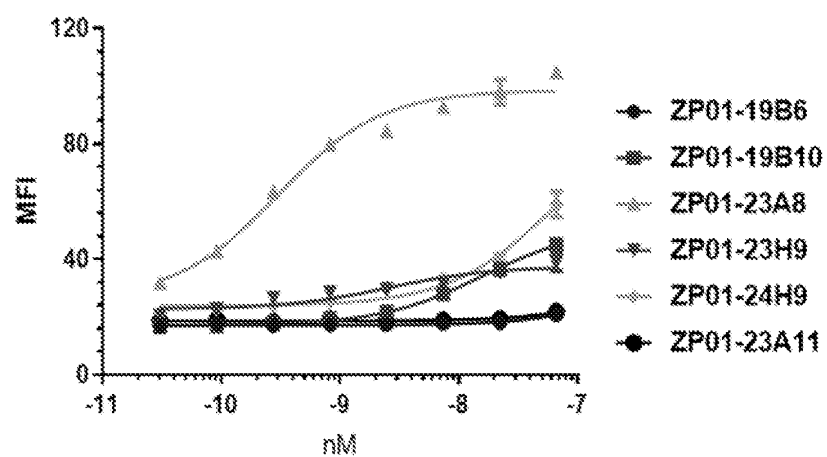


Fig. 4A

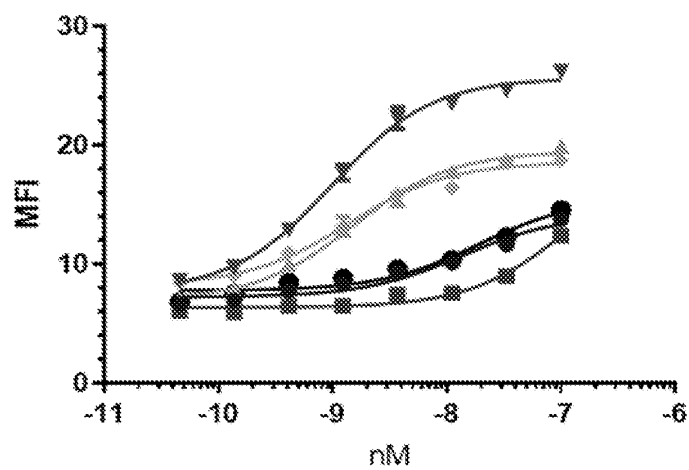


Fig. 4B

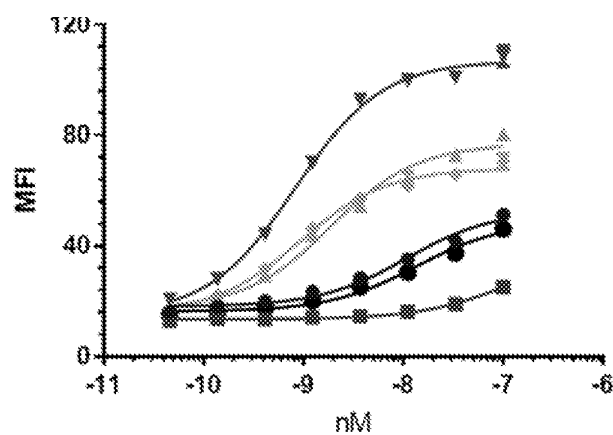


Fig. 4C

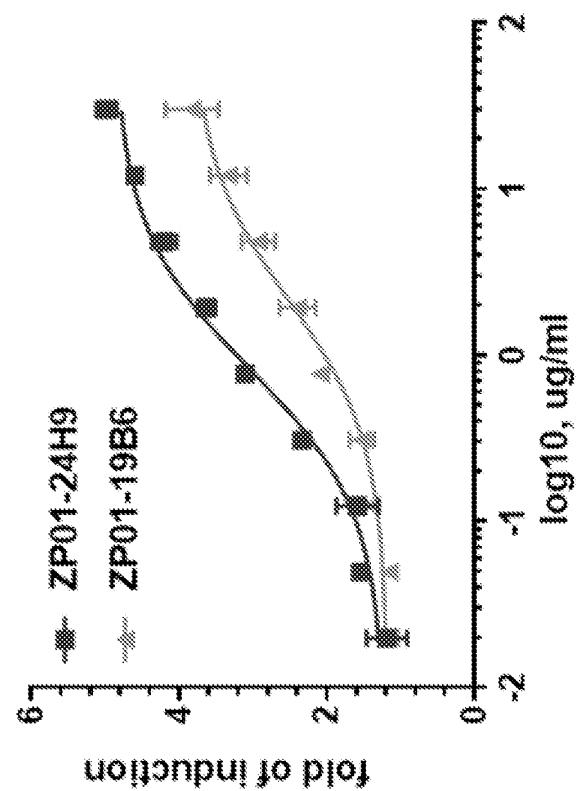


Fig. 5B

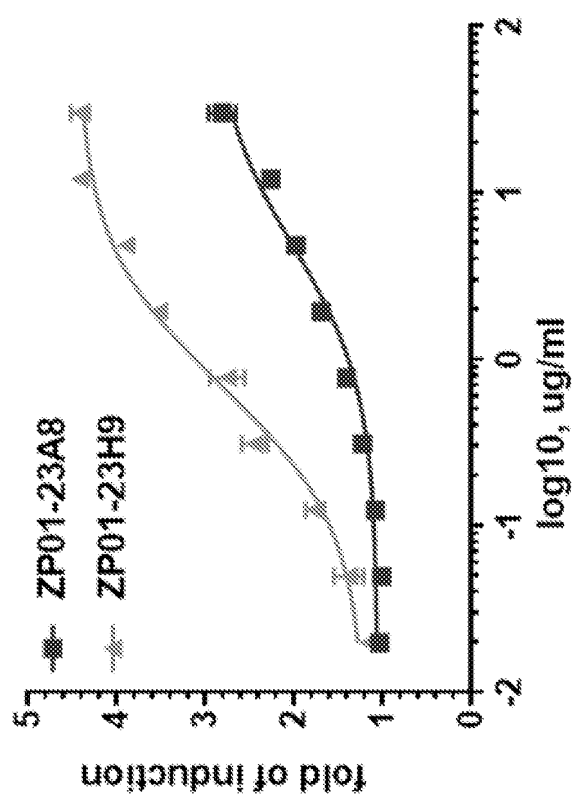


Fig. 5A

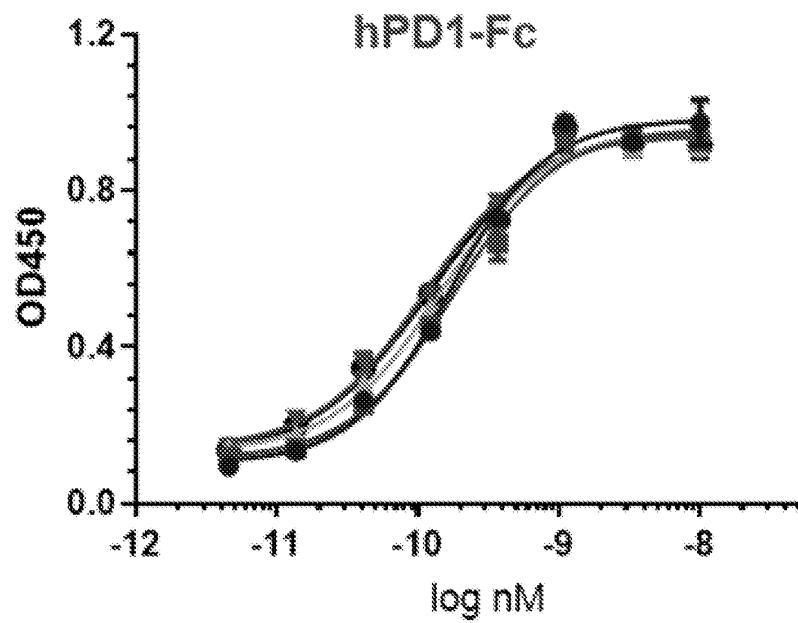


Fig. 6A

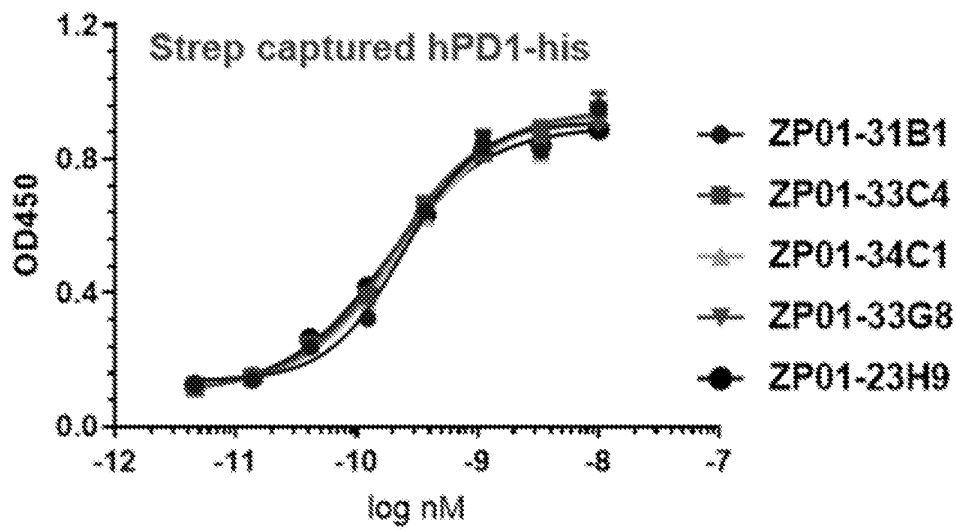


Fig. 6B

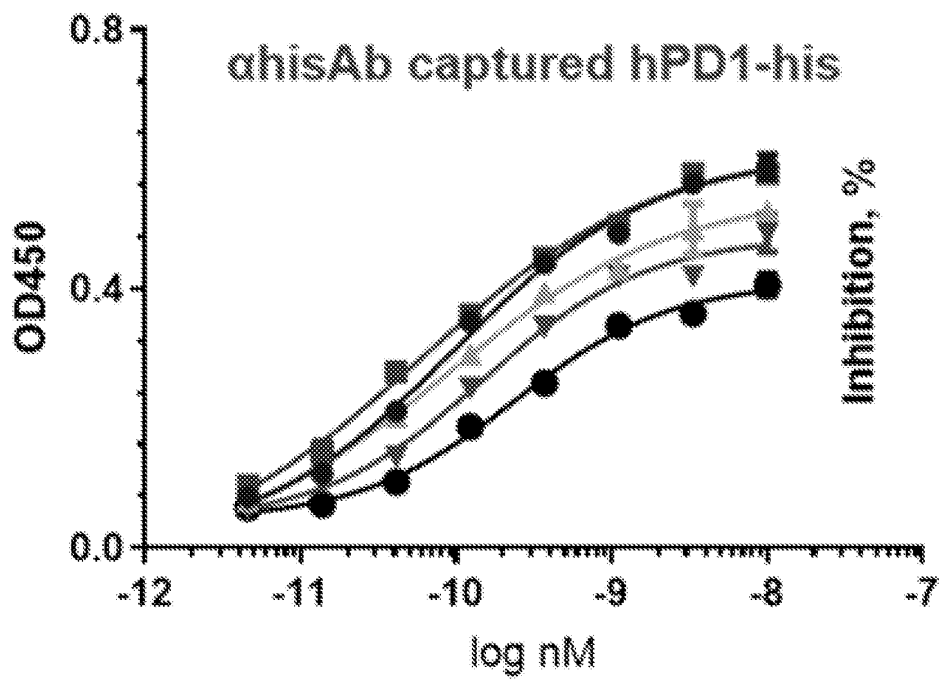


Fig. 6C

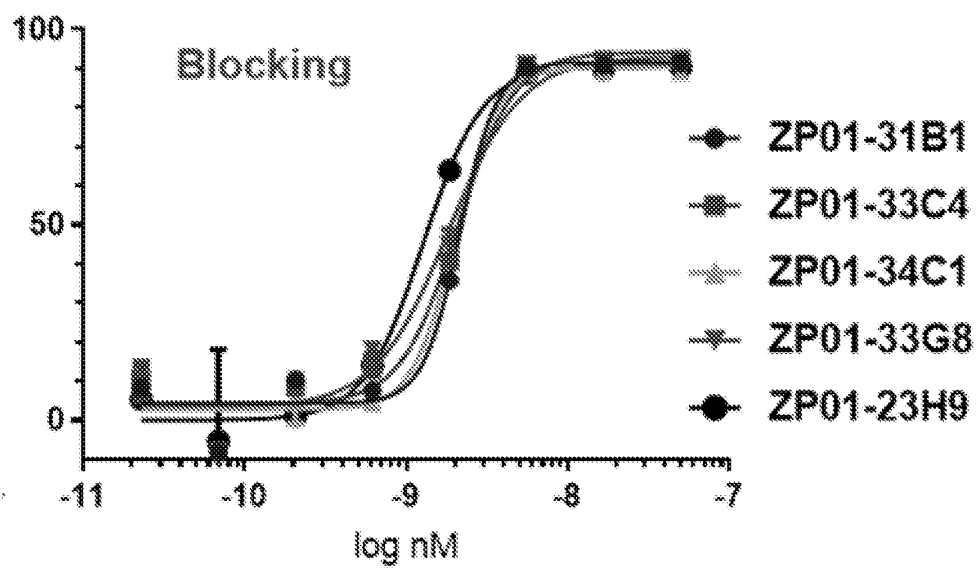


Fig. 6D

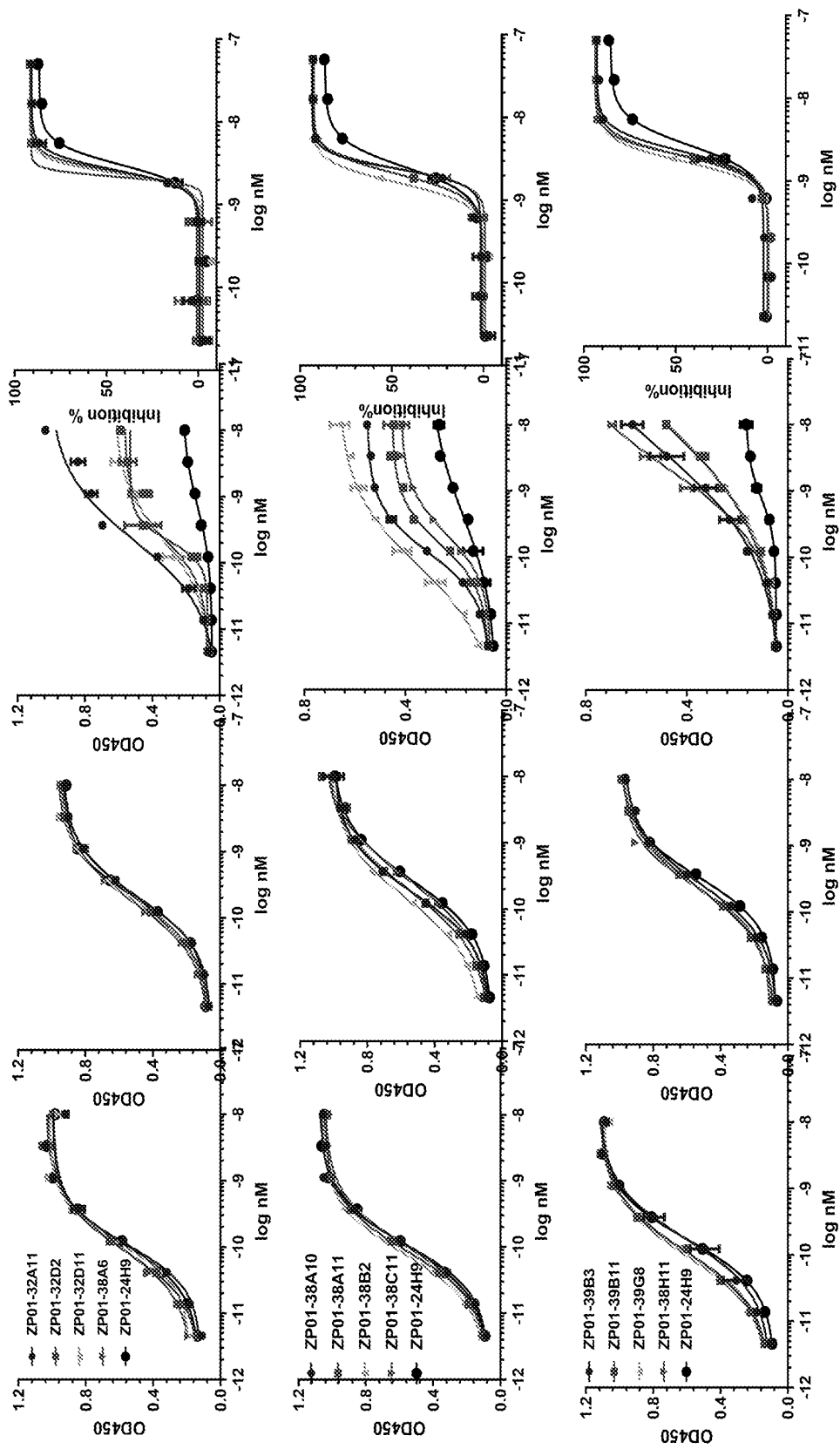


Fig. 7

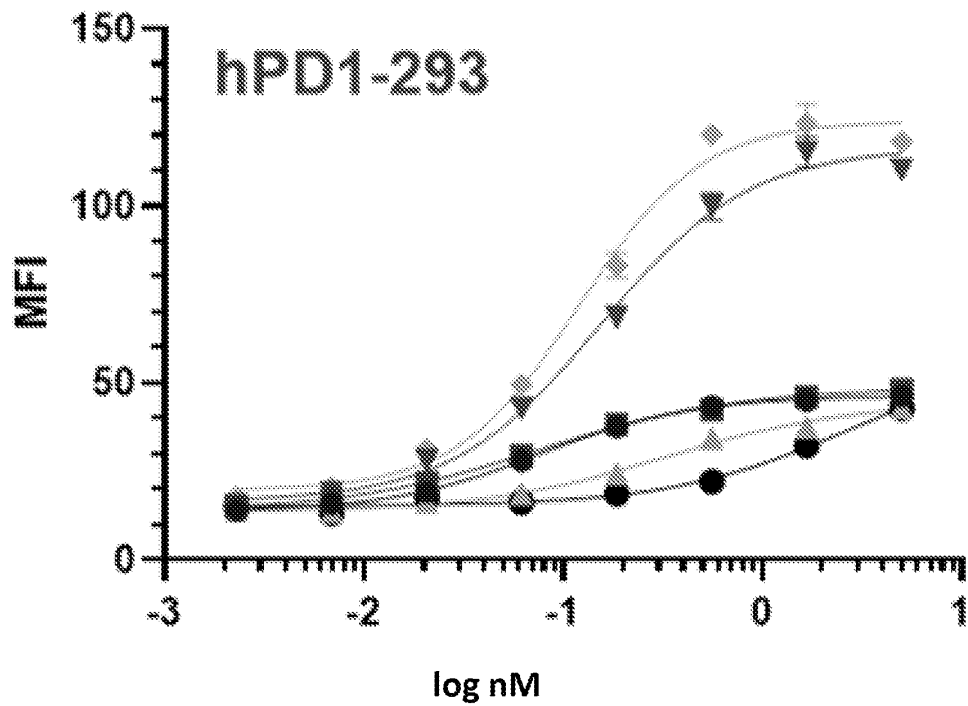


Fig. 8A

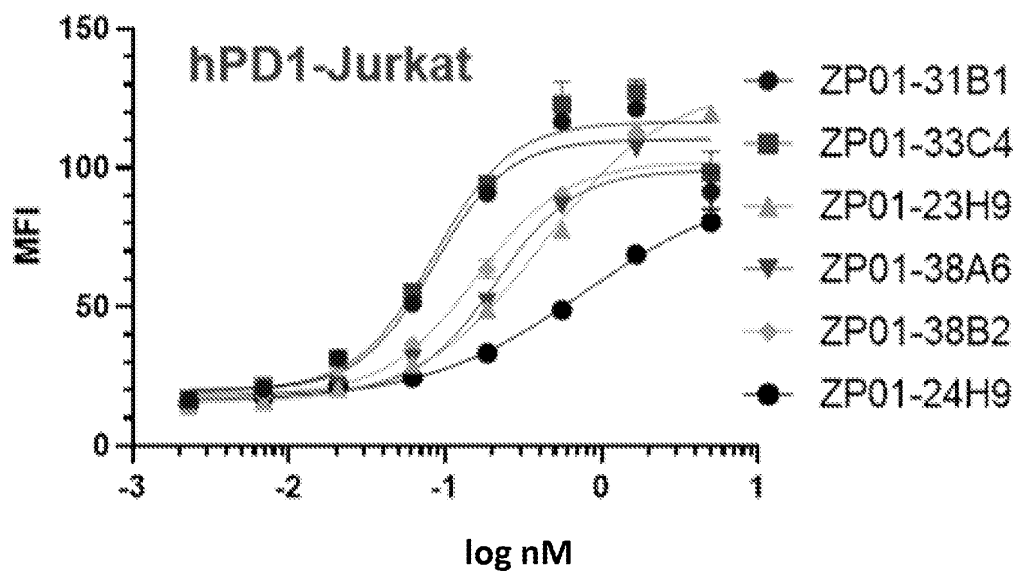


Fig. 8B

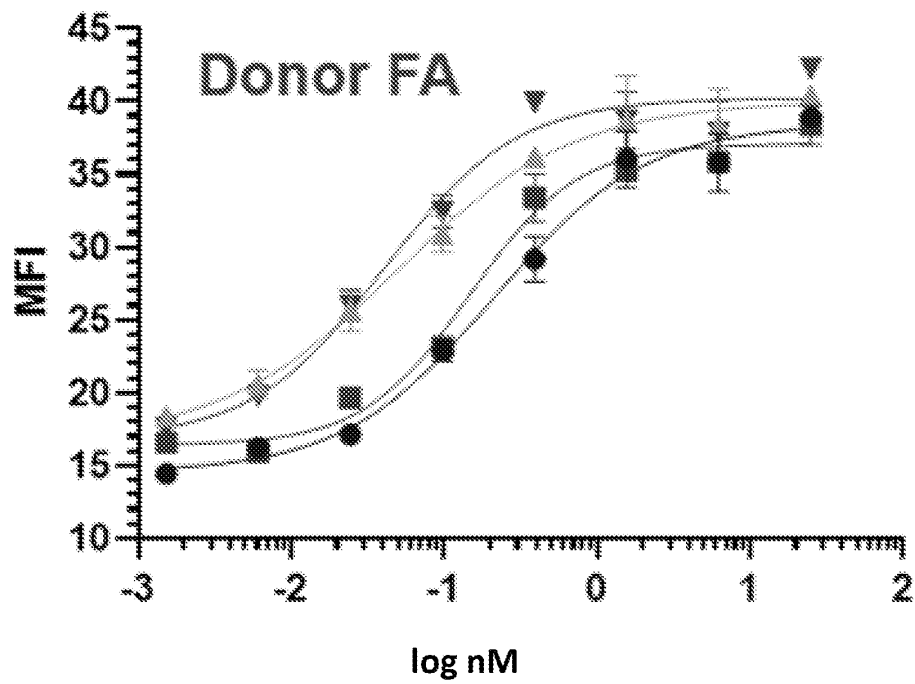


Fig. 8C

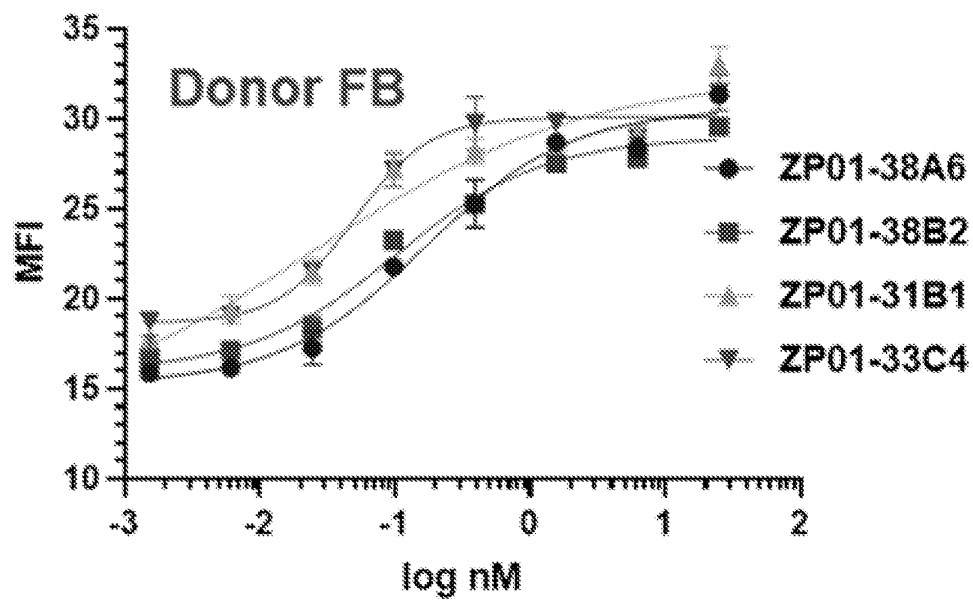


Fig. 8D

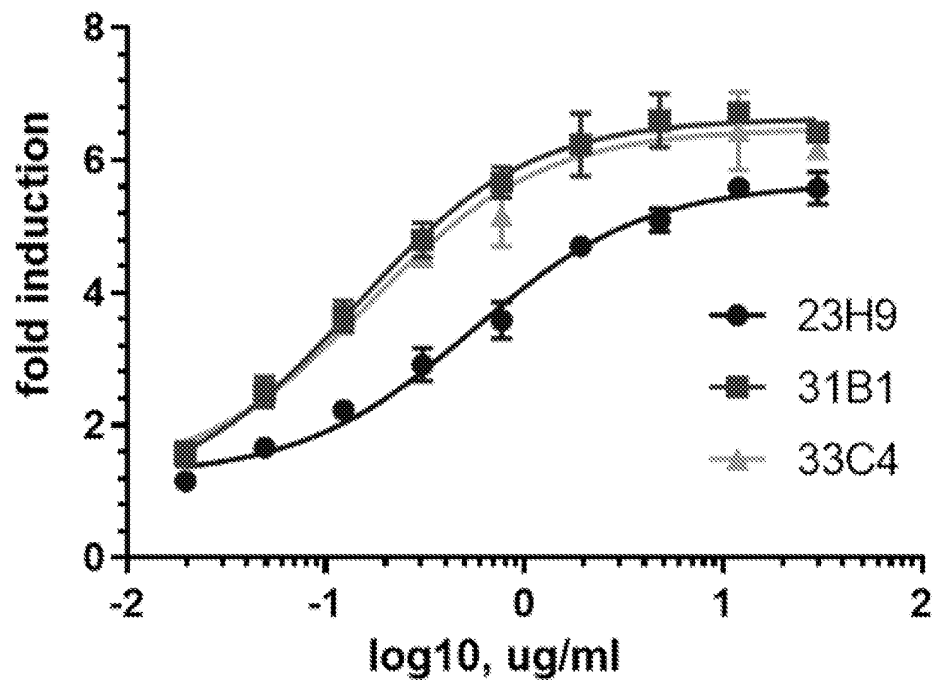


Fig. 9A

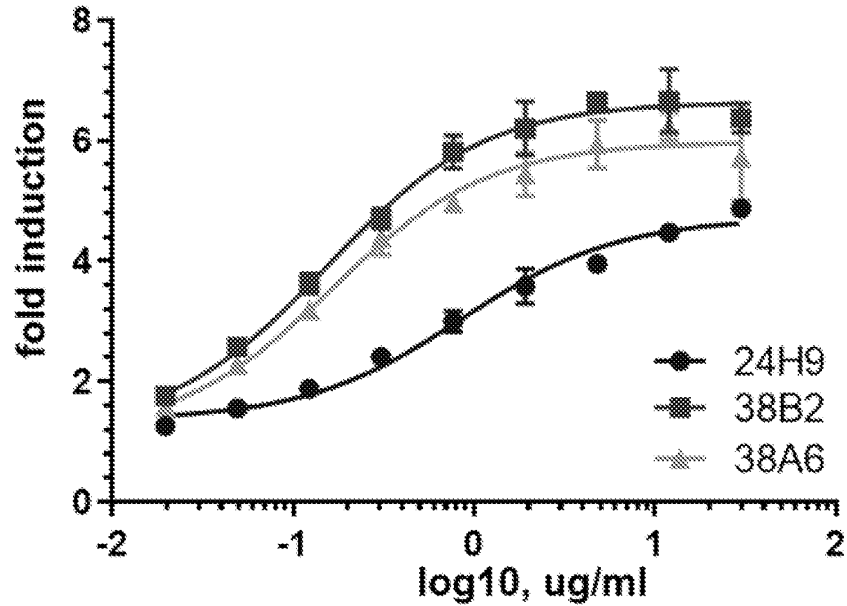


Fig. 9B

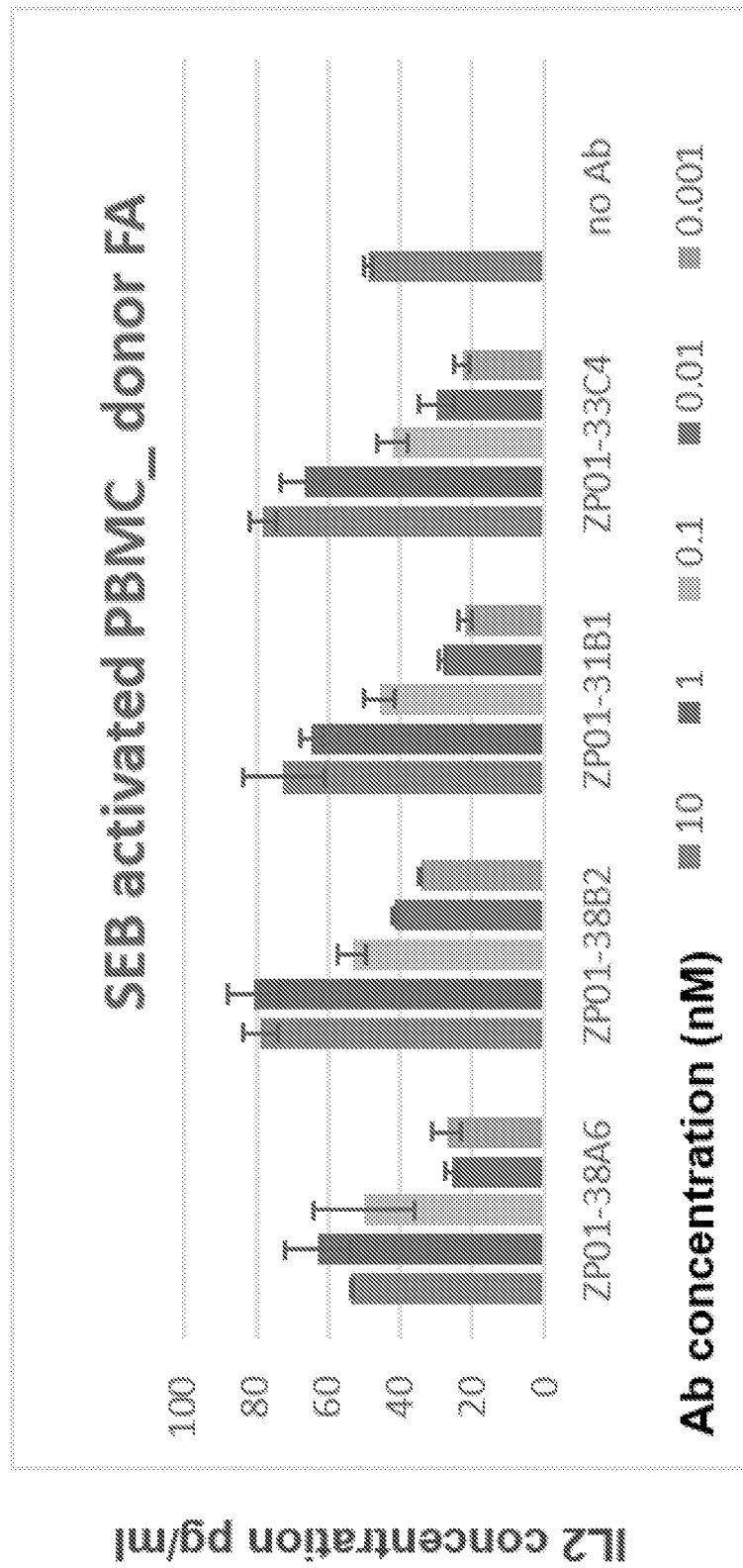


Fig. 10A

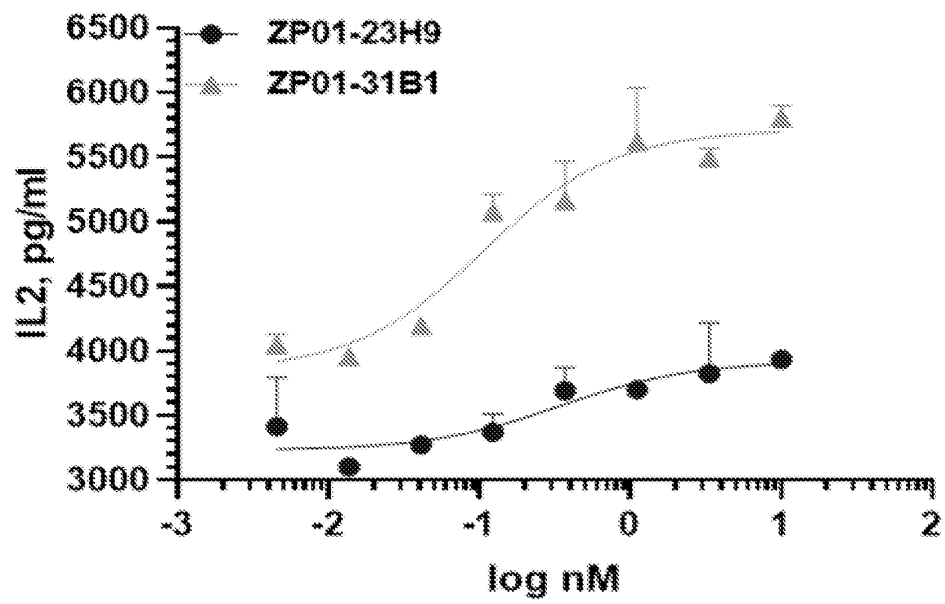


Fig. 10B

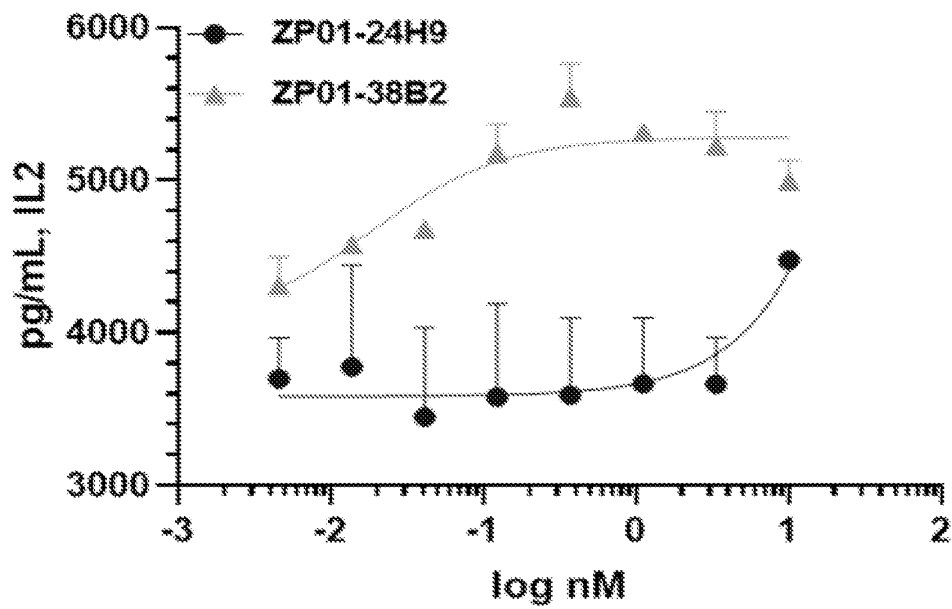


Fig. 10C

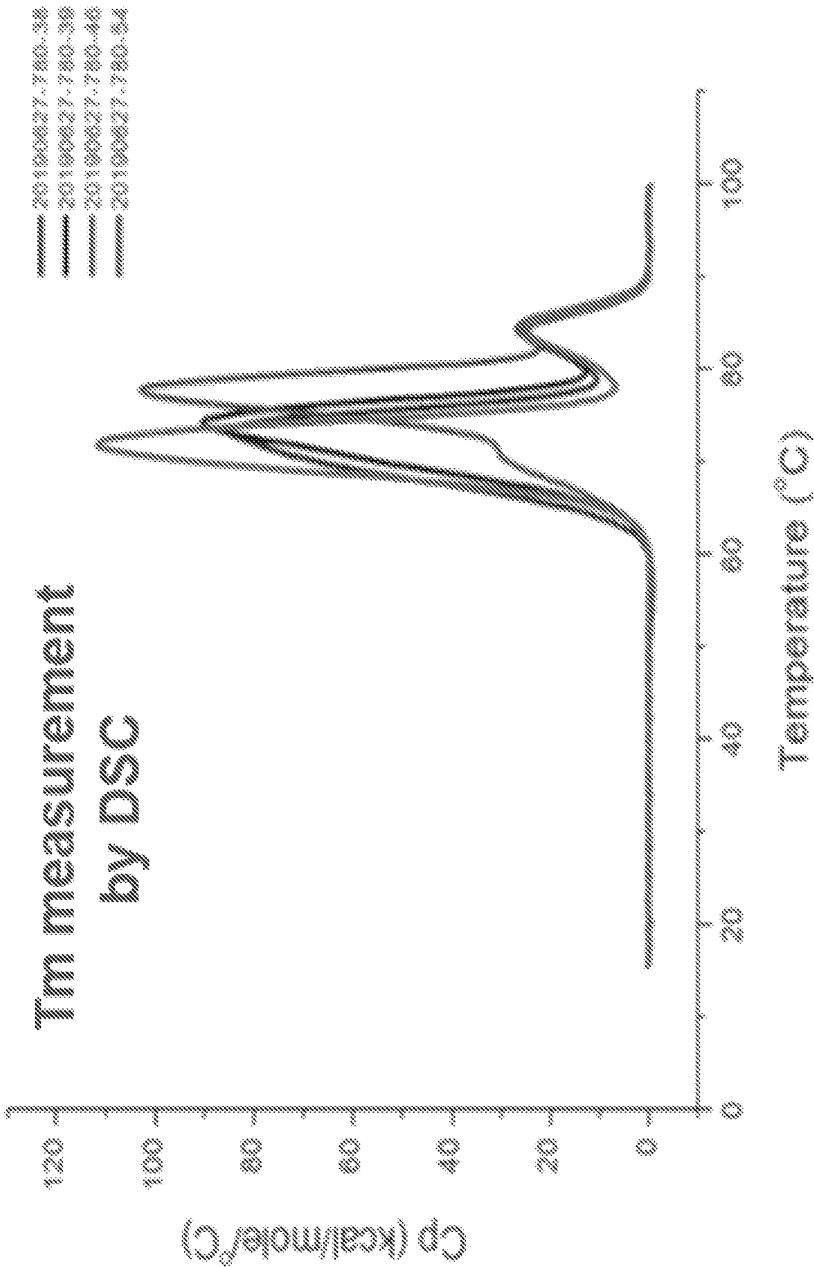


Fig. 11

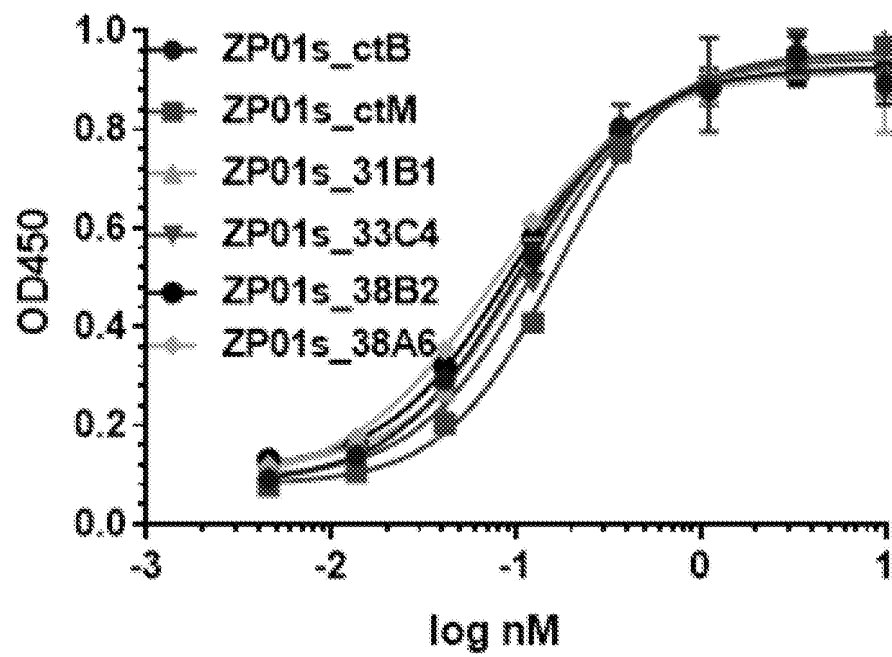


Fig. 12A

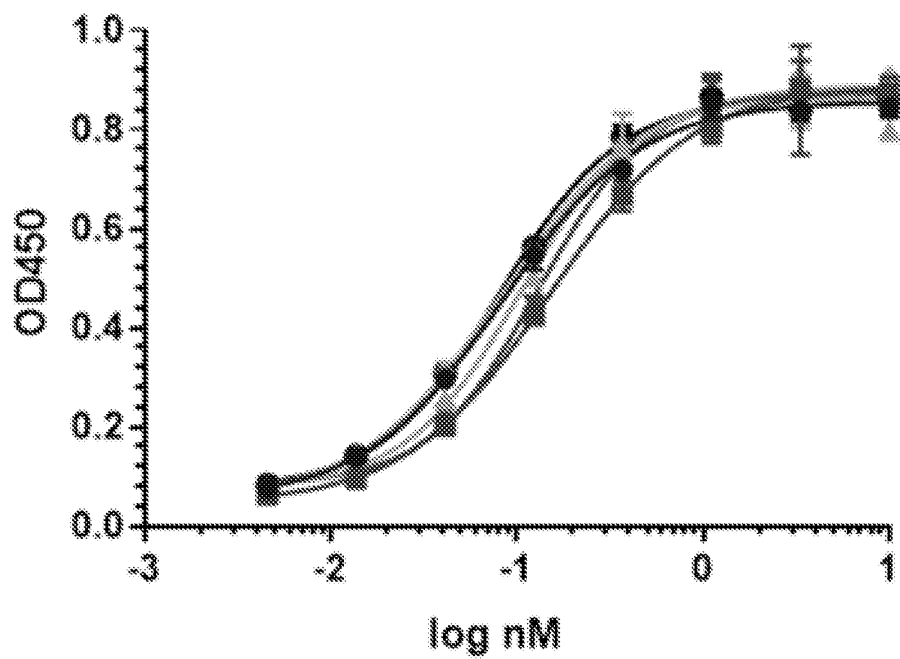


Fig. 12B

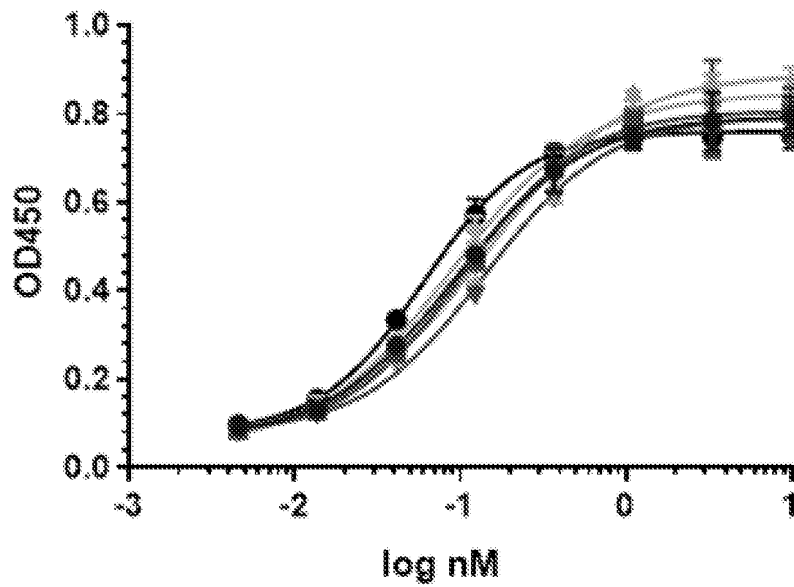


Fig. 12C

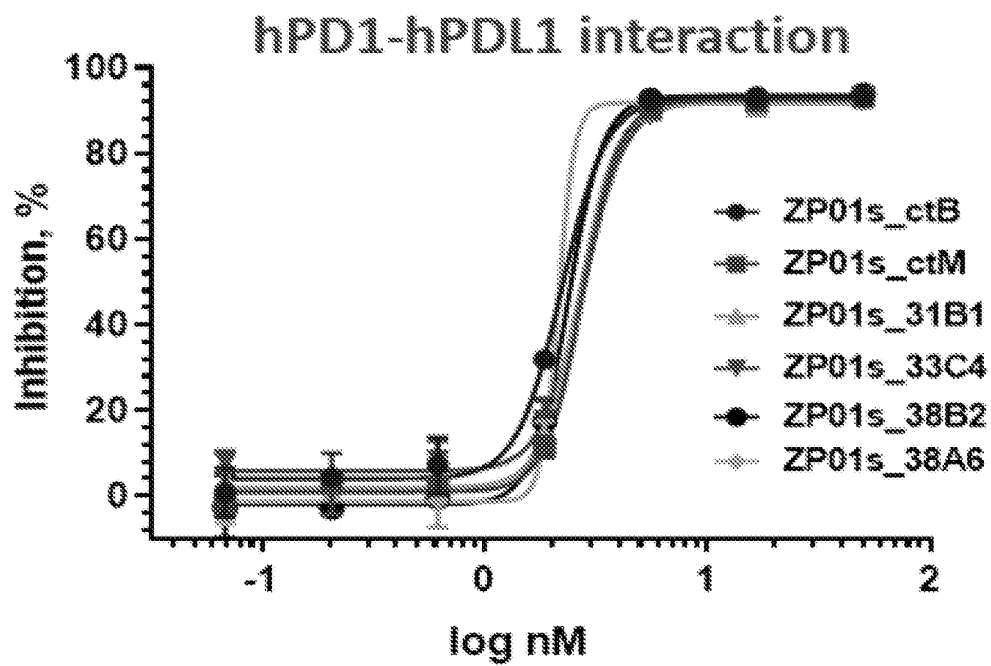
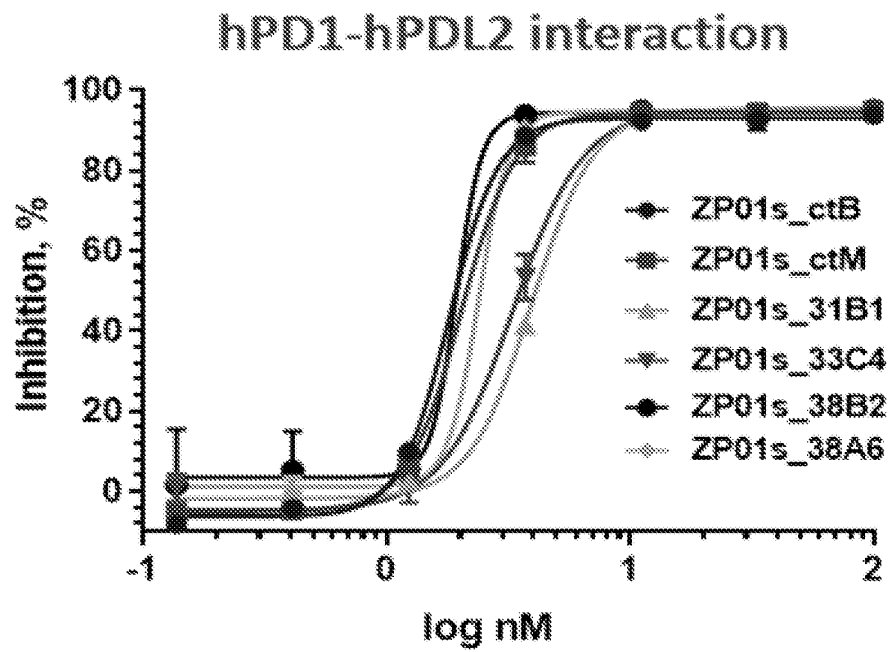


Fig. 12D



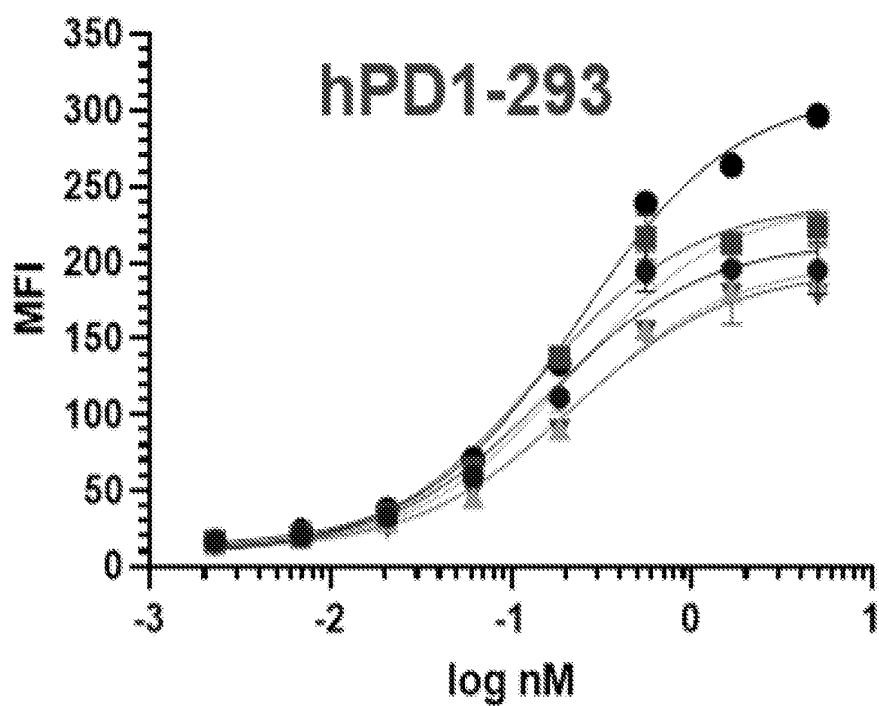


Fig. 13A

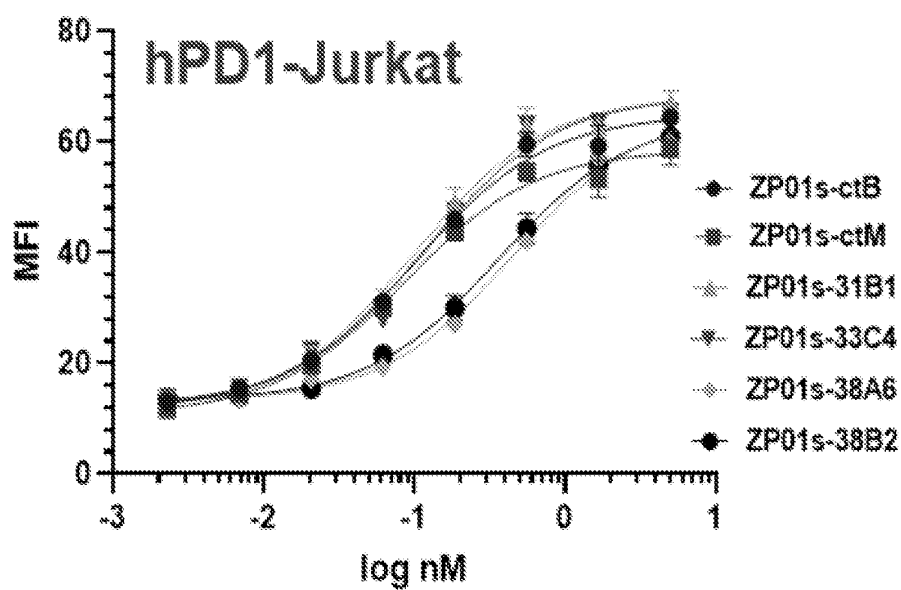


Fig. 13B

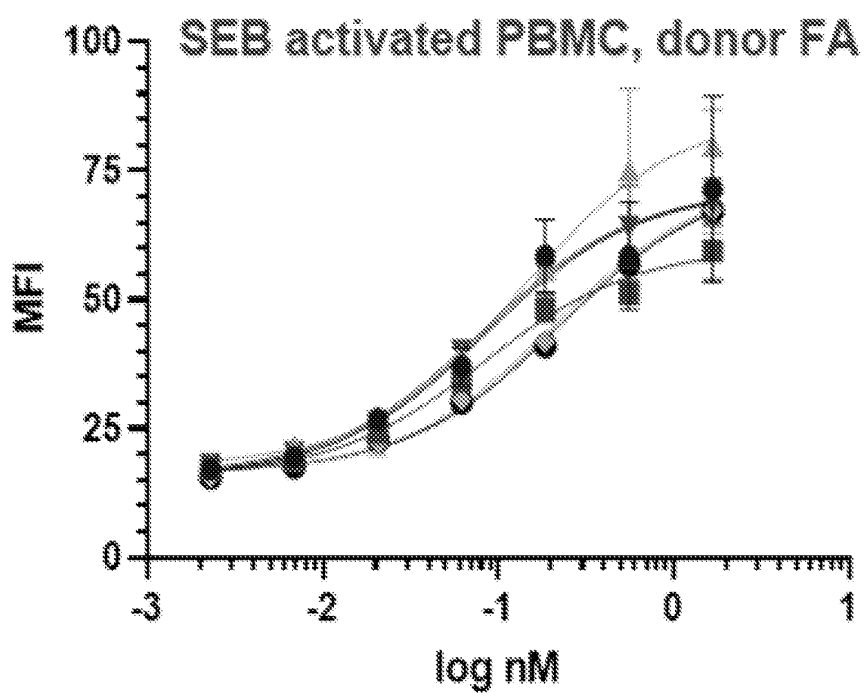


Fig. 13C

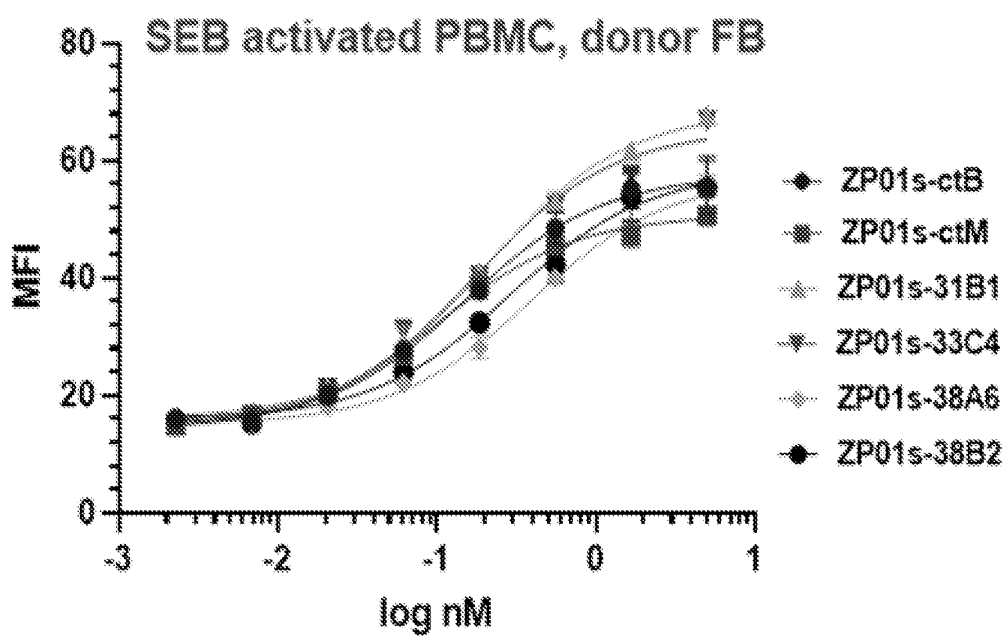
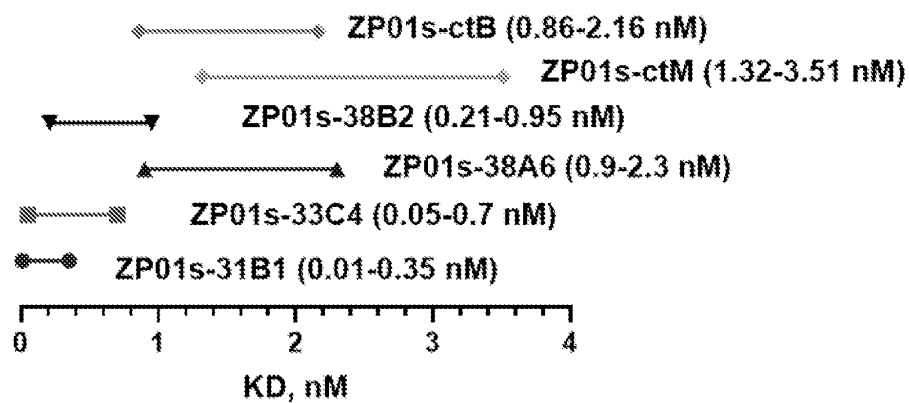
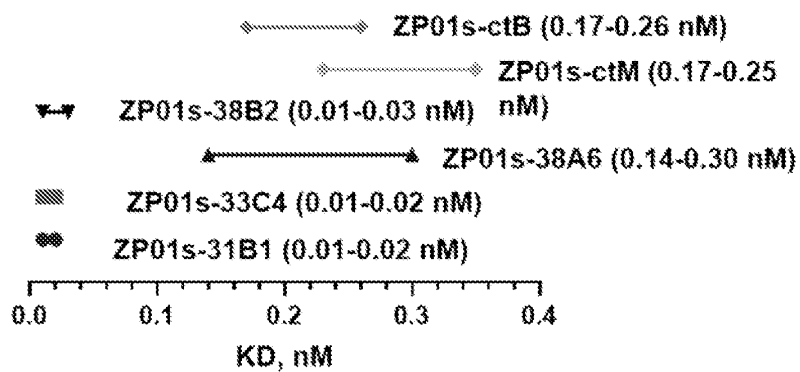


Fig. 13D

hPD1his Biacore analysis**Fig. 14A***hPD1Fc Biacore analysis***Fig. 14B**

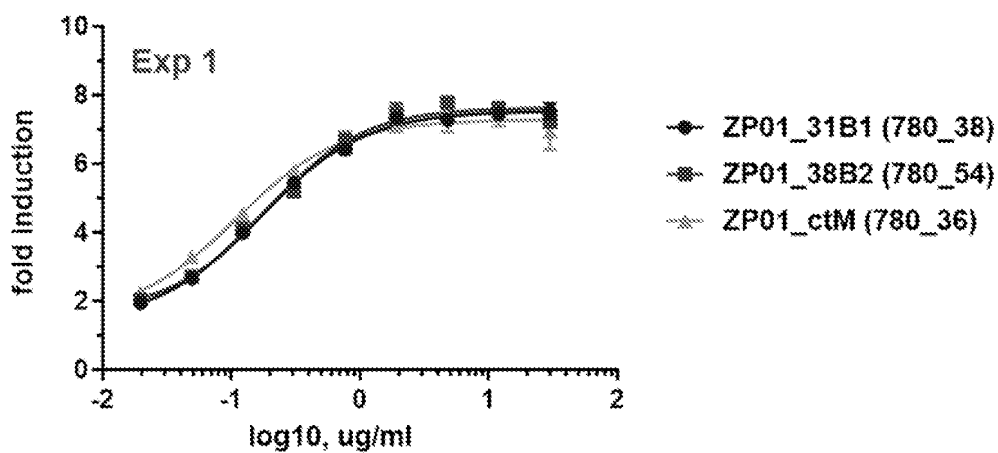


Fig. 15A

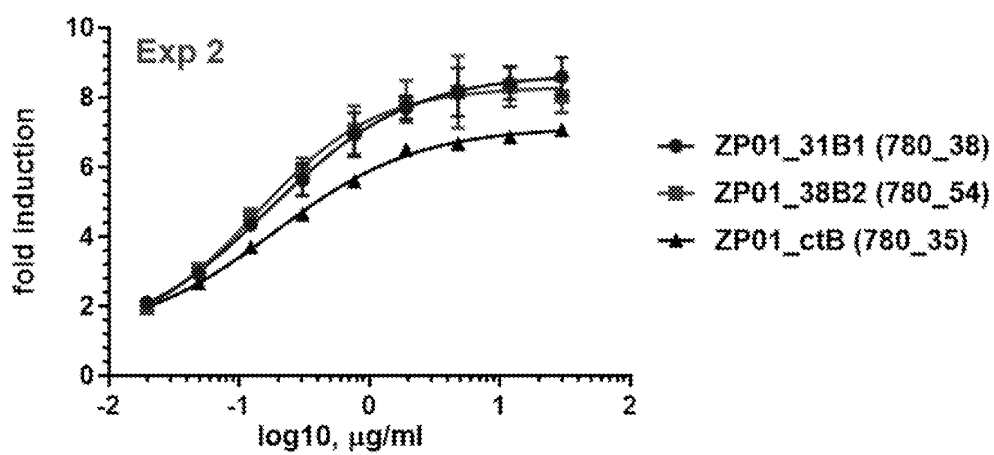


Fig. 15B

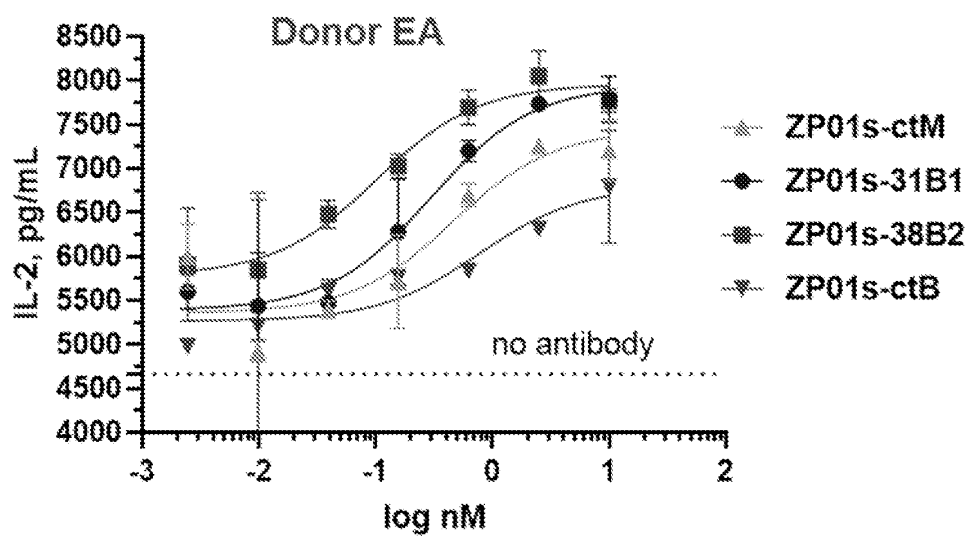


Fig. 16A

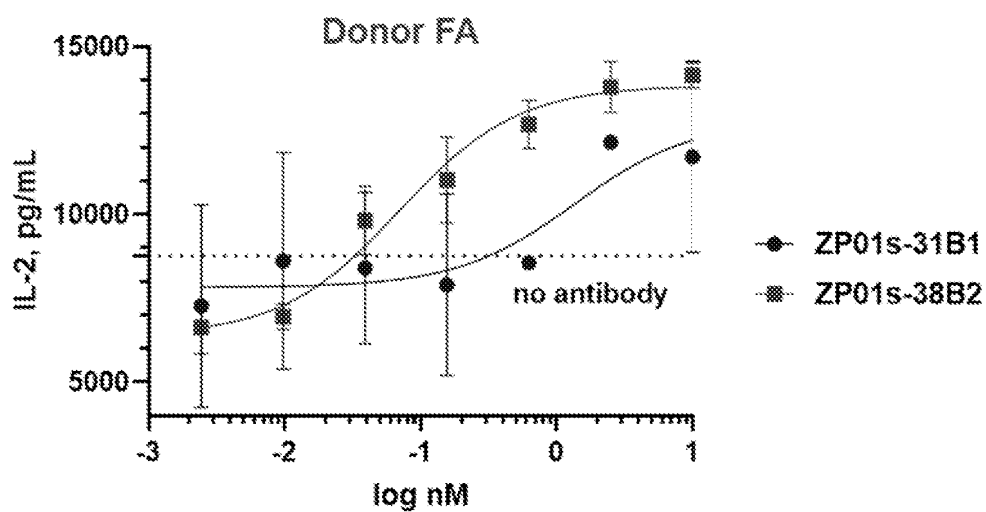


Fig. 16B

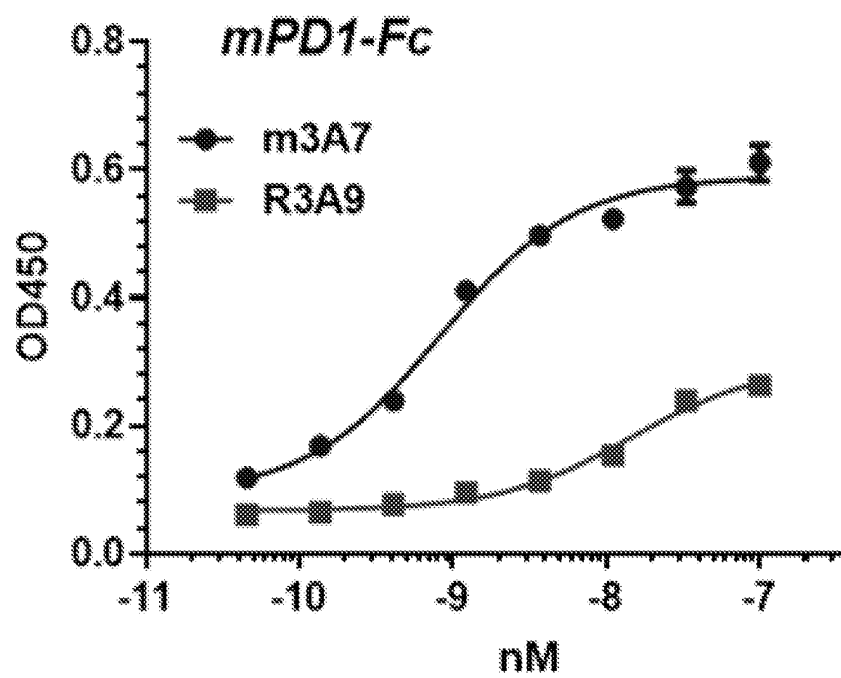


Fig. 17A

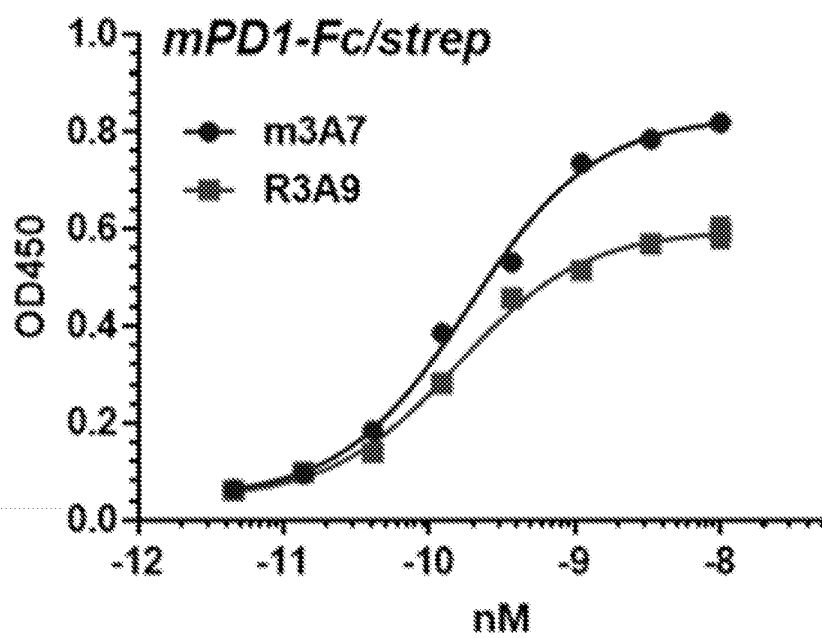


Fig. 17B

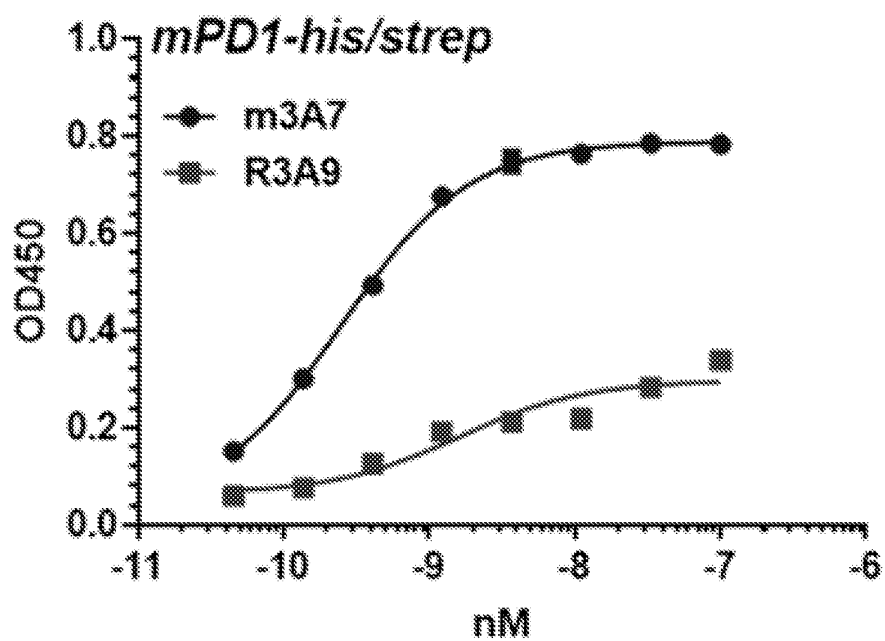


Fig. 17C

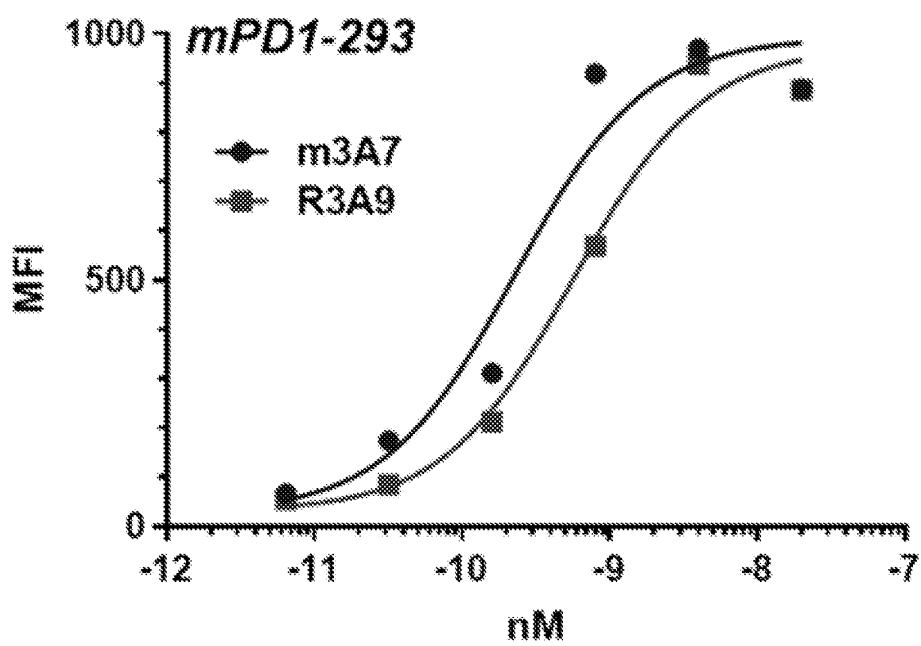


Fig. 17D

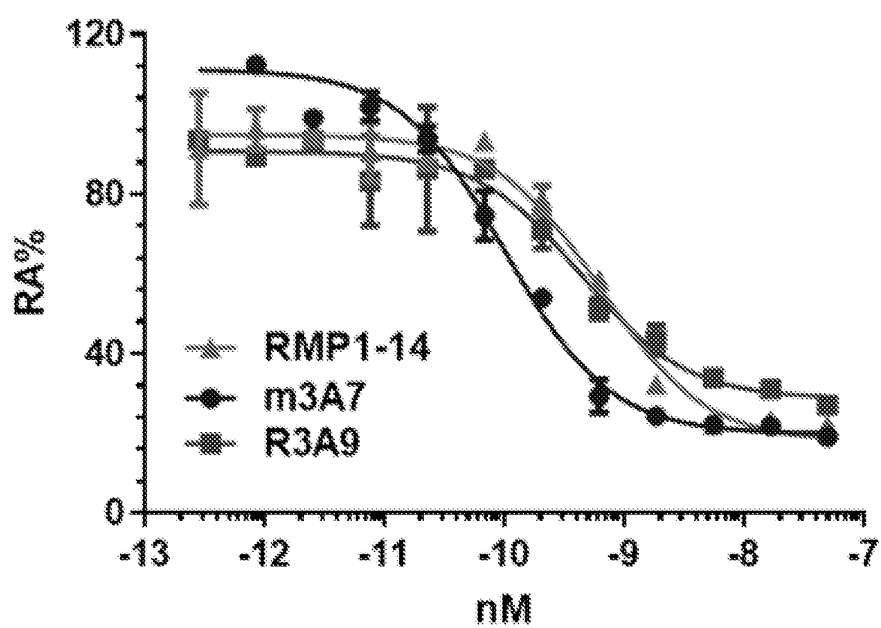


Fig. 17E

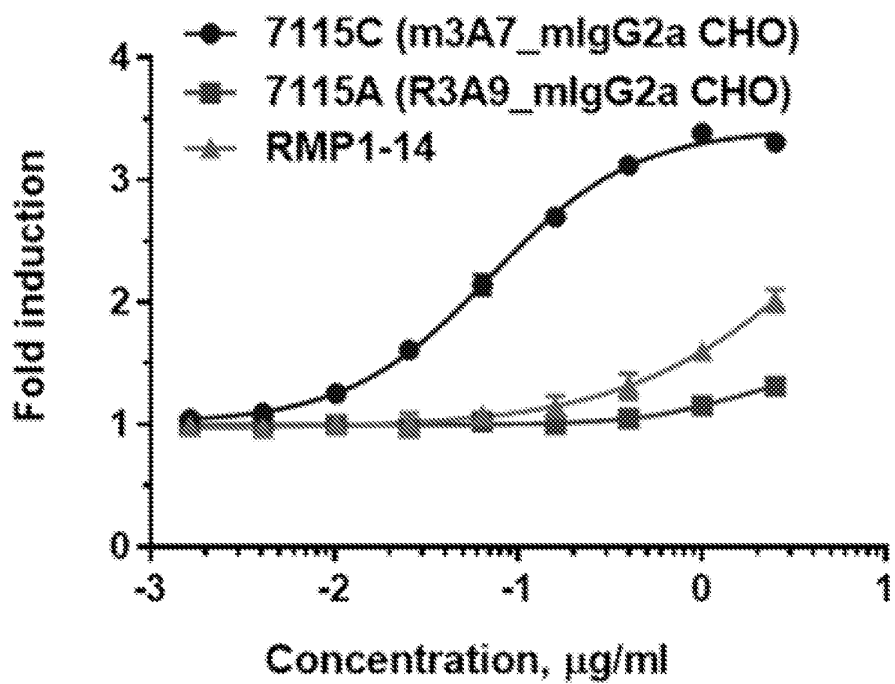


Fig. 17F

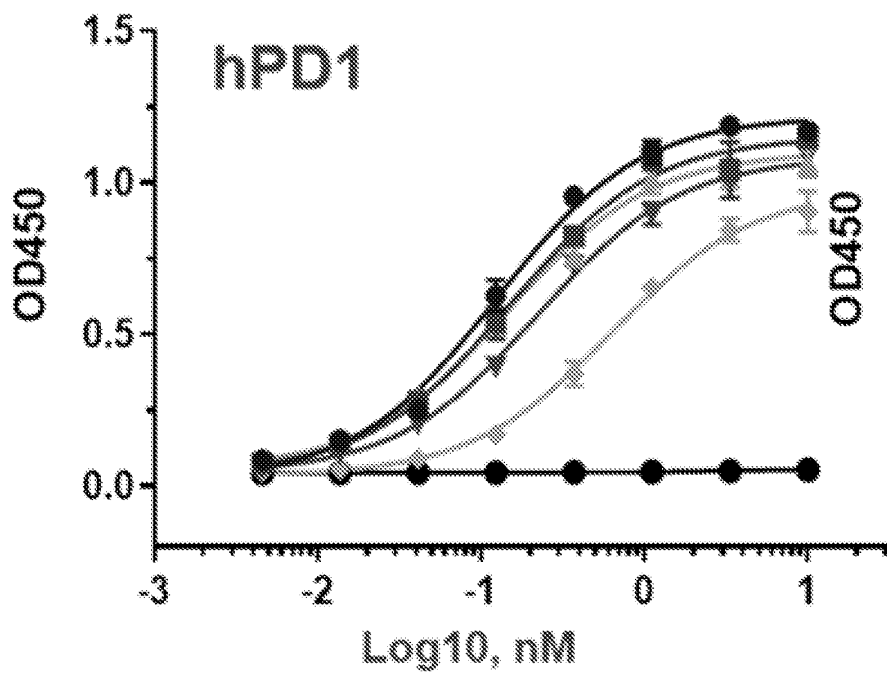


Fig. 18A

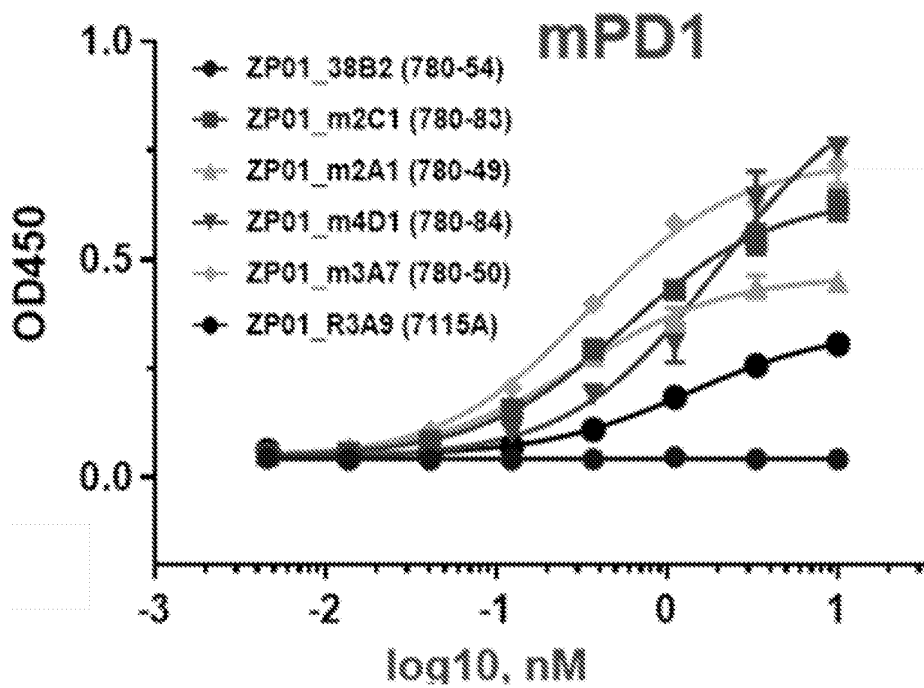


Fig. 18B

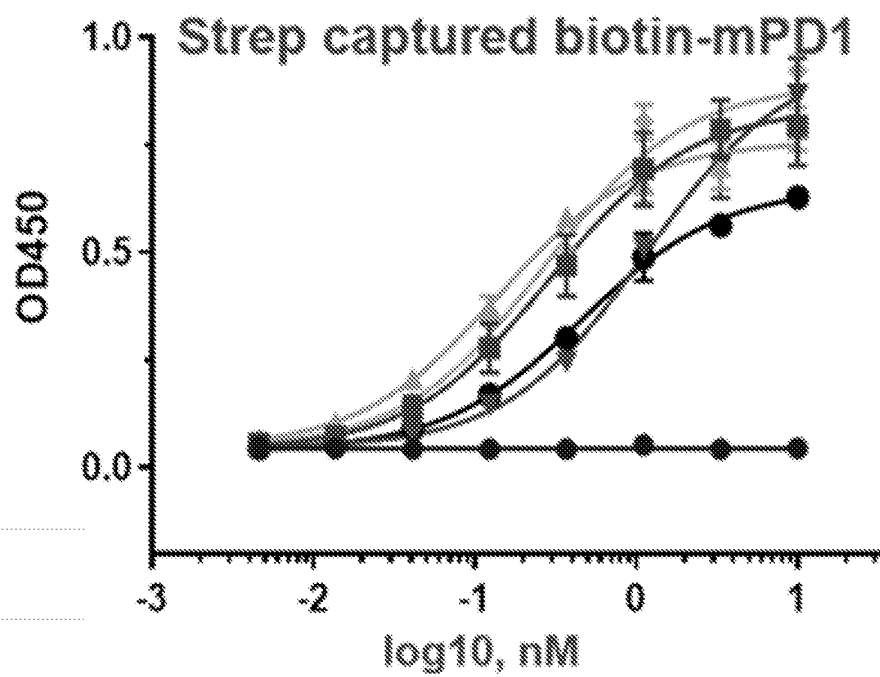


Fig. 18C

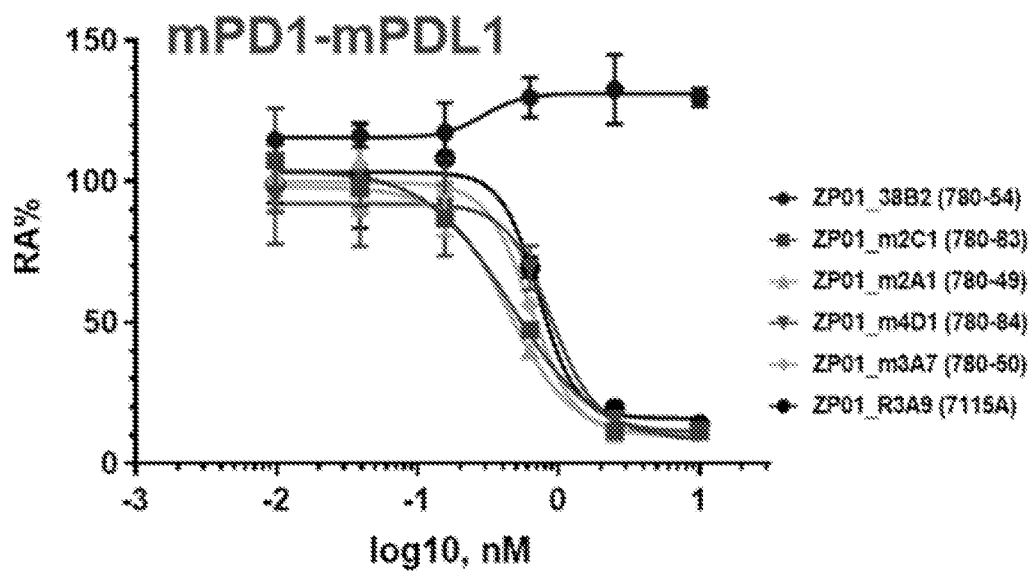


Fig. 18D

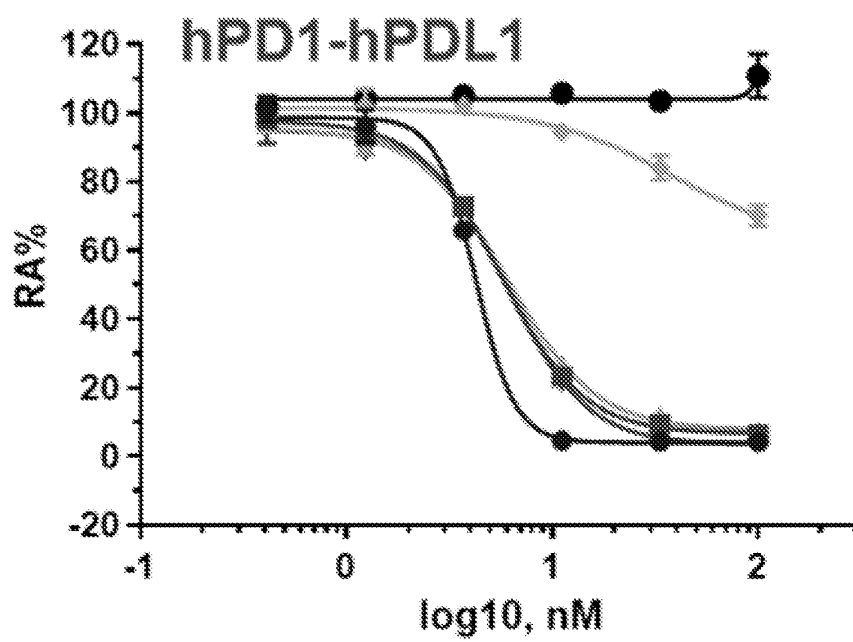


Fig. 18E

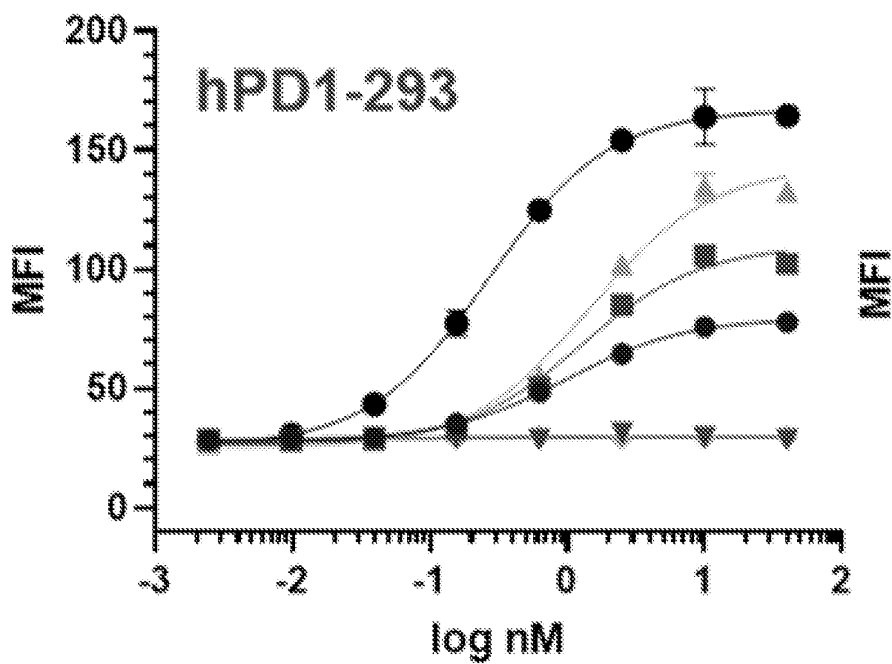


Fig. 19A

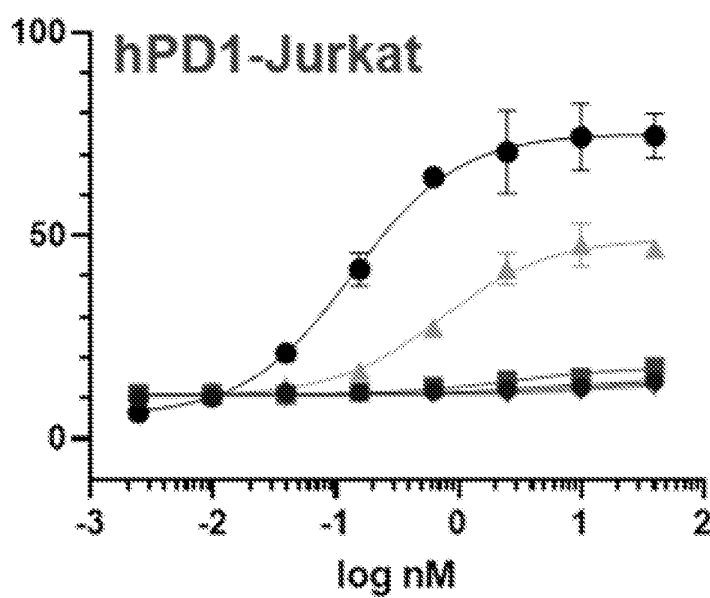


Fig. 19B

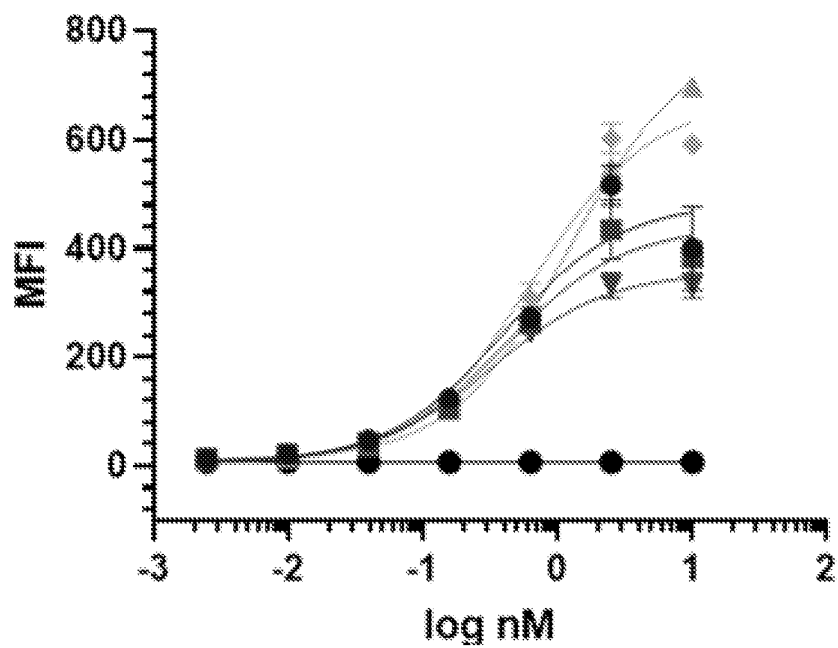


Fig. 19C

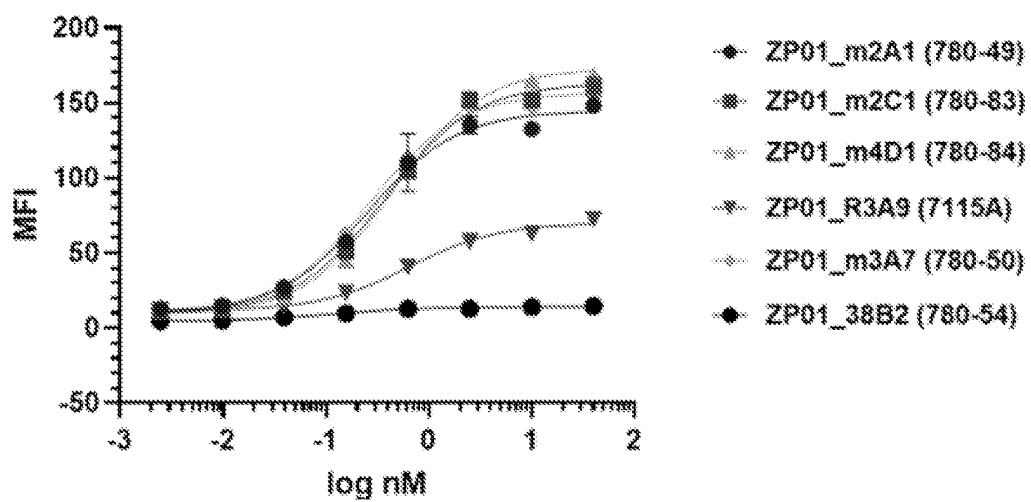


Fig. 19D

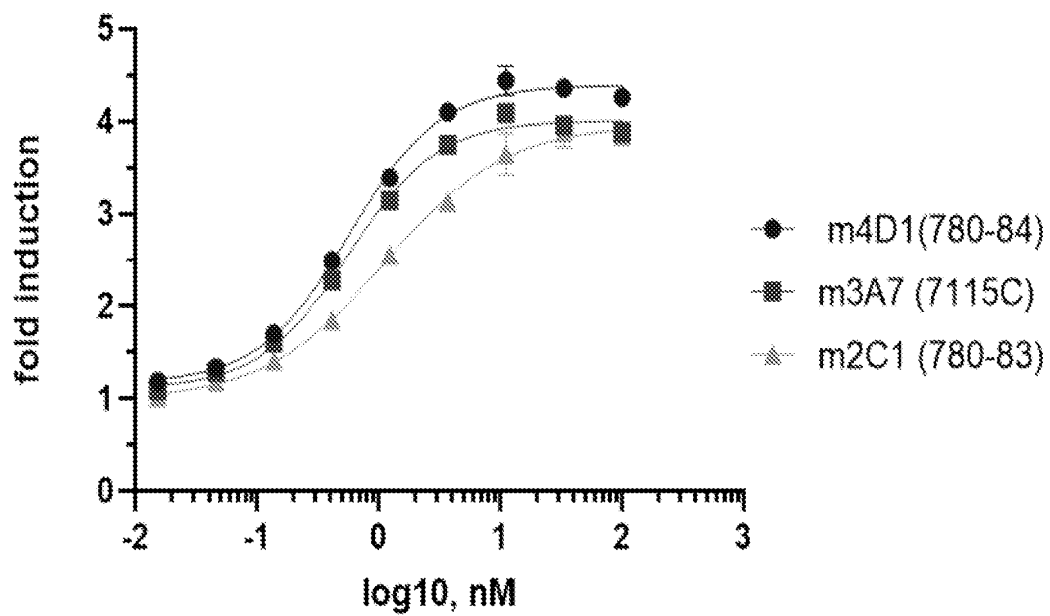


Fig. 20A

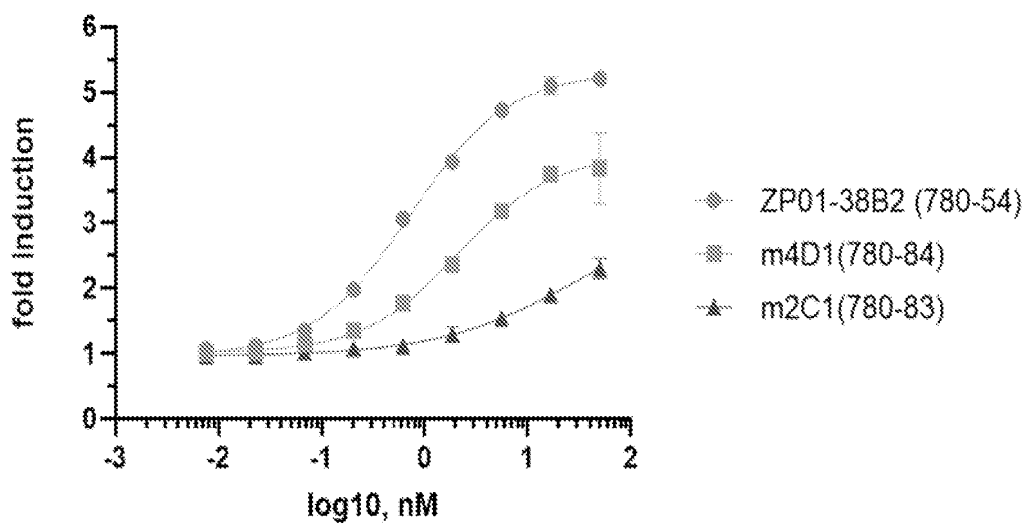
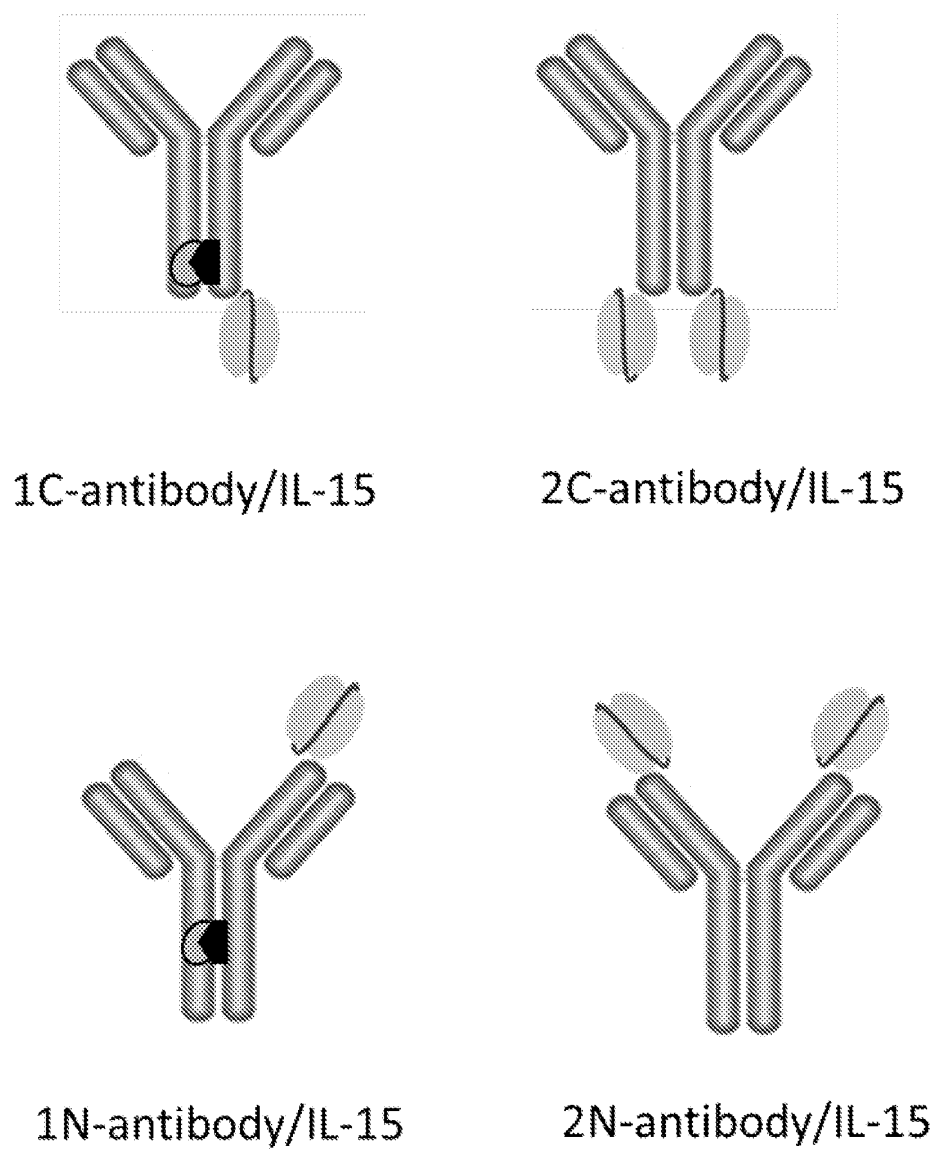


Fig. 20B

**Fig. 21A**

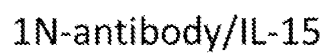
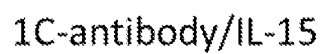


Fig. 21B

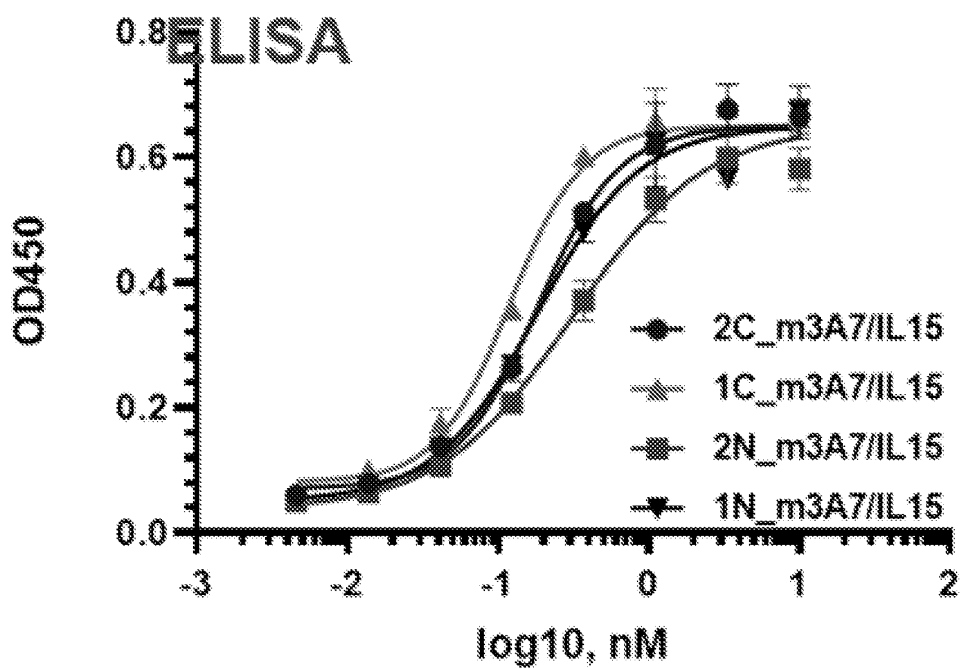


Fig. 22A

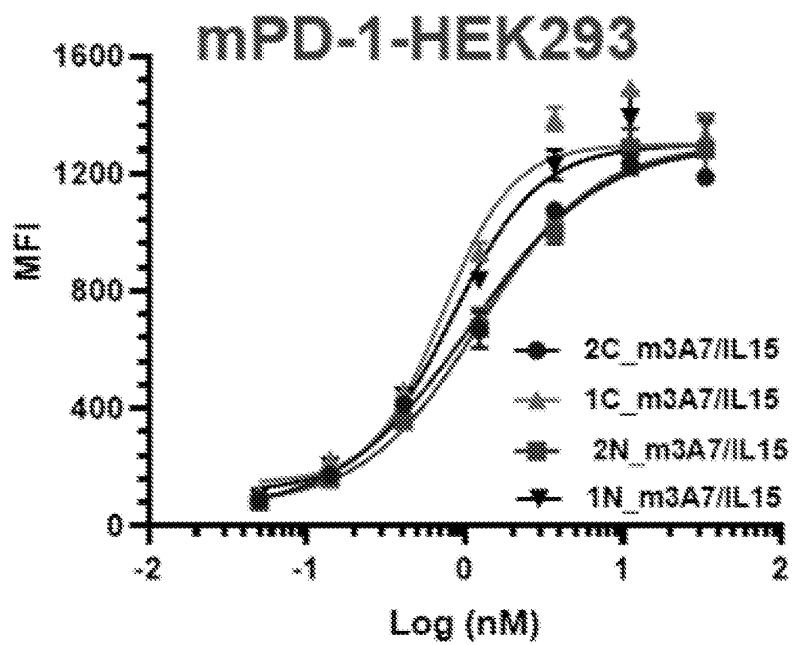


Fig. 22B

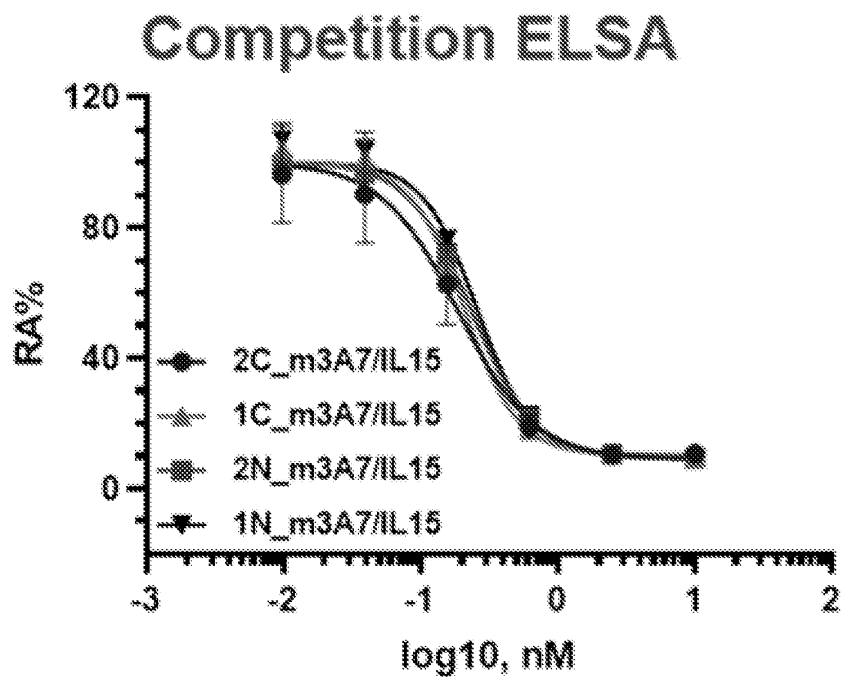


Fig. 22C

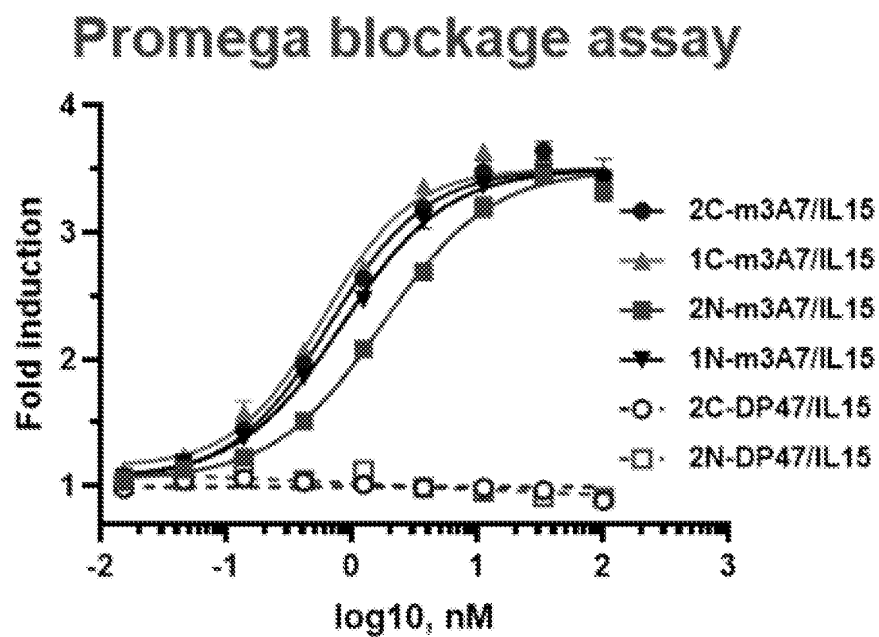


Fig. 22D

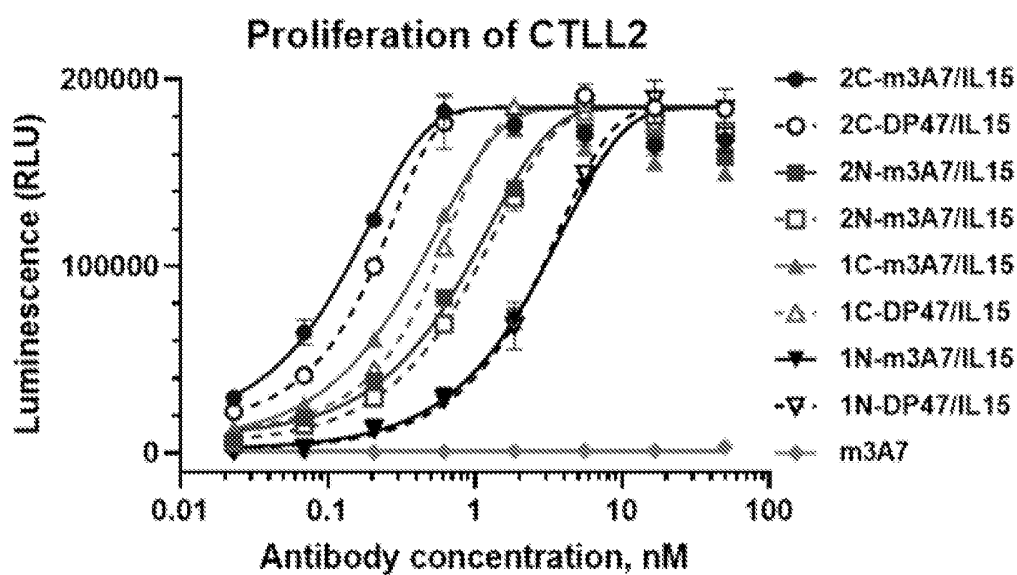


Fig. 23A

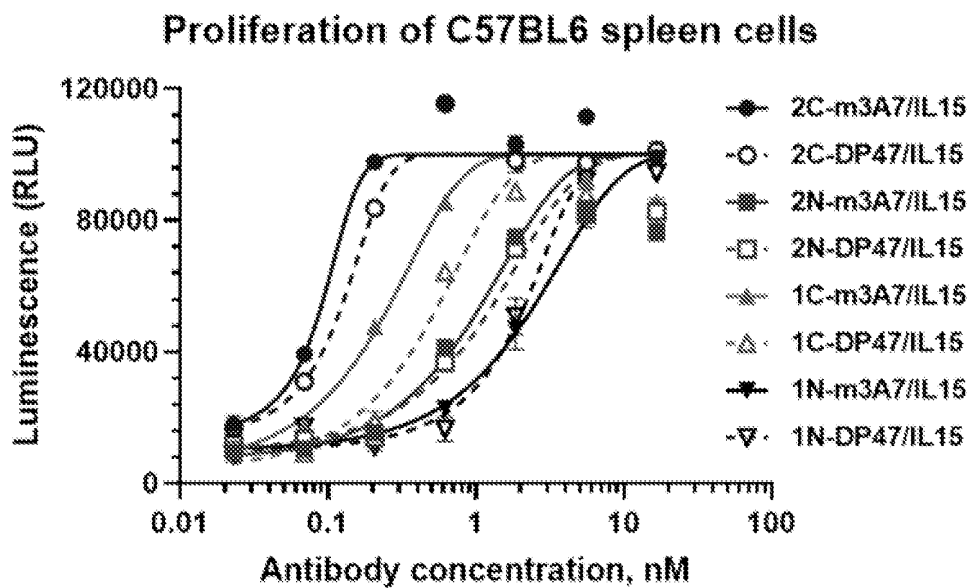


Fig. 23B

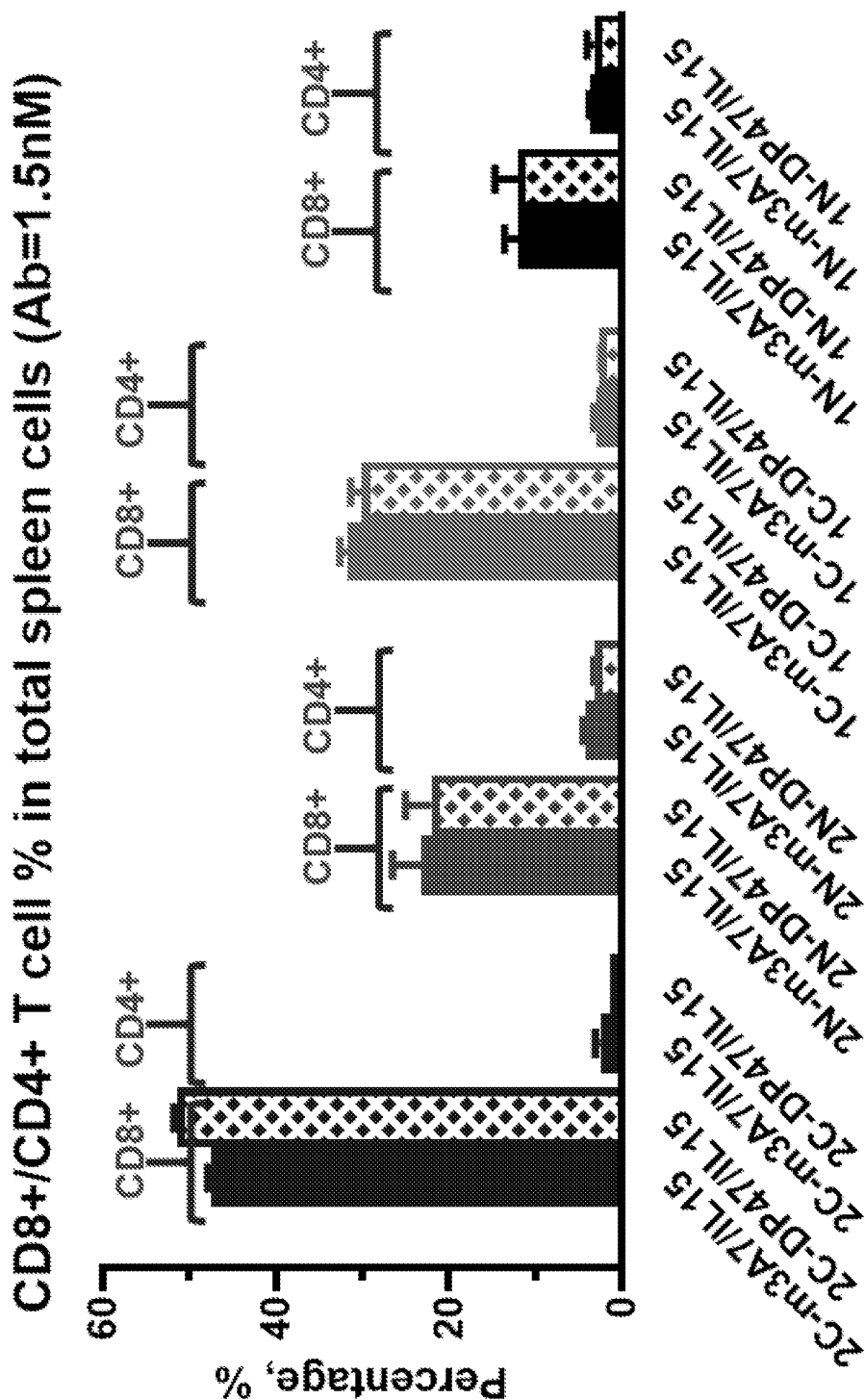


Fig. 23C

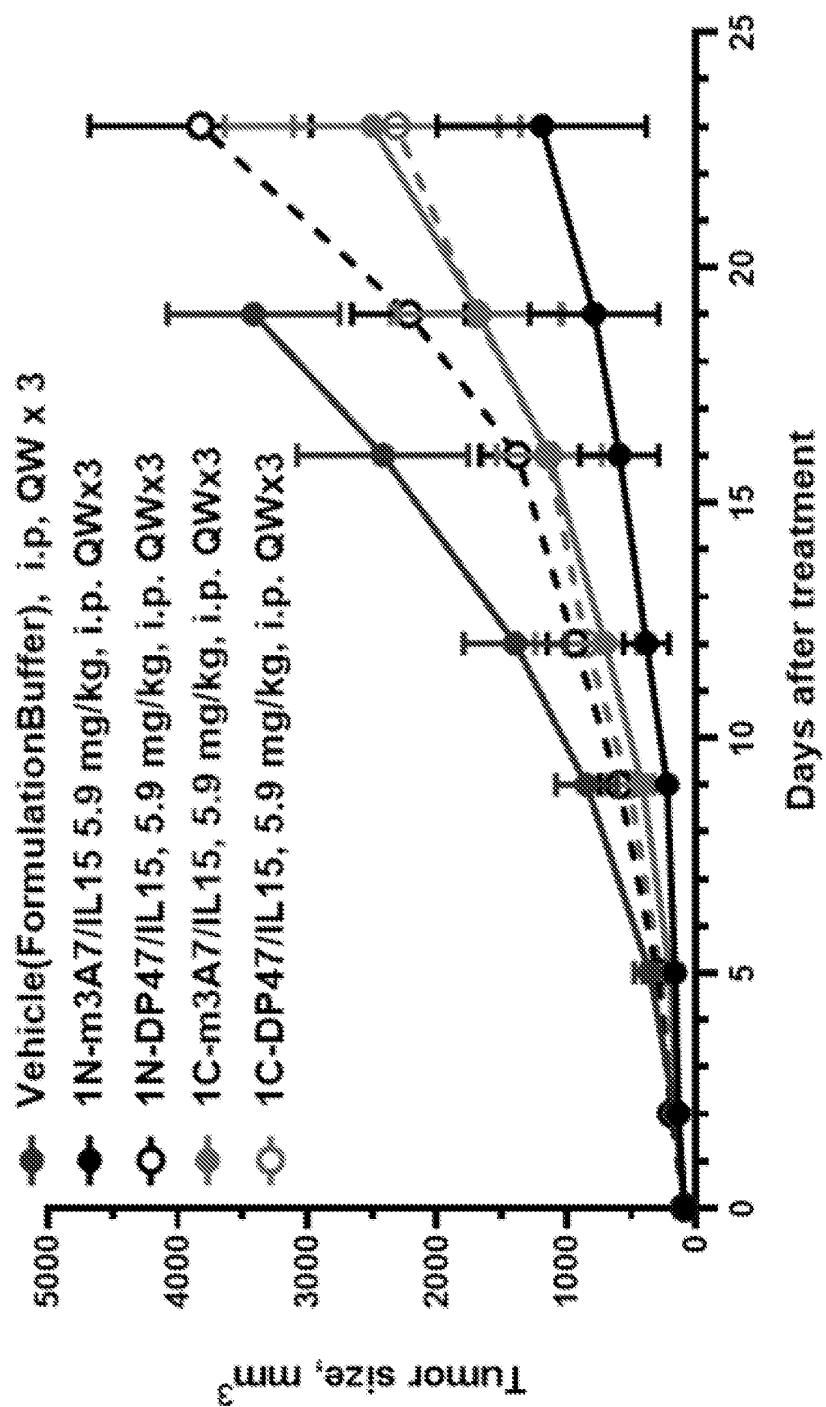
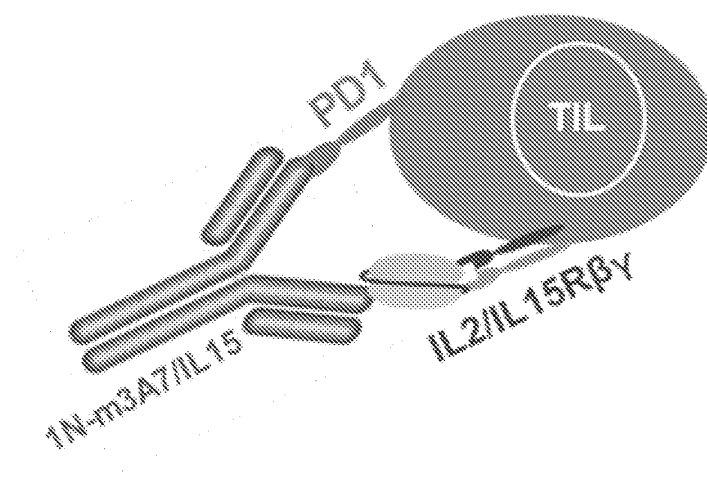


Fig. 24

1N or 2N: Cis presentation



1C or 2C: Trans presentation

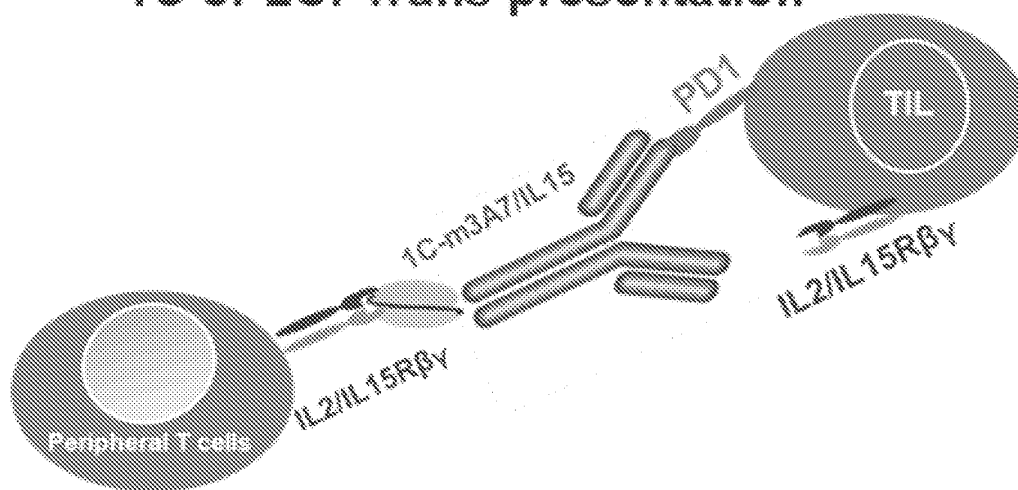


Fig. 25A

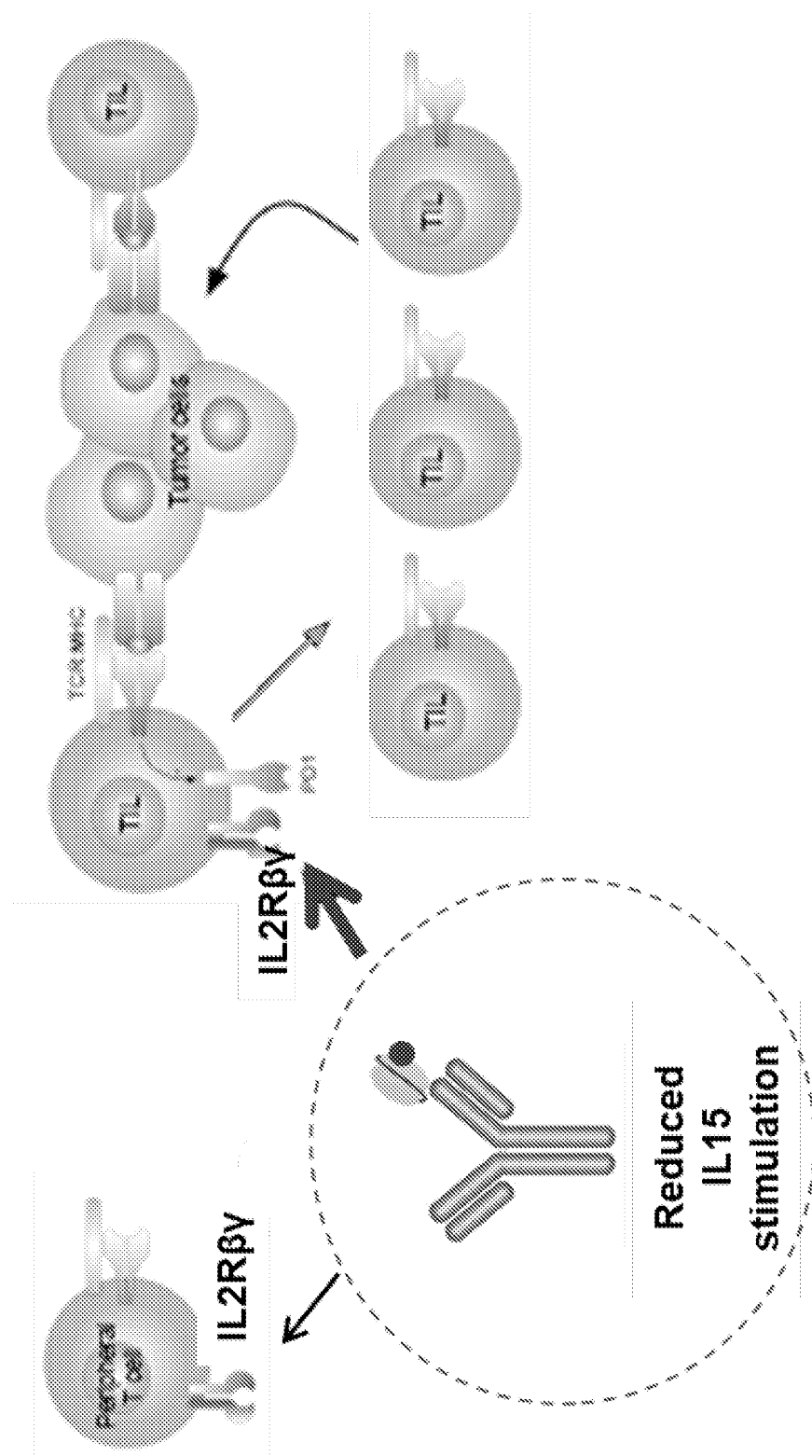


Fig. 25B

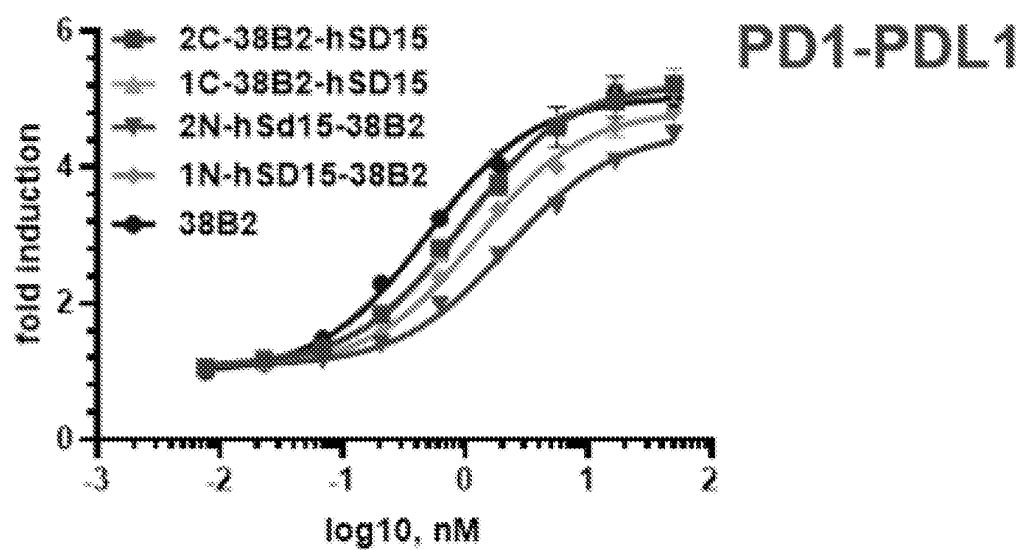


Fig. 26A

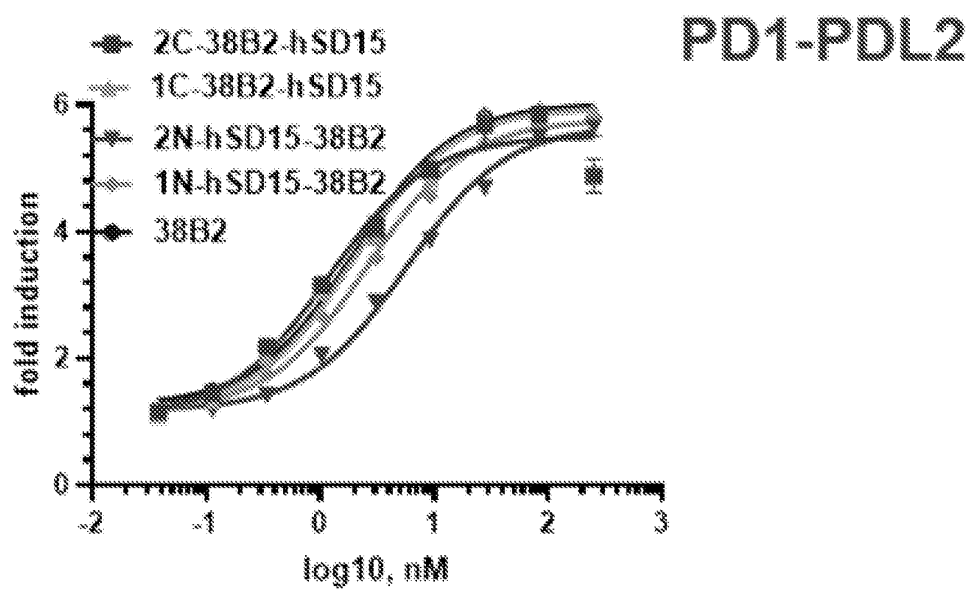
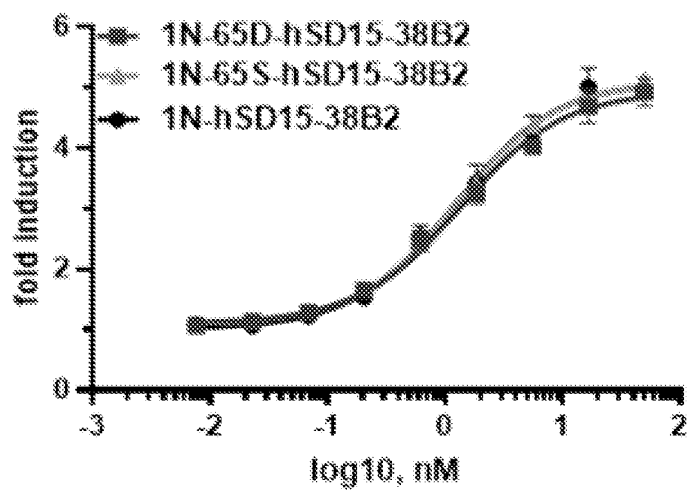


Fig. 26B

PD1-PDL1**Fig. 26C**

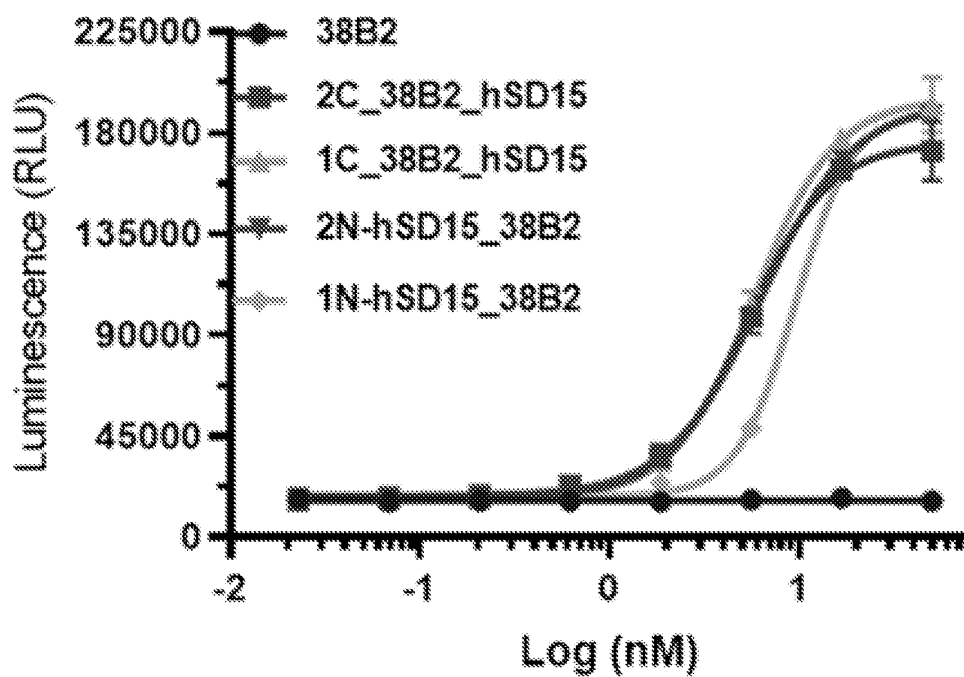


Fig. 27A

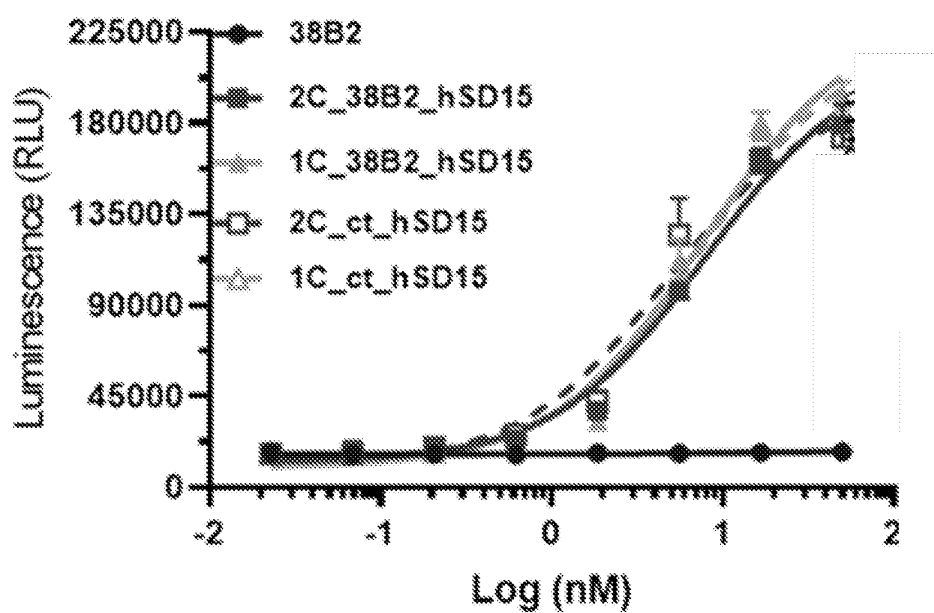


Fig. 27B

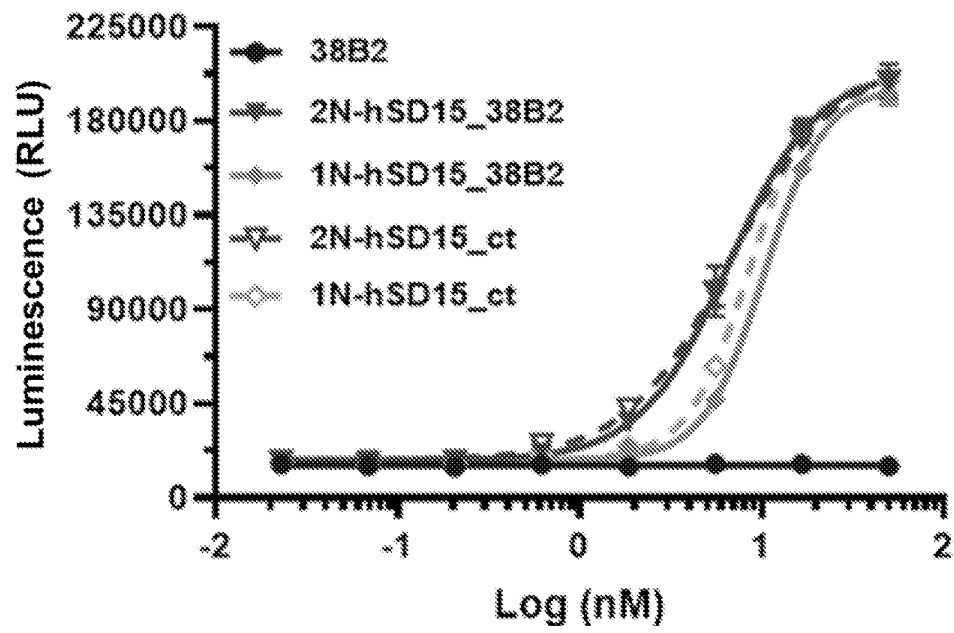


Fig. 27C

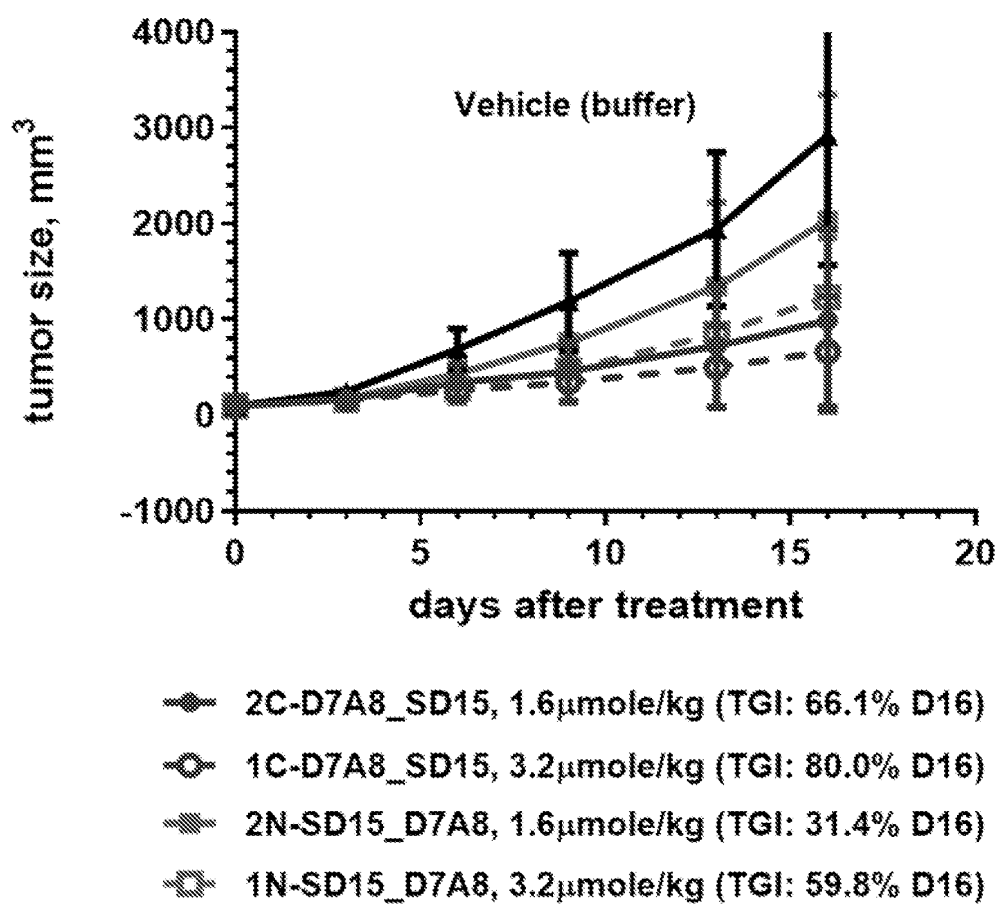


Fig. 28

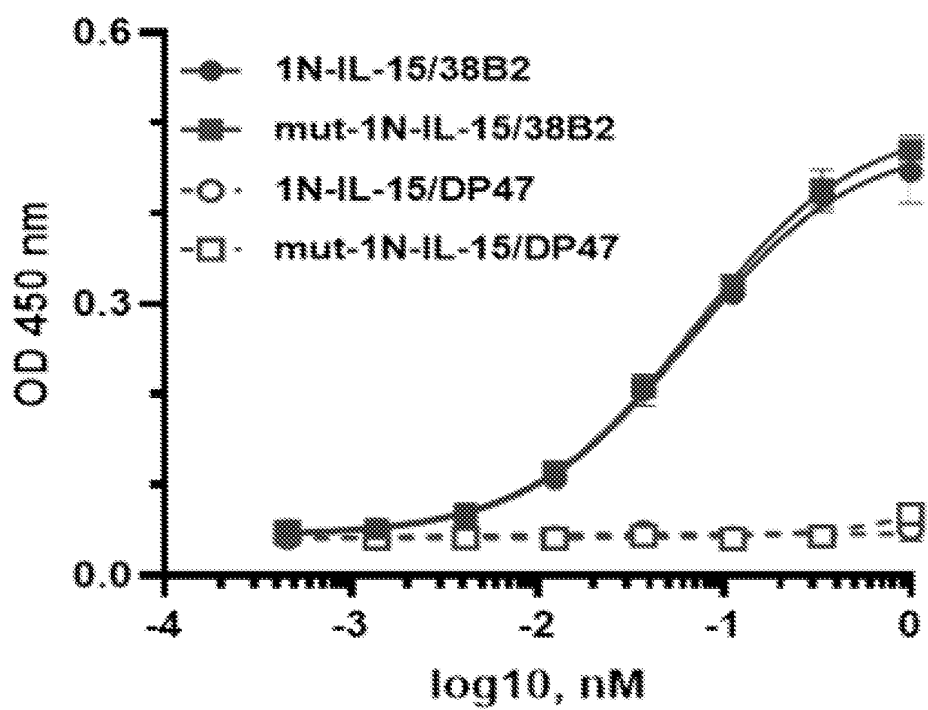


Fig. 29A

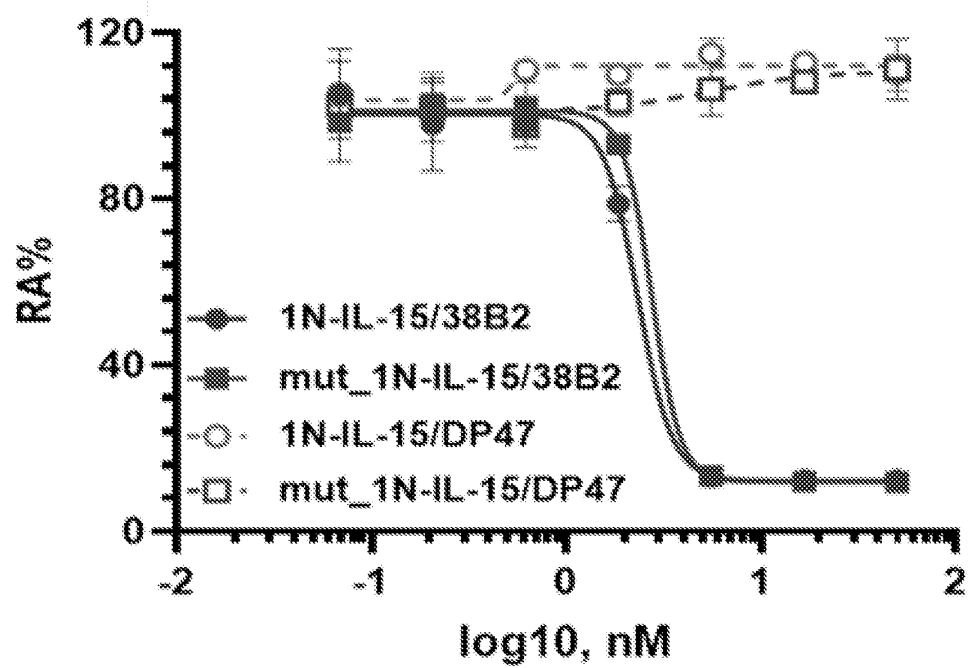


Fig. 29B

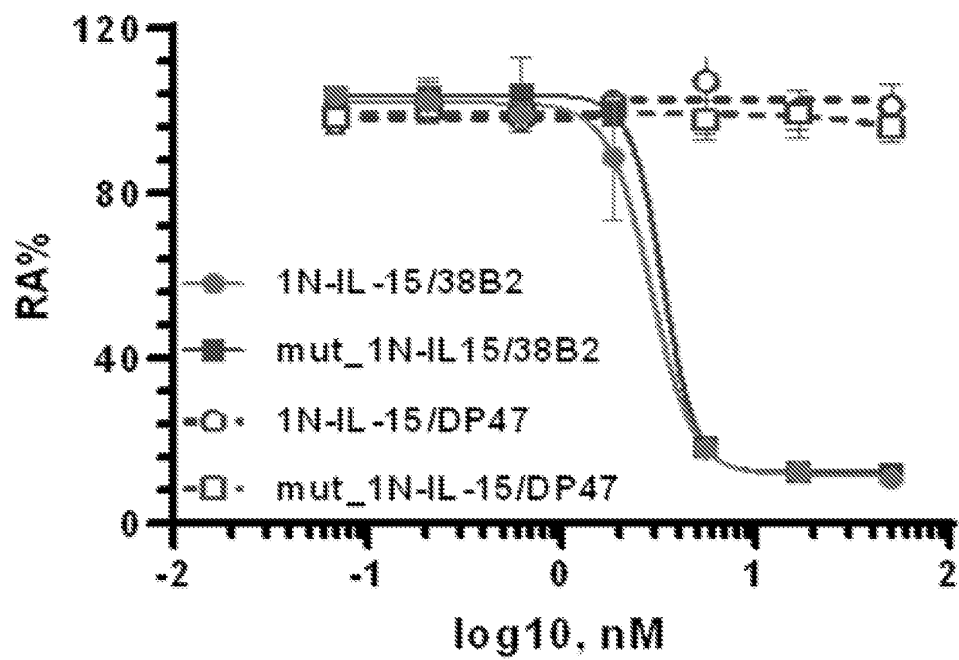


Fig. 29C

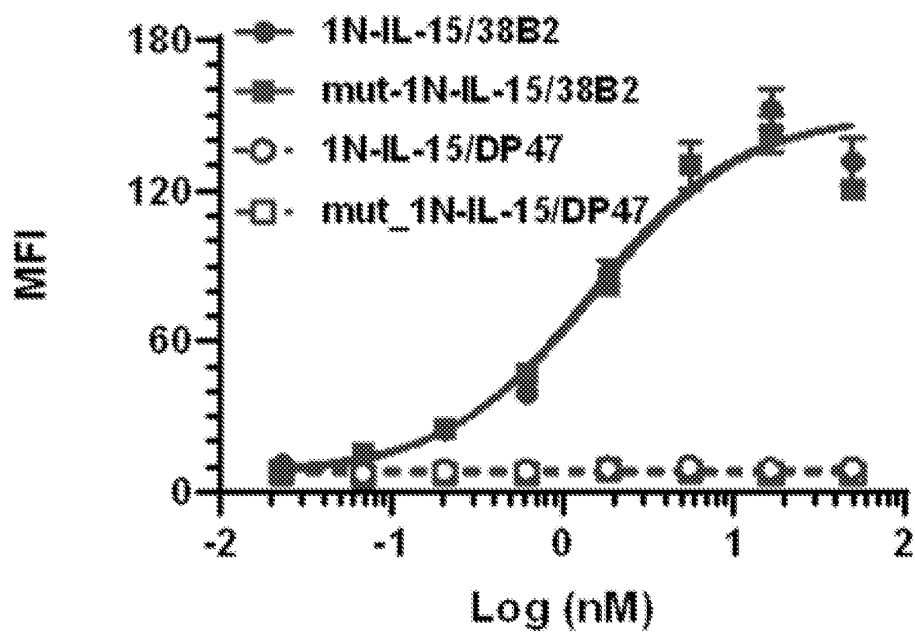


Fig. 29D

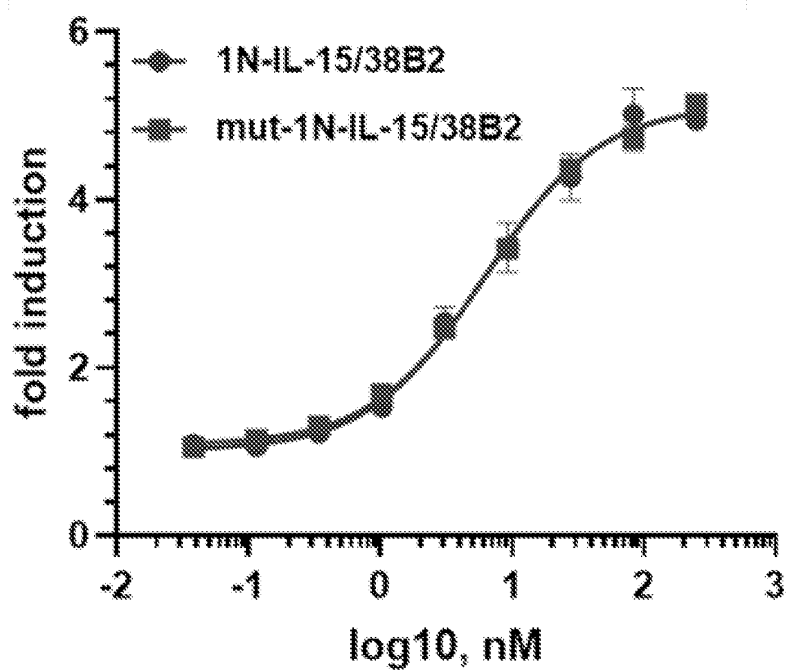


Fig. 29E

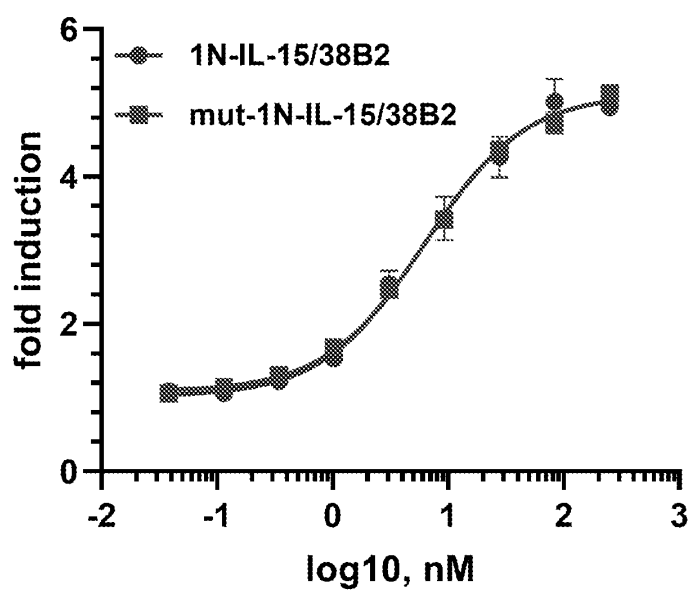


Fig. 29F

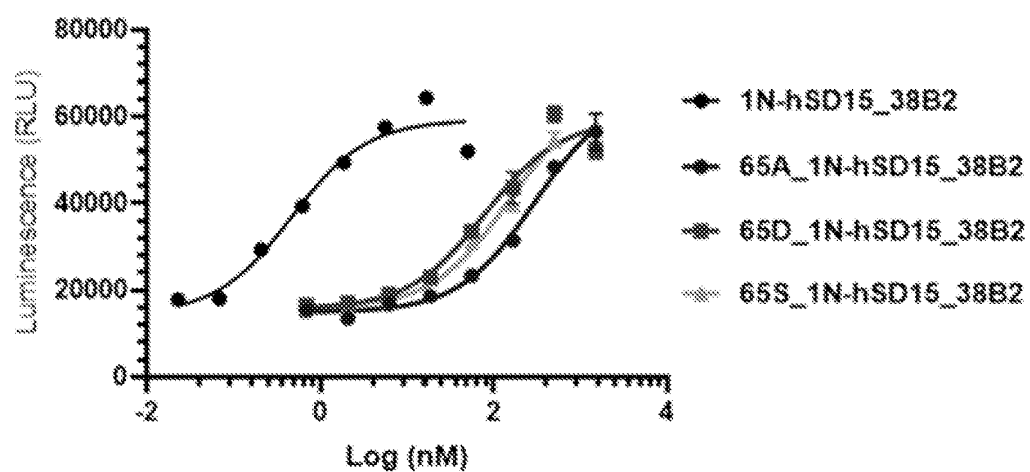


Fig. 30A

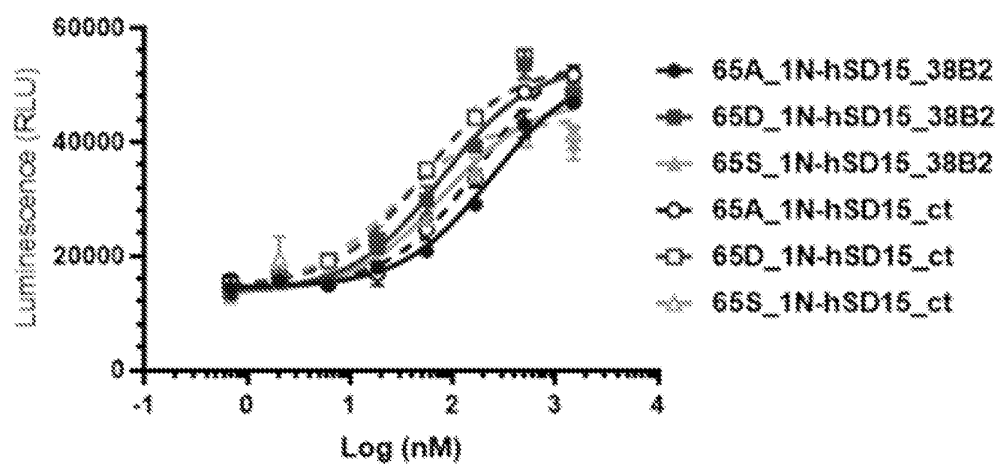


Fig. 30B

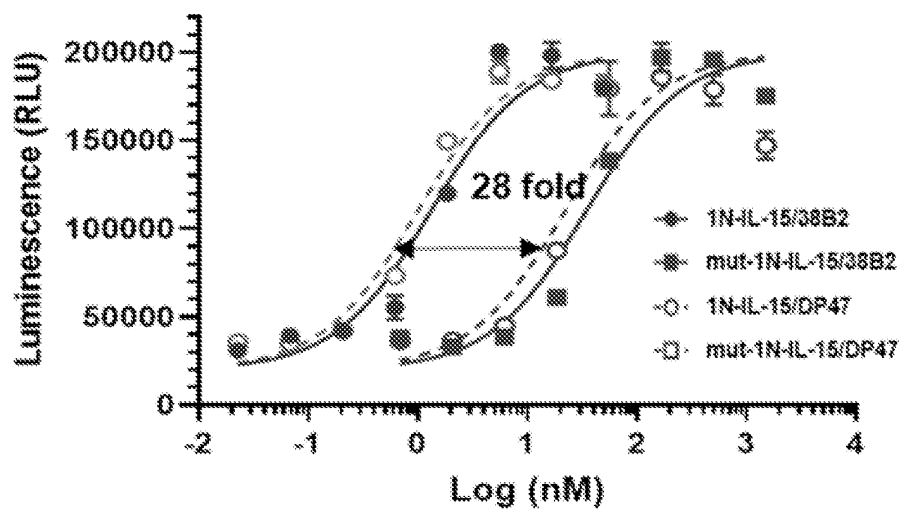


Fig. 30C

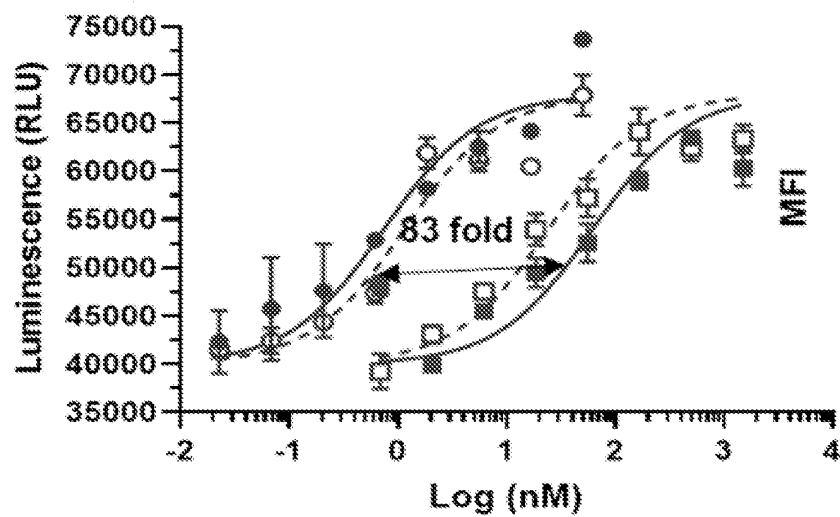


Fig. 30D

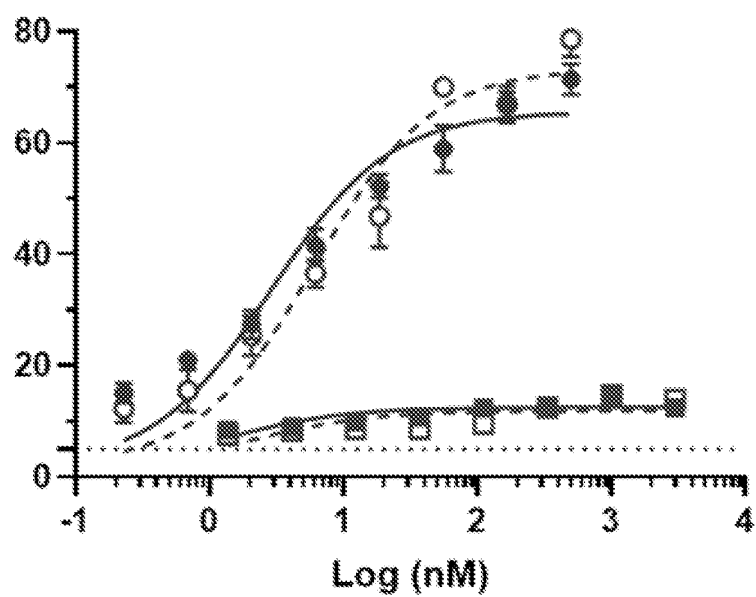


Fig. 30E

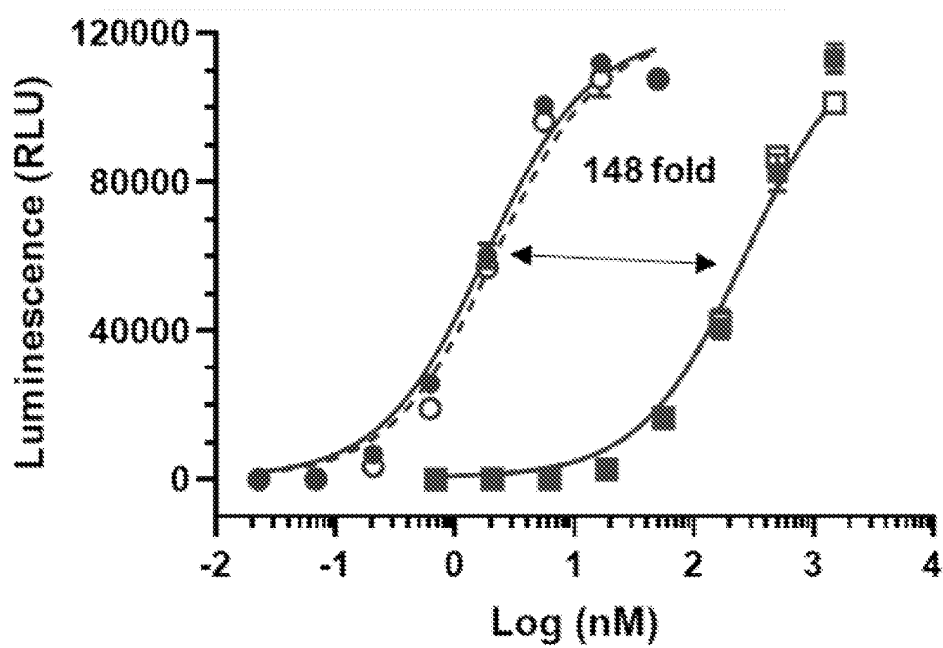


Fig. 31A

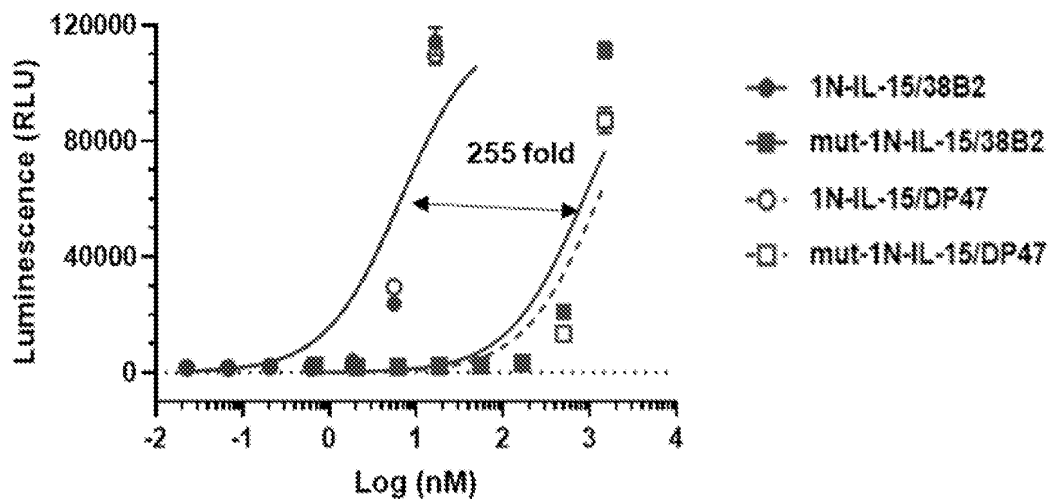


Fig. 31B

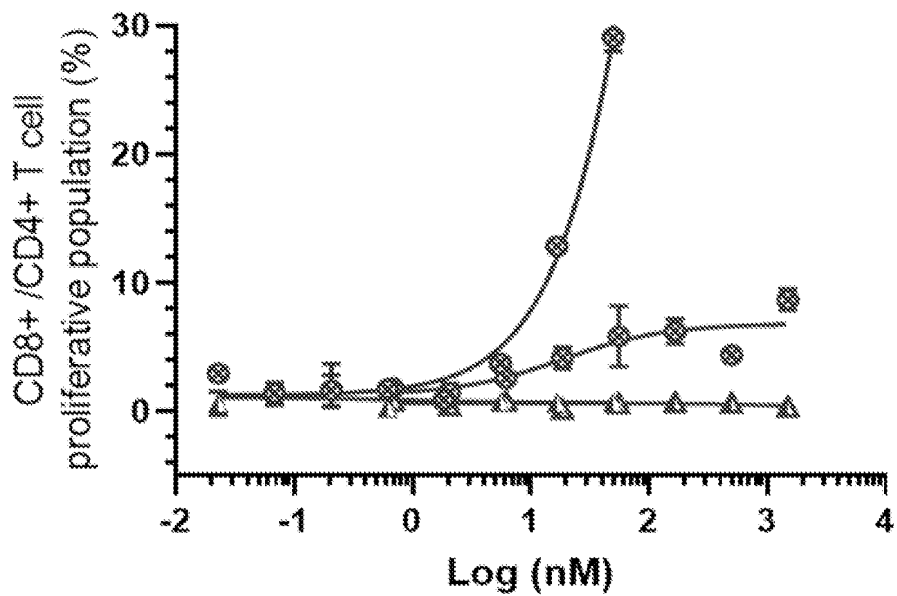


Fig. 31C

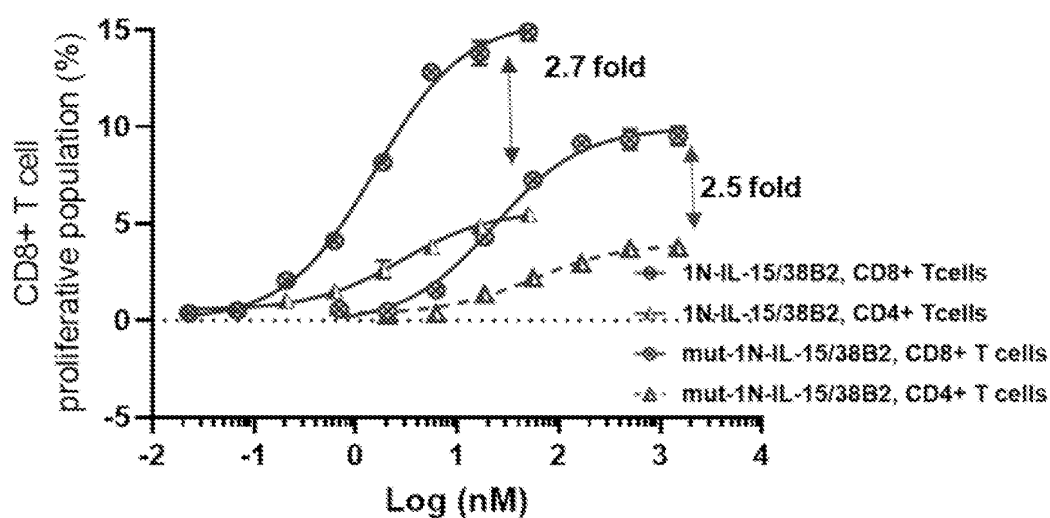


Fig. 31D

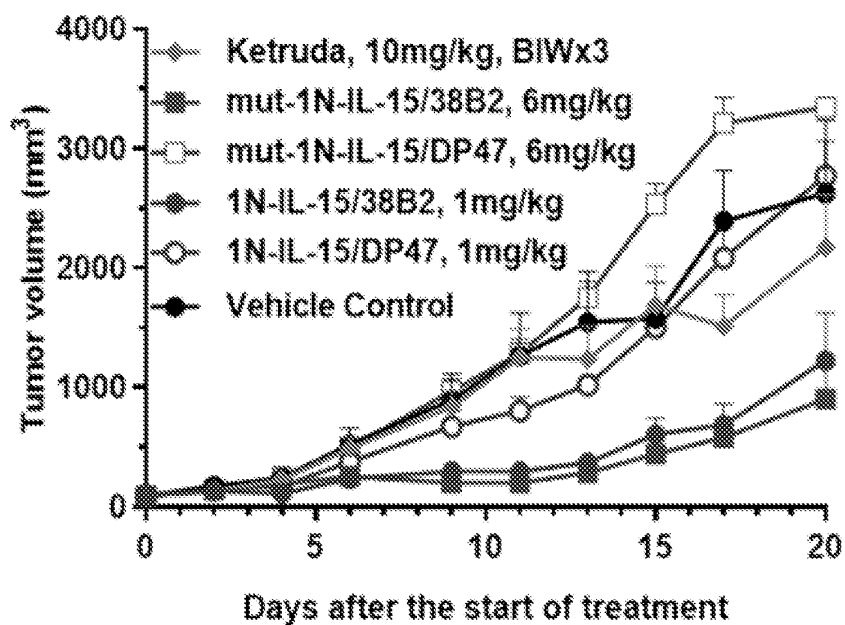


Fig. 32A

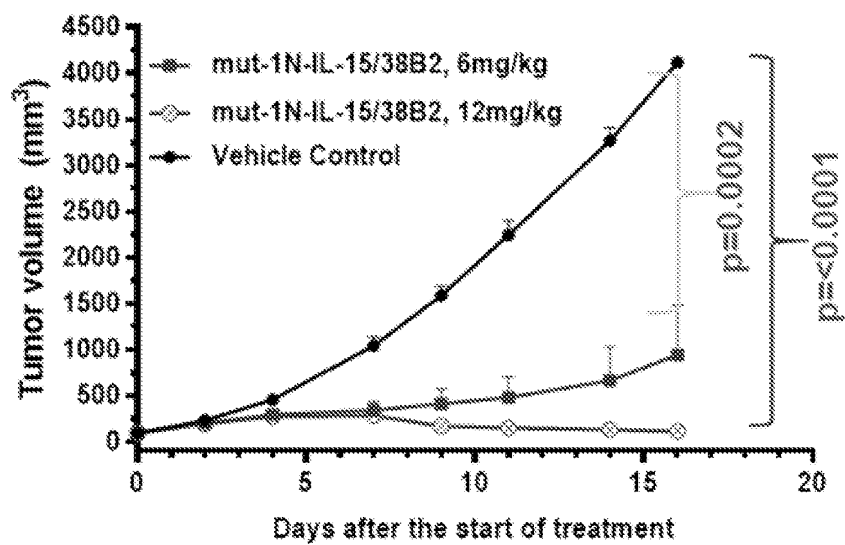


Fig. 32B

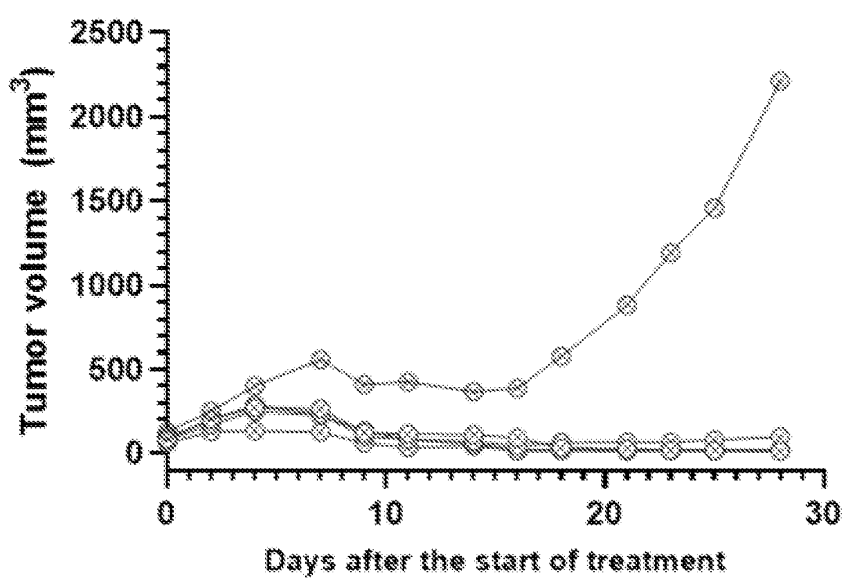


Fig. 32C

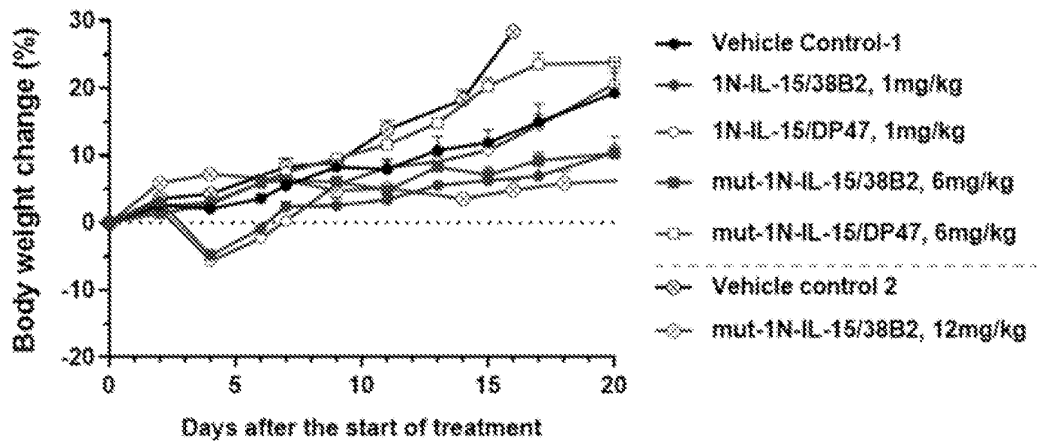


Fig. 32D

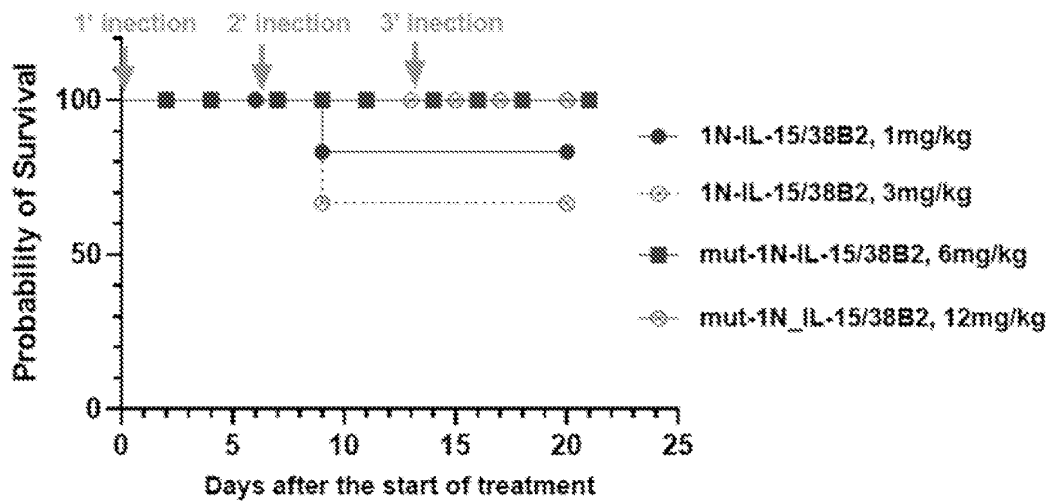


Fig. 32E

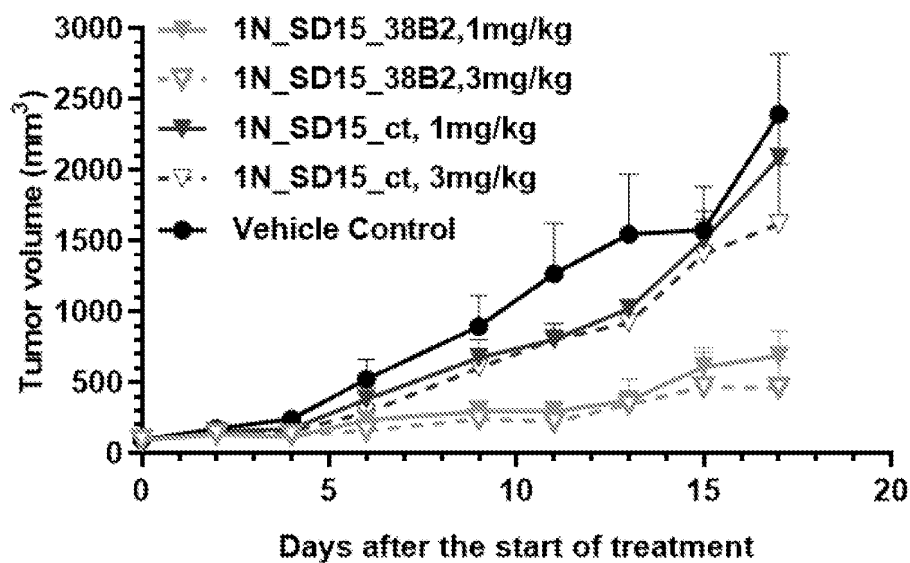


Fig. 32F

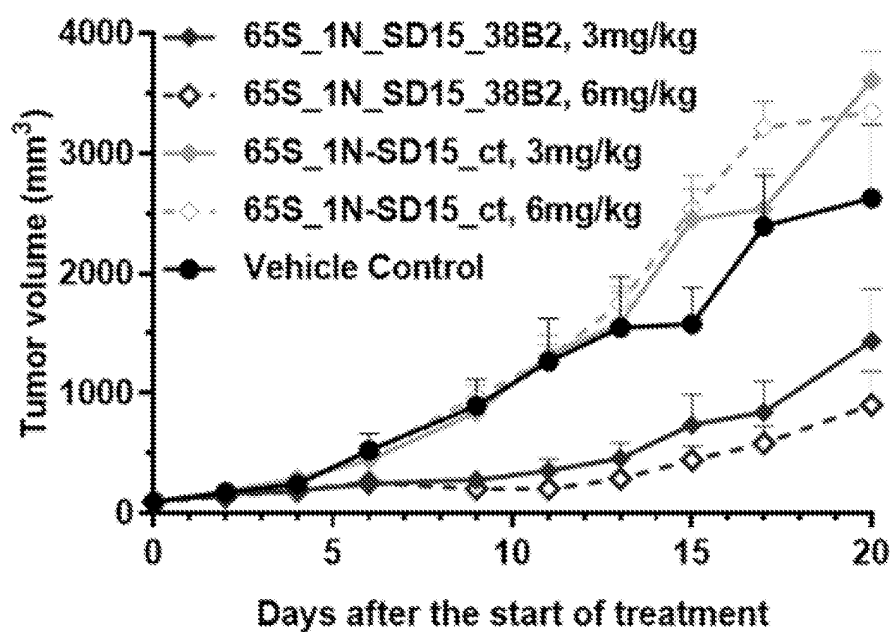


Fig. 32G

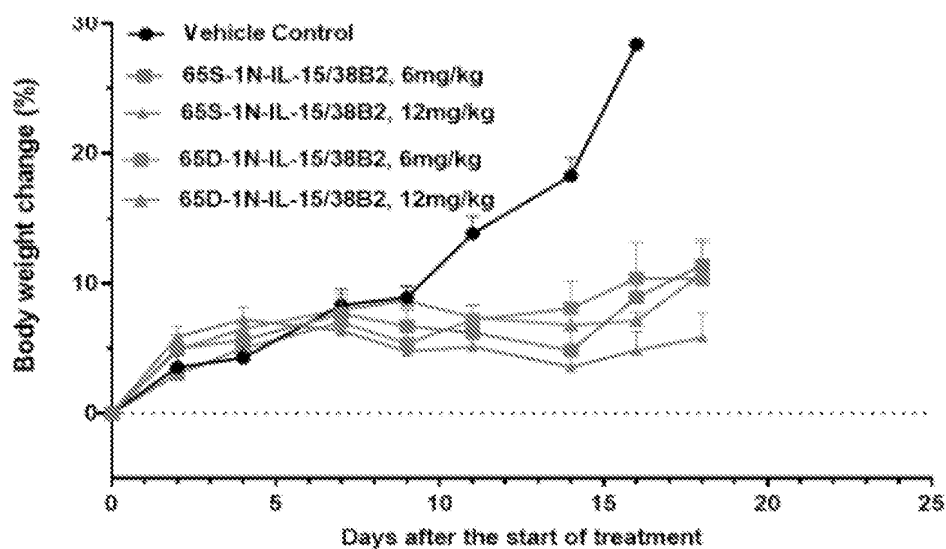


Fig. 32H

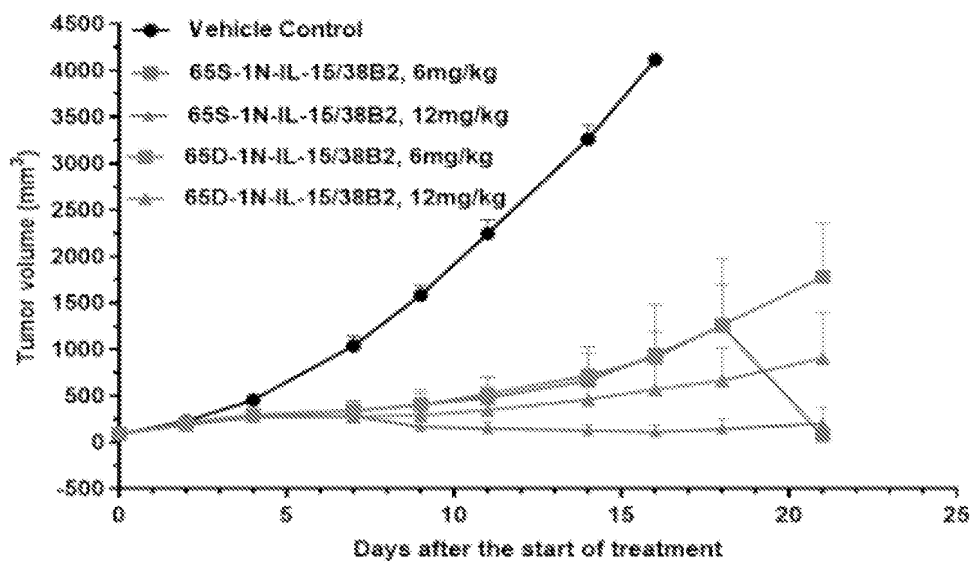


Fig. 32I

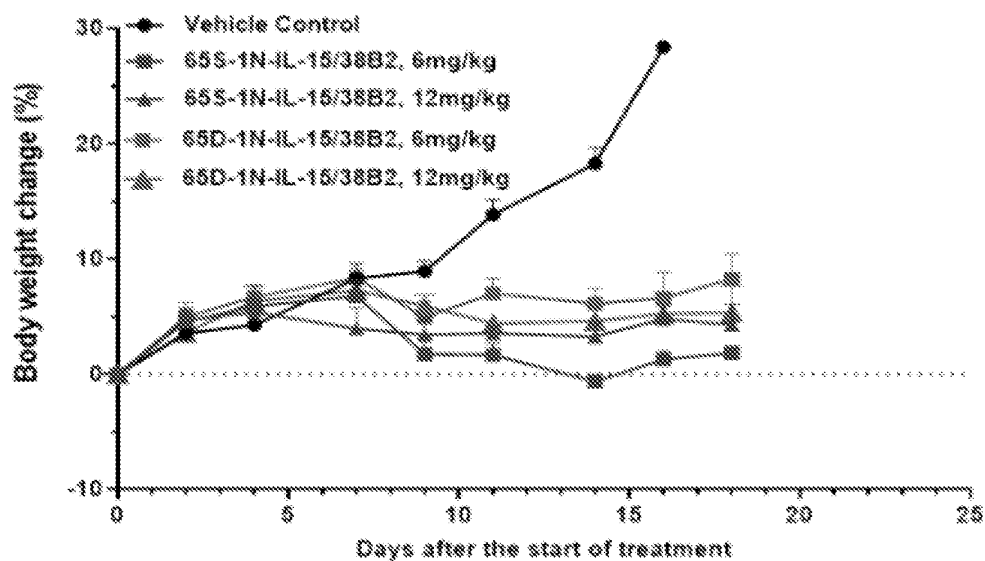


Fig. 32J

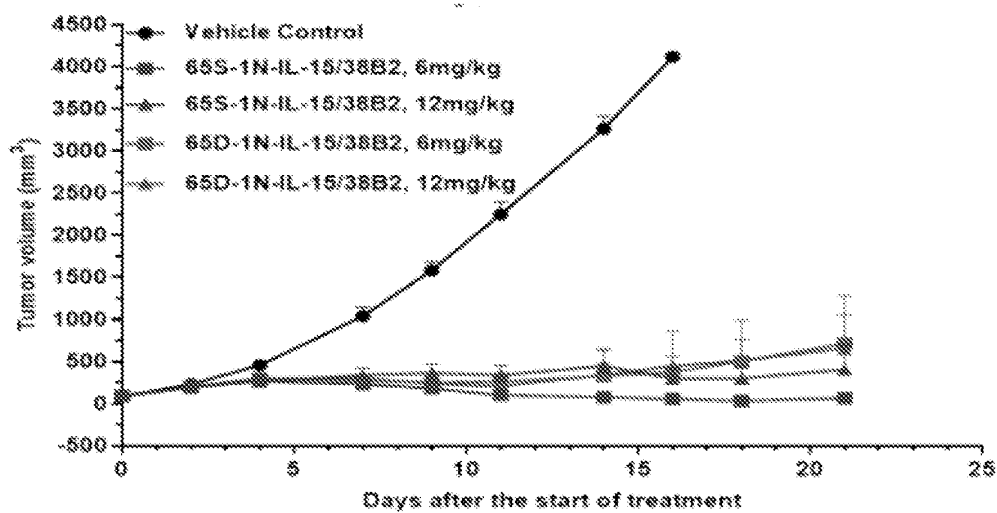


Fig. 32K

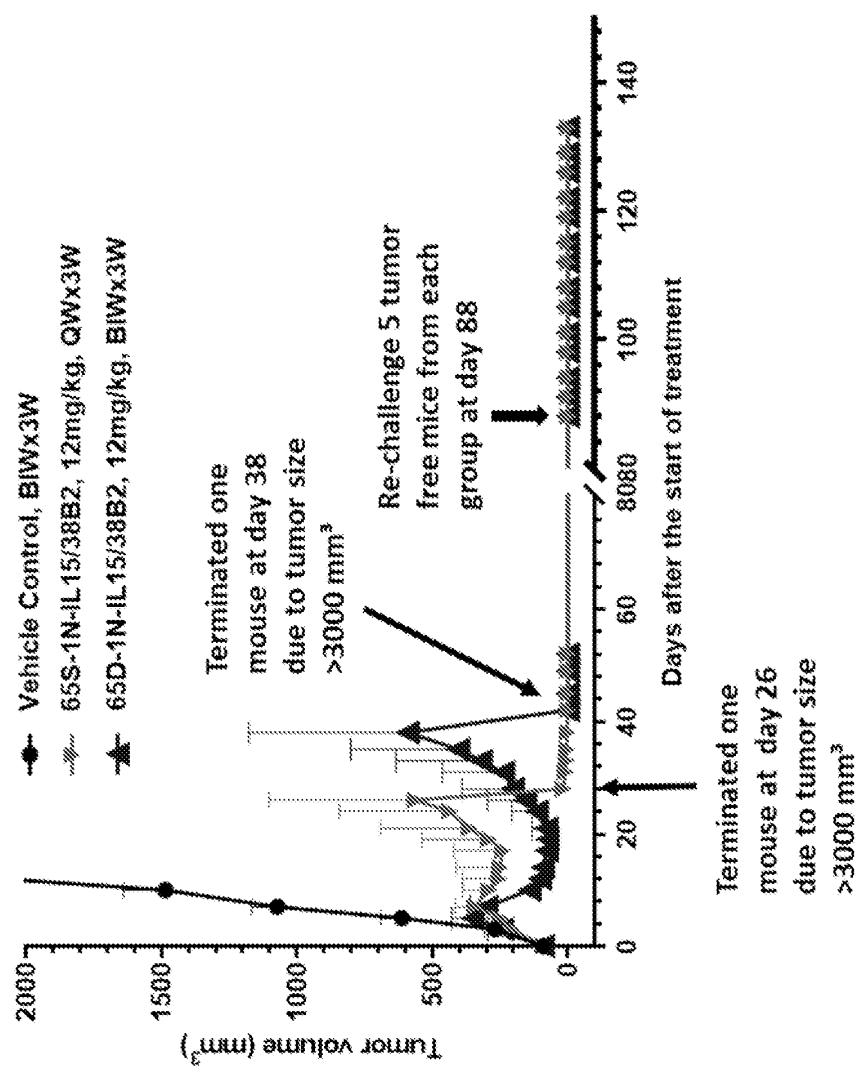


Fig. 33

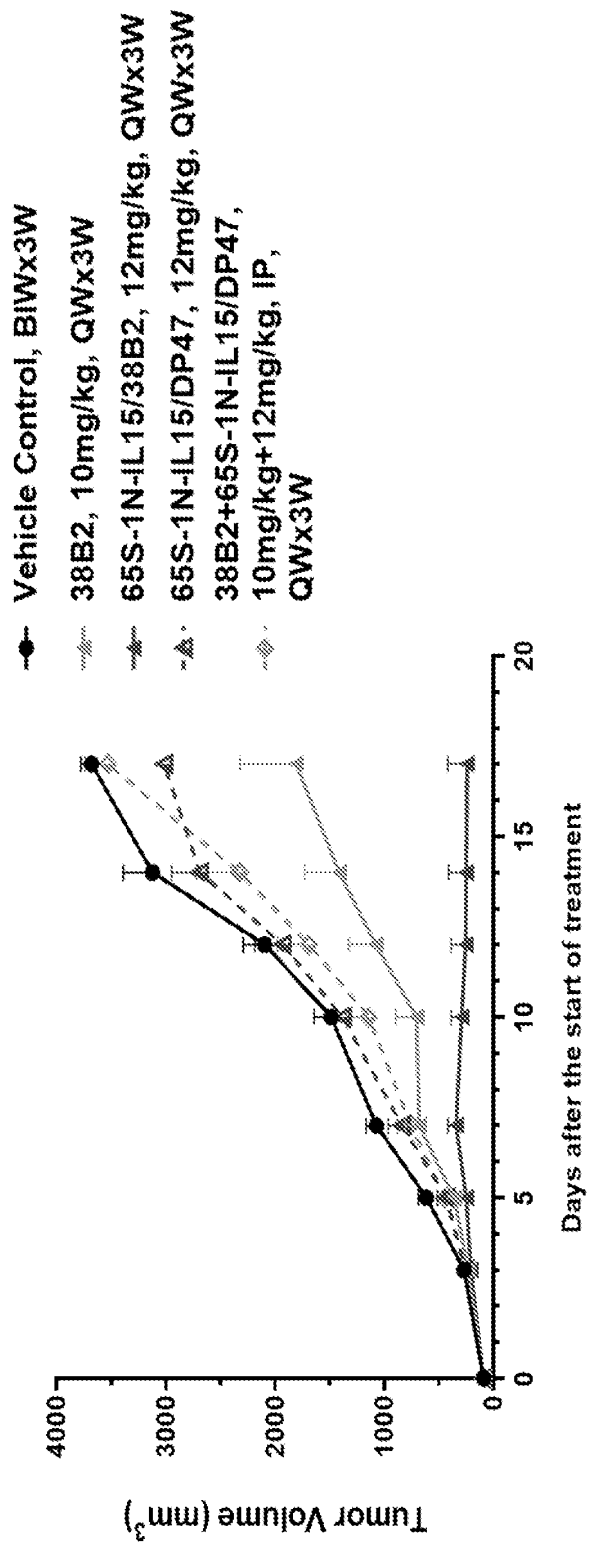


Fig. 34A

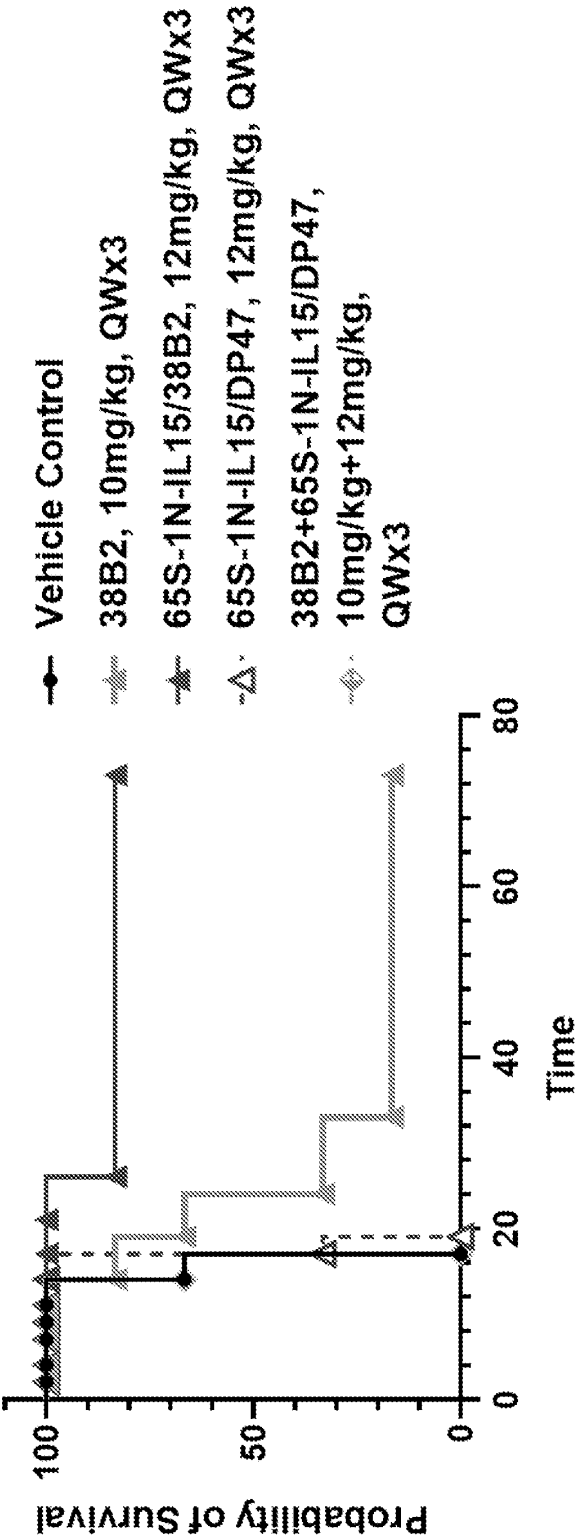


Fig. 34B

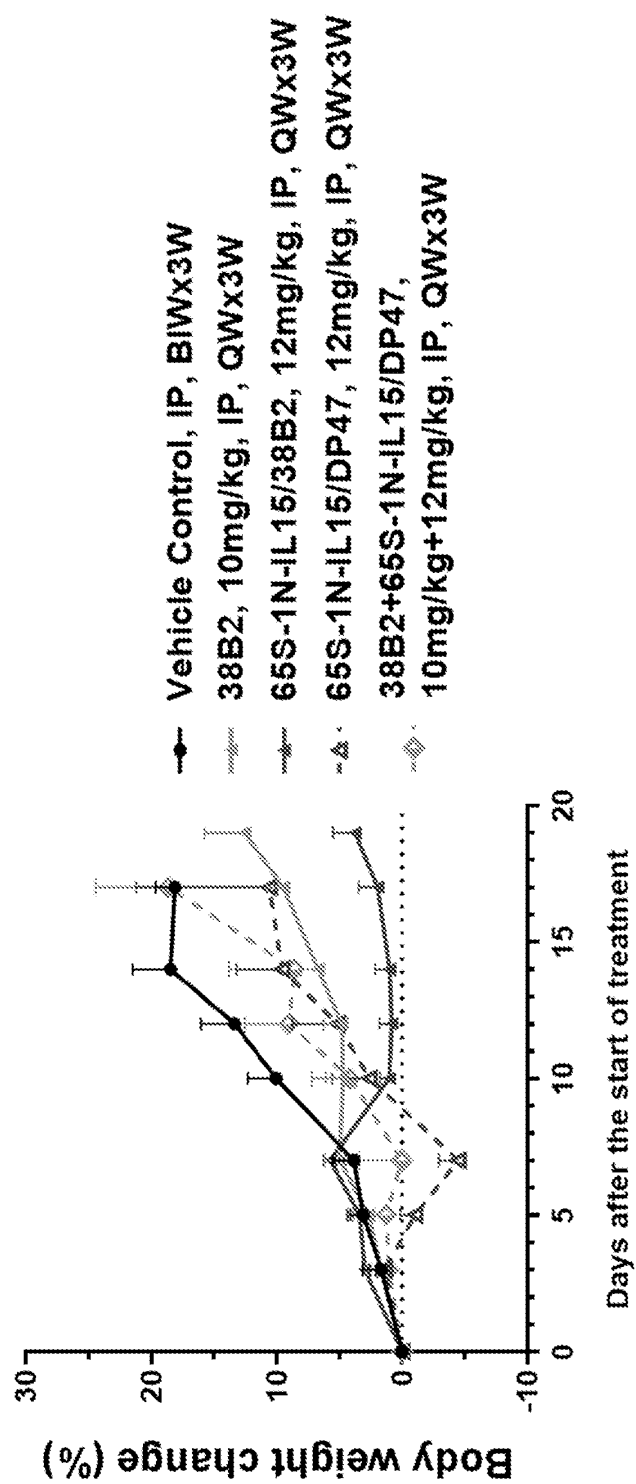


Fig. 34C

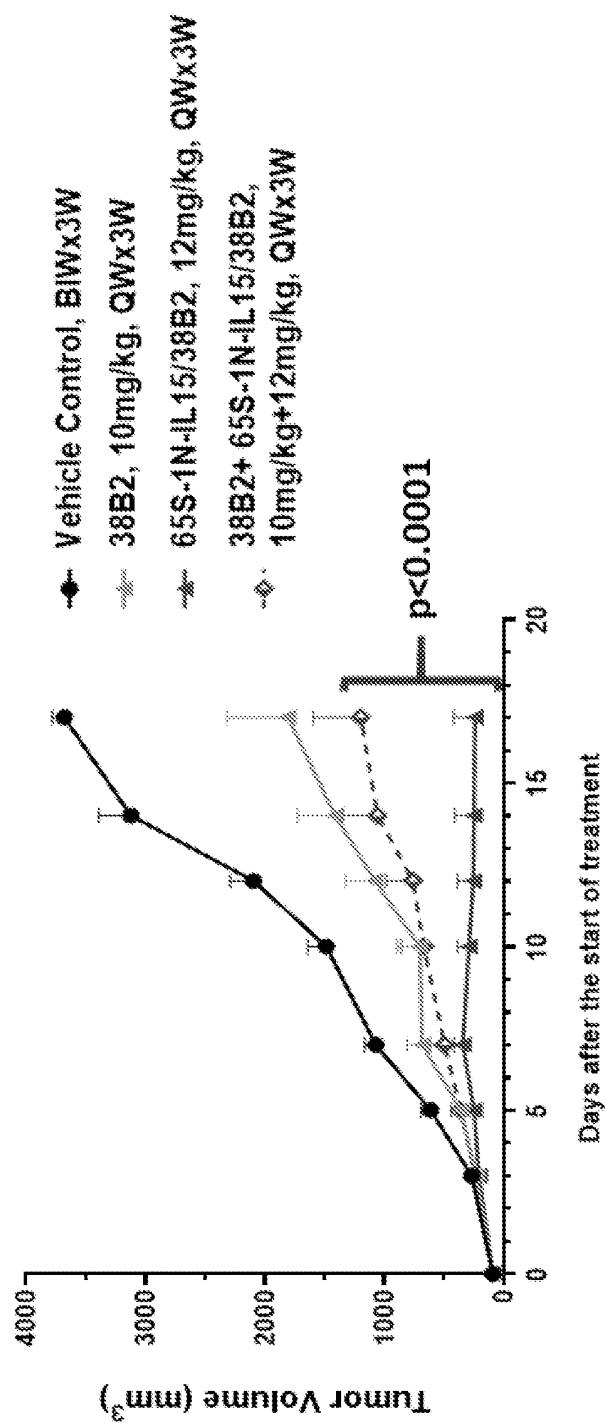


Fig. 35A

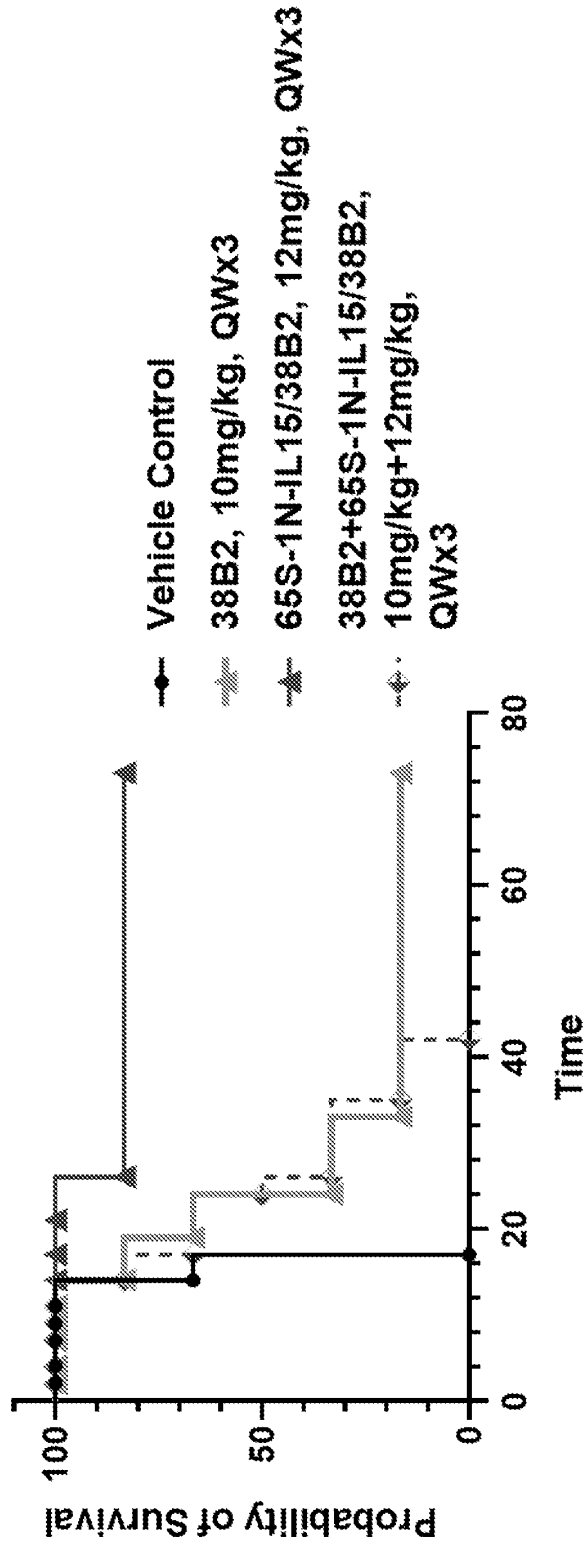


Fig. 35B

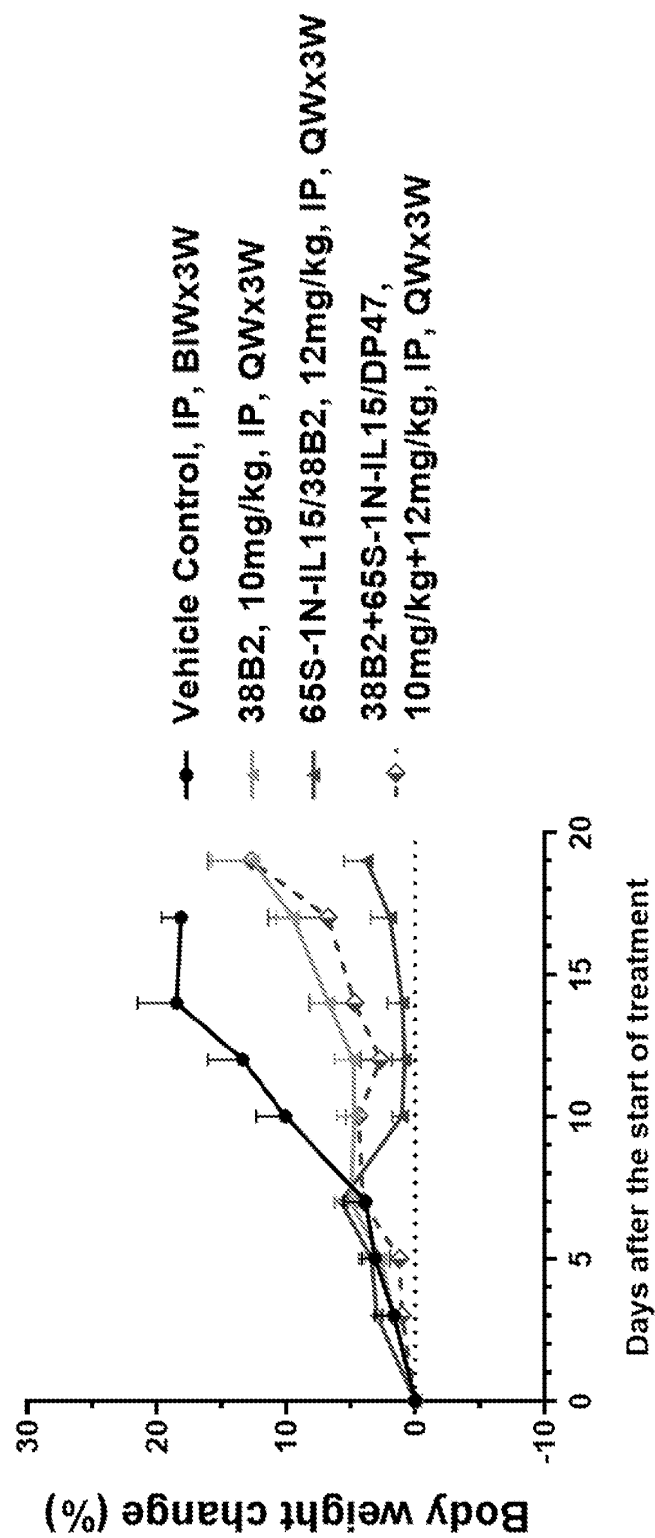


Fig. 35C

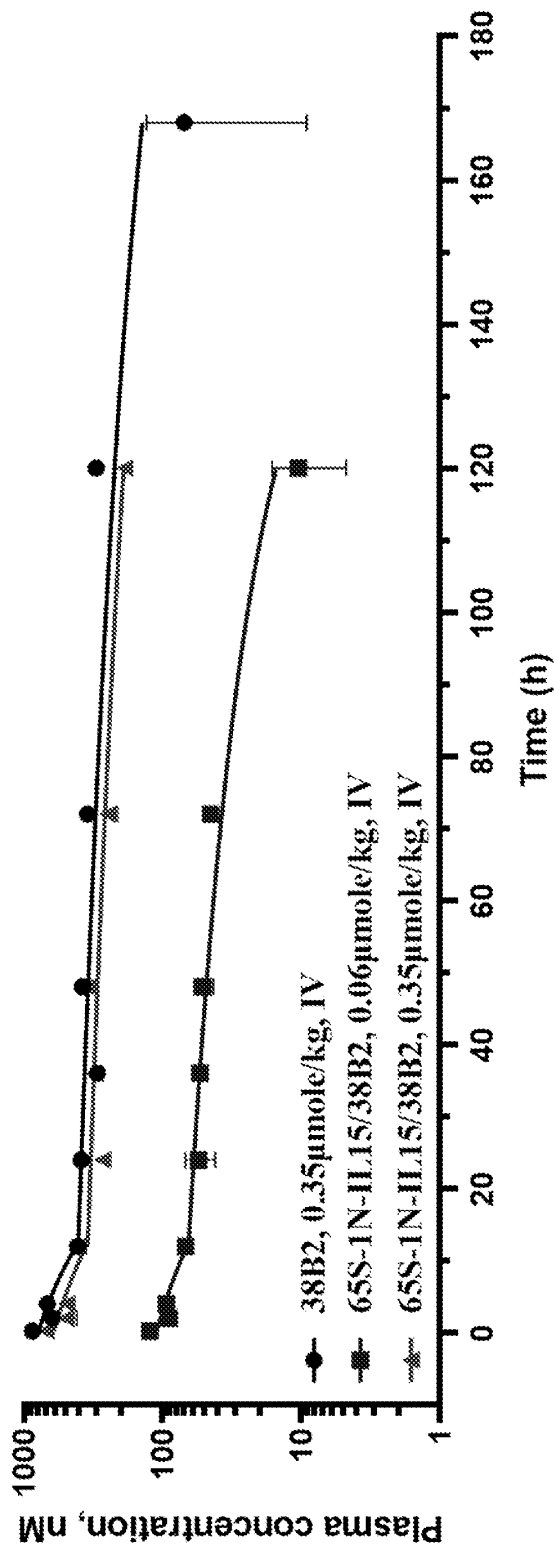


Fig. 36A

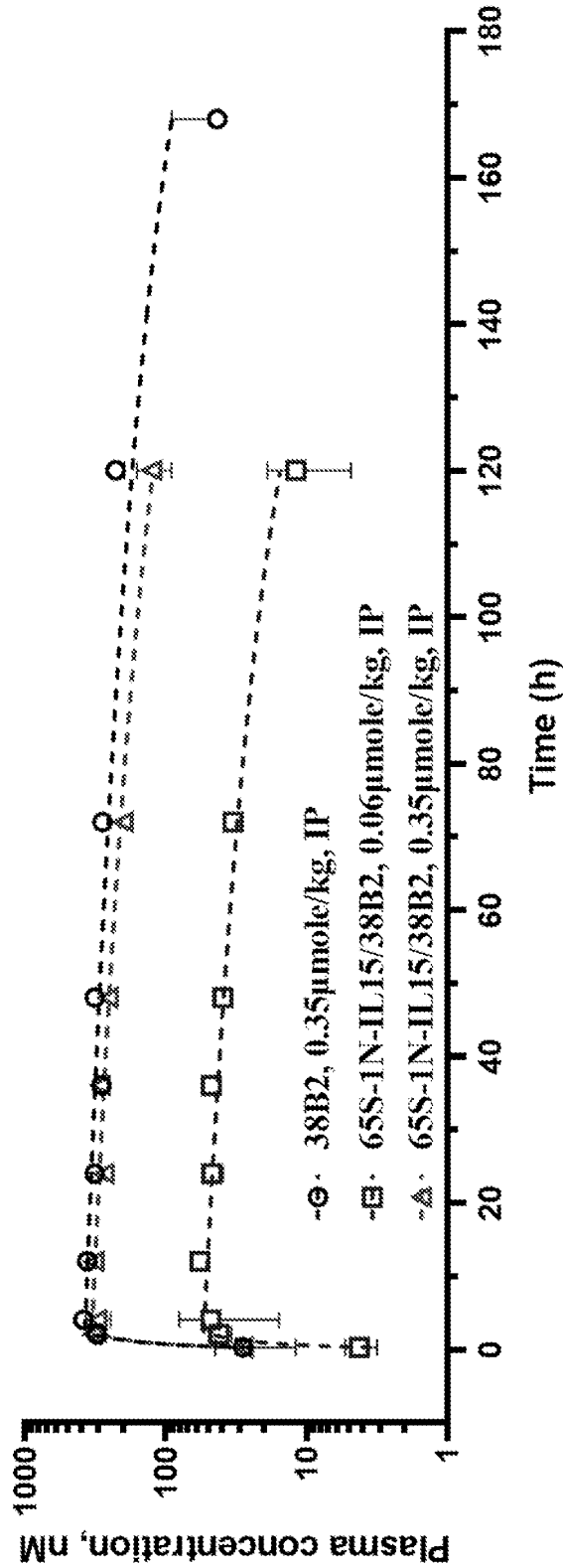


Fig. 36B

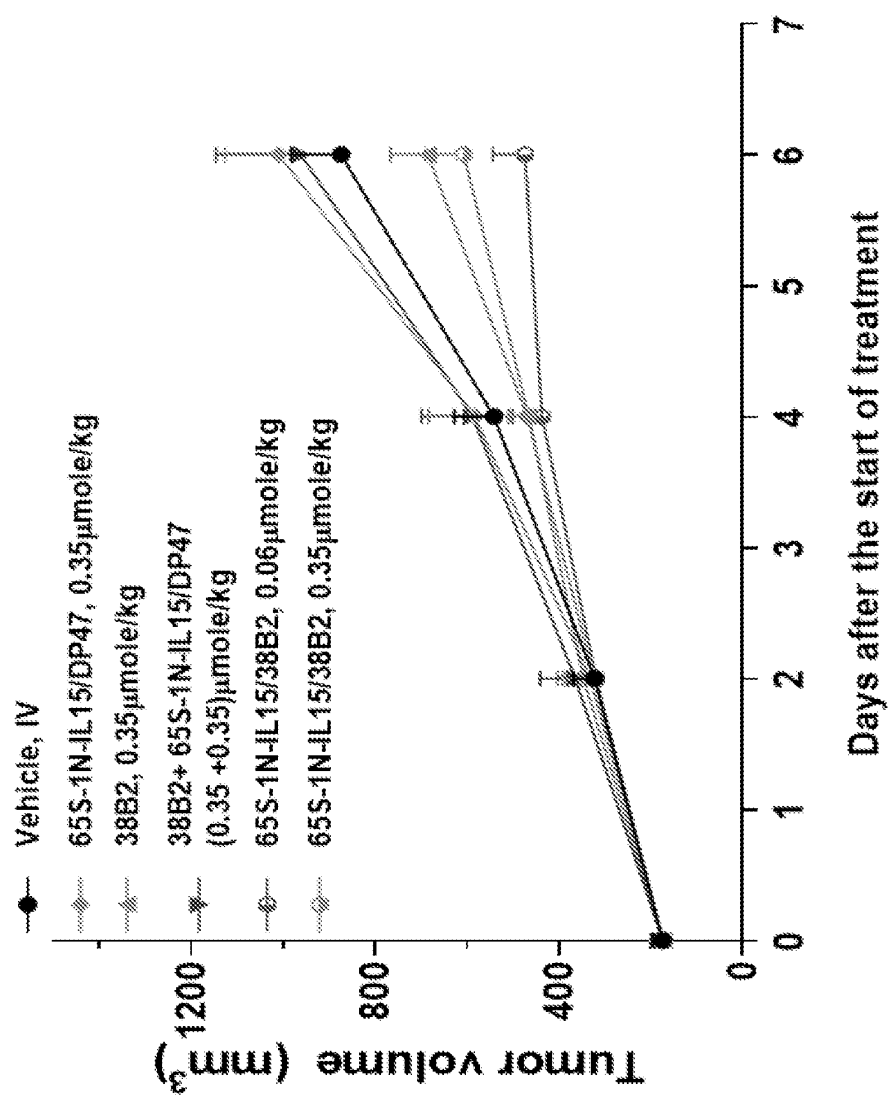
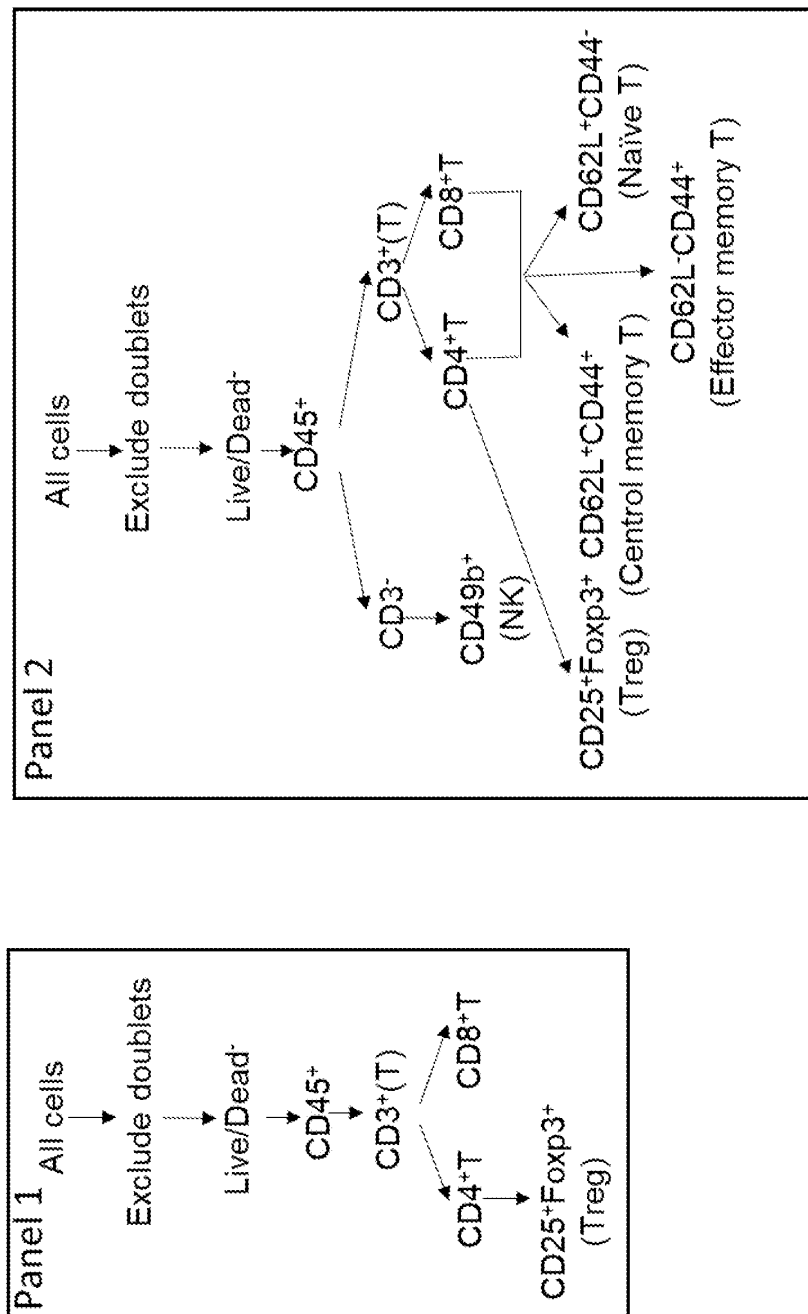


Fig. 37A

**Fig. 37B**

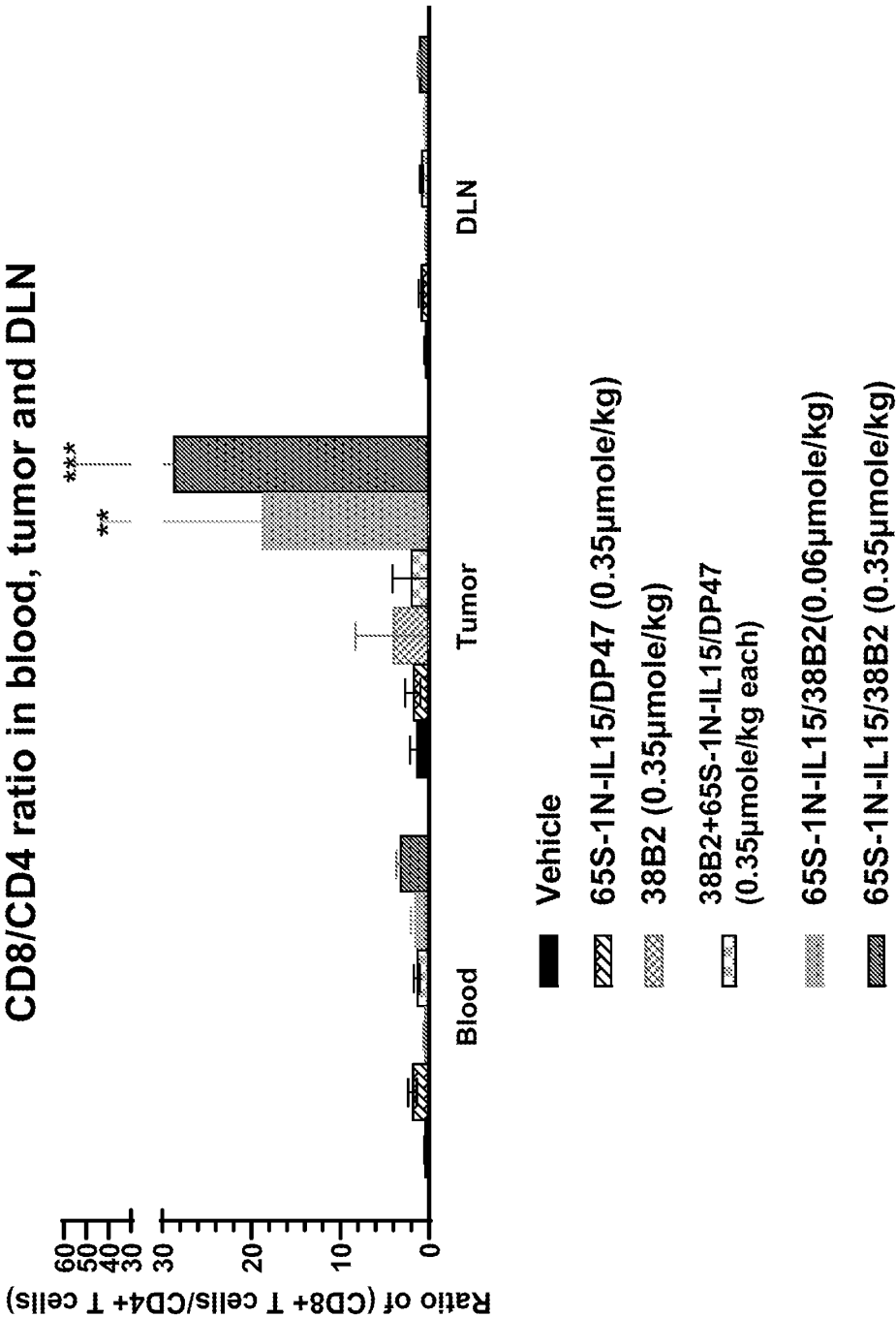


Fig. 37C

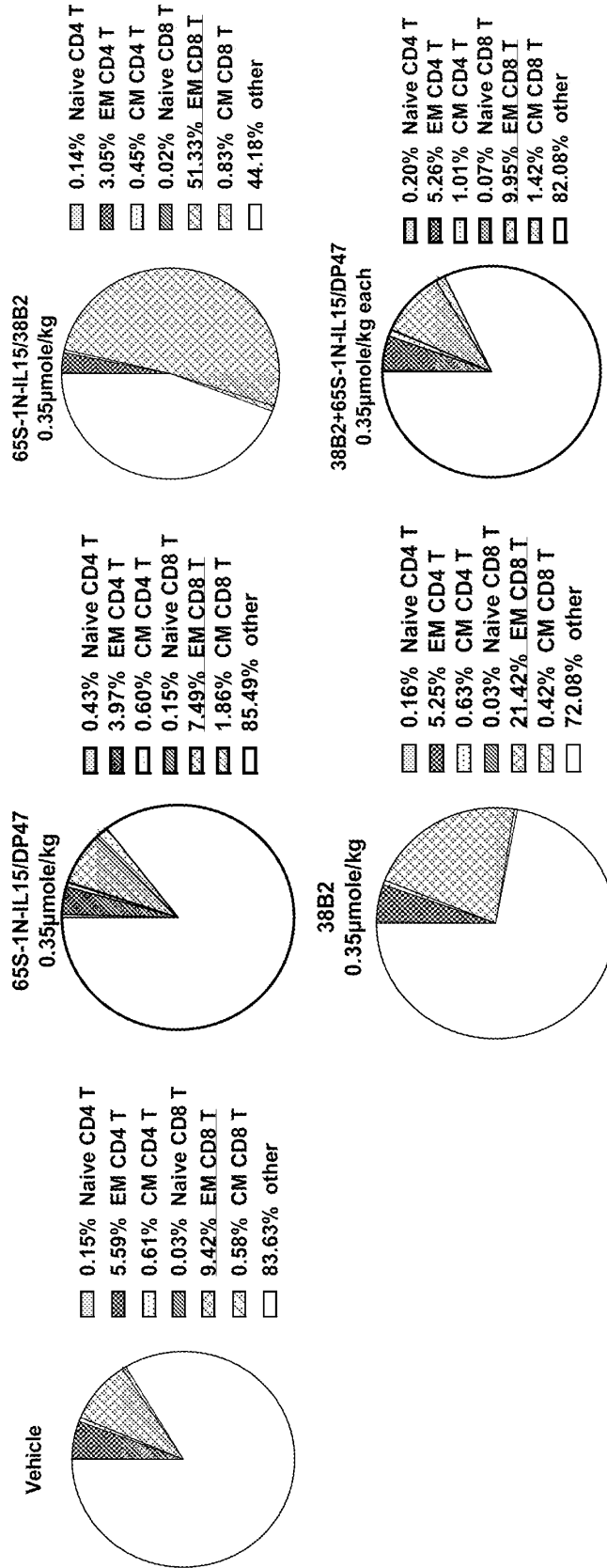


Fig. 37D

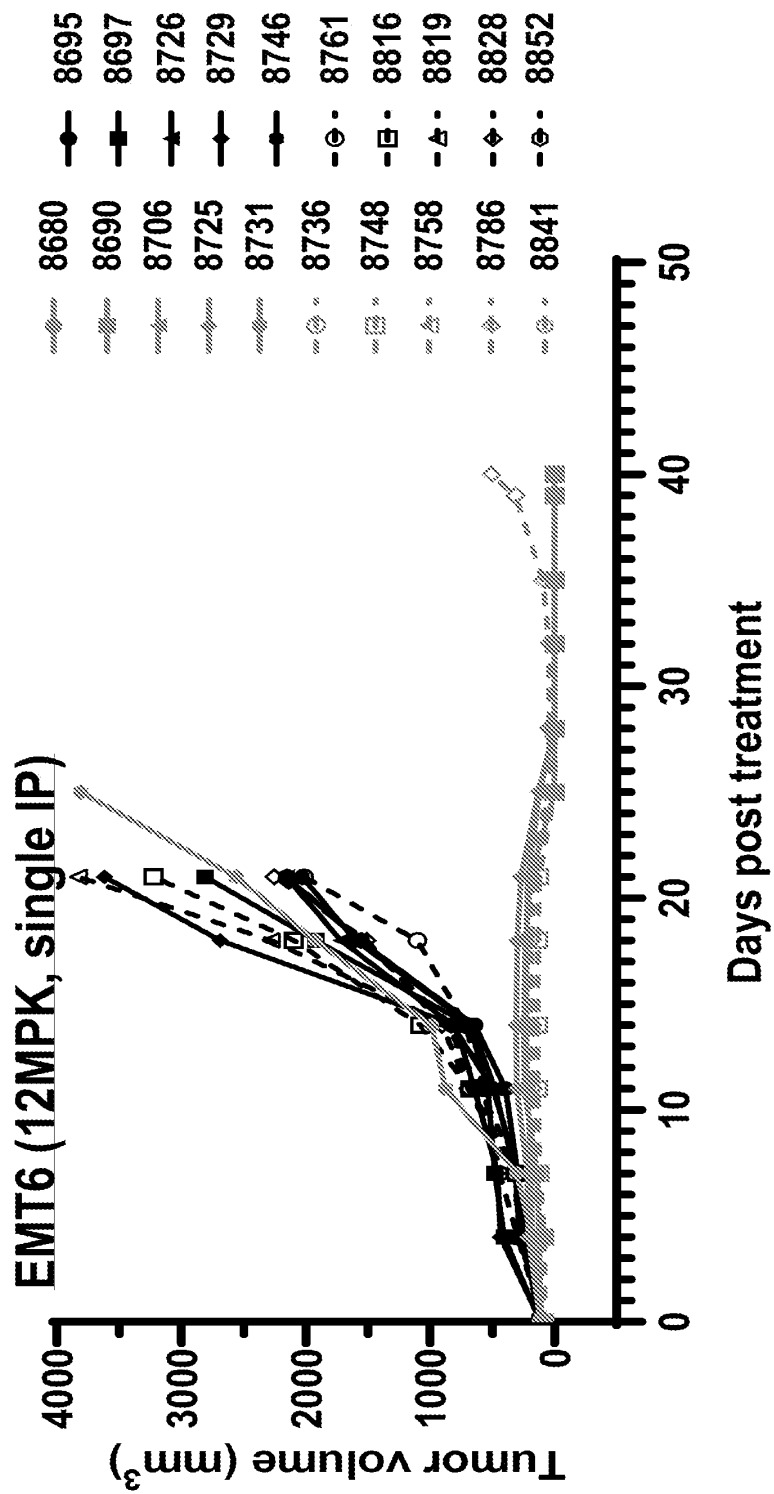


Fig. 38