

Kabat Numbering	VH Sequences																								
	CDR 2																		CDR 3						
	50	51	52	52a	53	54	55	56	57	58	59	60	61	62	63	64	65	95	96	97	98	99	100	101	102
ParB0067	T	I	S	Y	S	G	S	L	I	S	Y	A	D	S	V	K	G	I	N	N	D	P	M	D	V
PaB670129					H			H				H				H	H		H	H					
PaB670010										H															
PaB670020																				H					
PaB670034																									
PaB670045																			H	H					
PaB670048																			H	H					H
PaB670064																									
PaB670066																									
PaB670067																									
PaB670068																									
PaB670070																									
PaB670071																									
PaB670073																									
PaB670075																									
PaB670076																									
PaB670077																									
PaB670078																									
PaB670079																									
PaB670080																									
PaB670081				H			H	H			H	H			H	H									
PaB670082				H		H							H			H									
PaB670083			H	H			H		H		H			H											
PaB670084				H			H			H	H				H										
PaB670085					H			H				H	H		H										
PaB670087					H			H						H	H		H								
PaB670088							H			H				H	H	H									
PaB670089					H			H			H			H		H									
PaB670090					H		H	H			H			H			H								
PaB670091				H			H			H	H	H	H												
PaB670092					H			H				H				H	H								
PaB670093					H	H	H				H														
PaB670094					H		H	H			H				H	H									
PaB670095					H		H	H							H	H	H								
PaB670097			H	H			H		H			H	H	H											
PaB670098				H			H		H	H					H		H								
PaB670099					H			H				H				H	H								
PaB670100					H		H	H			H		H	H		H									
PaB670101																			H	H	H		H		H
PaB670102																				H					H
PaB670103																									

Figure 1A

Kabat Numbering	VH Sequences																								
	CDR 2																CDR 3								
	50	51	52	52a	53	54	55	56	57	58	59	60	61	62	63	64	65	95	96	97	98	99	100	101	102
ParB0067	T	I	S	Y	S	G	S	L	I	S	Y	A	D	S	V	K	G	I	N	N	D	P	M	D	V
PaB670104																									
PaB670105																									
PaB670106																									
PaB670107																									
PaB670108																									
PaB670114										H										H					
PaB670115				H			H	H			H	H			H	H				H					
PaB670116				H			H			H	H				H					H					
PaB670117							H			H				H	H	H				H					
PaB670118					H			H			H			H		H				H					
PaB670119					H			H				H			H	H				H					
PaB670120					H		H	H							H	H	H			H					
PaB670121					H			H				H				H	H			H					
PaB670122										H									H	H					
PaB670123				H			H	H			H	H			H	H			H	H					
PaB670125							H			H				H	H	H			H	H					
PaB670126					H			H			H			H		H			H	H					
PaB670127					H			H				H			H	H			H	H					
PaB670128					H		H	H							H	H	H		H	H					
PaB670136					H		H	H							H	H	H		H	H					H
PaB670137					H			H				H				H	H		H	H					H
PaB670141																				H					
PaB670142																			H	H					
PaB670143					H		H	H							H	H	H								
PaB670144					H		H	H							H	H	H			H					
PaB670146																				H					
PaB670148					H		H	H							H	H	H								
PaB670149					H		H	H							H	H	H			H					
PaB670151																				H					
PaB670152																			H	H					
PaB670153					H		H	H							H	H	H								
PaB670156																				H					
PaB670157																			H	H					
PaB670158					H		H	H							H	H	H								
PaB670159					H		H	H							H	H	H			H					
PaB670160																				H					
PaB670161																			H	H					
PaB670162					H		H	H							H	H	H								
PaB670163					H		H	H							H	H	H			H					

Figure 1B

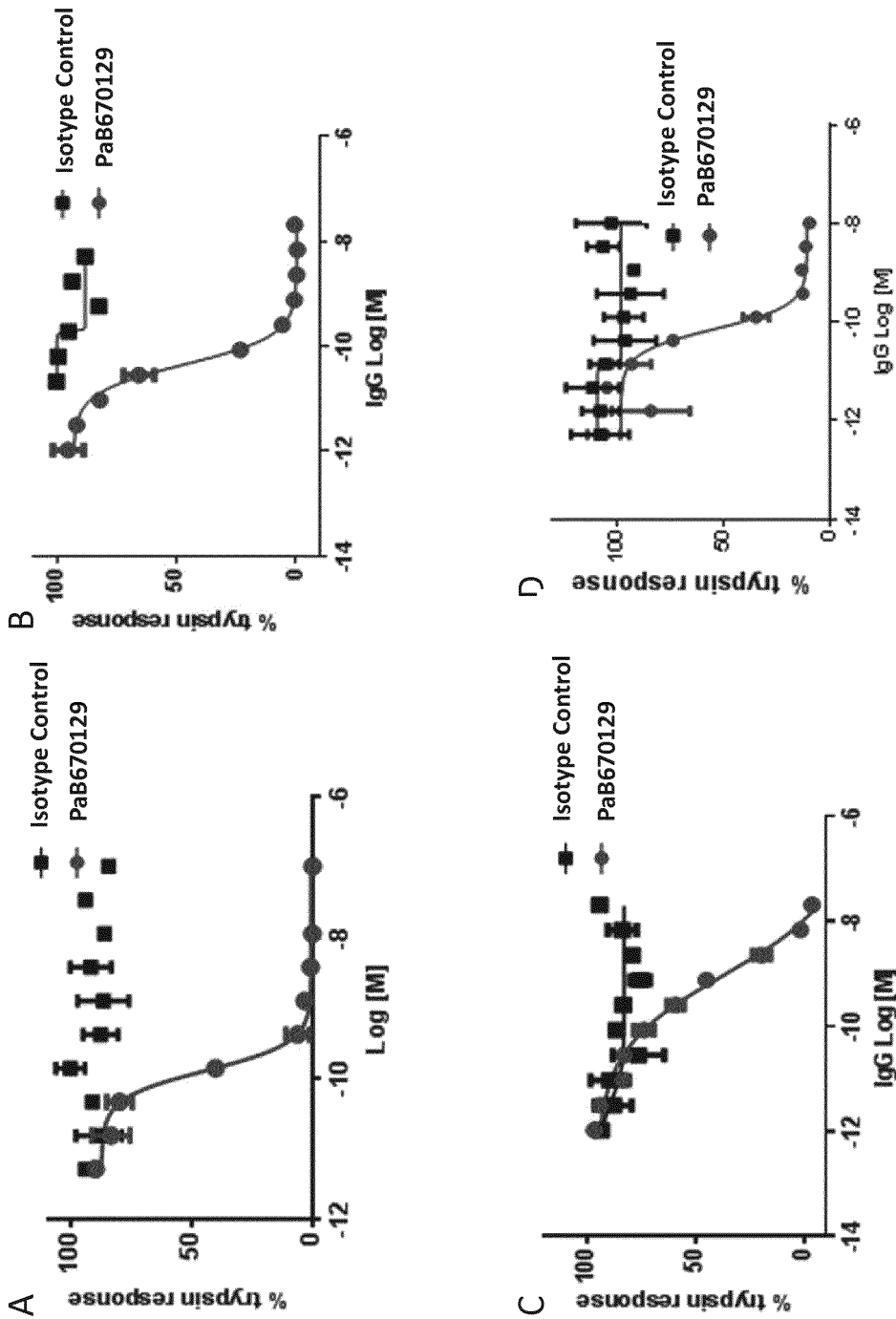
Kabat Numbering	VL Sequences														
	CDR 3														
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PaB670129															
PaB670010															
PaB670020															
PaB670034									H						
PaB670045															
PaB670048															
PaB670064	H			H	H			H						H	
PaB670066	H	H		H			H	H						H	
PaB670067	H			H	H	H			H			H			
PaB670068						H	H		H			H	H		
PaB670070					H		H	H			H				
PaB670071	H			H	H	H	H	H				H		H	
PaB670073		H		H		H		H	H			H			
PaB670075		H					H	H	H					H	
PaB670076	H				H	H	H					H			
PaB670077	H	H		H		H	H							H	
PaB670078	H	H		H		H		H				H			
PaB670079		H				H	H							H	
PaB670080						H	H	H						H	
PaB670081															
PaB670082															
PaB670083															
PaB670084															
PaB670085															
PaB670087															
PaB670088															
PaB670089															
PaB670090															
PaB670091															
PaB670092															
PaB670093															
PaB670094															
PaB670095															
PaB670097															
PaB670098															
PaB670099															
PaB670100															
PaB670101															
PaB670102															
PaB670103	H					H	H							H	

Figure 2A

Kabat Numbering	VL Sequences															
	CDR 3															
	89	90	91	92	93	94	95	95a	95b	95c	95d	95e	96	97		
Par80067	Q	T	W	D	G	N	P	T	T	G	E	T	N	V		
PaB670104		H				H	H	H								
PaB670105		H		H				H				H		H		
PaB670106	H				H			H	H	H	H			H		
PaB670107	H	H		H	H				H	H						
PaB670108		H		H		H	H	H								
PaB670114																
PaB670115																
PaB670116																
PaB670117																
PaB670118																
PaB670119																
PaB670120																
PaB670121																
PaB670122																
PaB670123																
PaB670125																
PaB670126																
PaB670127																
PaB670128																
PaB670136																
PaB670137																
PaB670141									H							
PaB670142									H							
PaB670143									H							
PaB670144									H							
PaB670146	H			H	H	H			H			H				
PaB670148	H			H	H	H			H			H				
PaB670149	H			H	H	H			H			H				
PaB670151	H				H	H	H					H				
PaB670152	H				H	H	H					H				
PaB670153	H				H	H	H					H				
PaB670156						H	H	H							H	
PaB670157						H	H	H							H	
PaB670158						H	H	H							H	
PaB670159						H	H	H							H	
PaB670160	H					H	H								H	
PaB670161	H					H	H								H	
PaB670162	H					H	H								H	
PaB670163	H					H	H								H	

Figure 2B

Figure 3

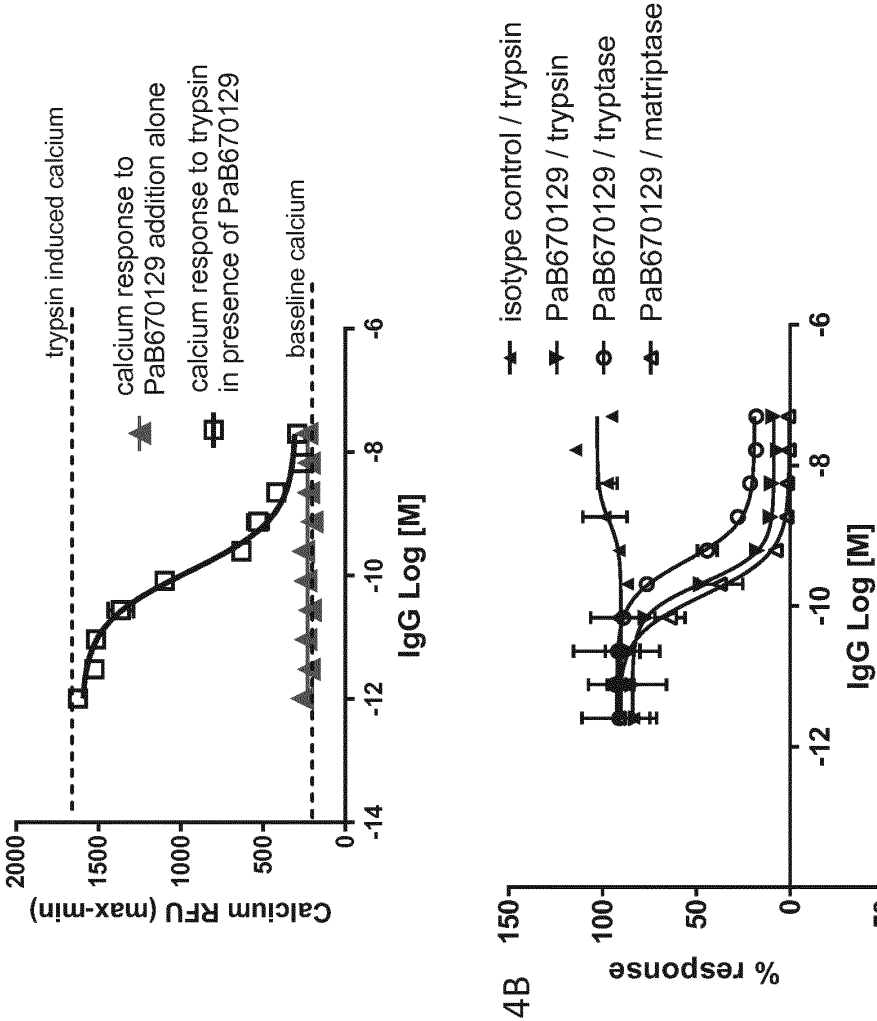
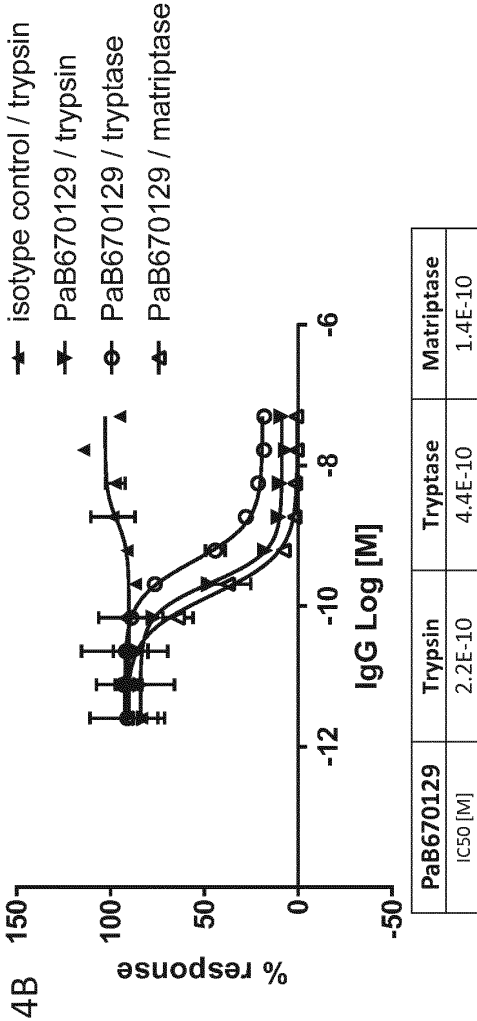


PAR2 FLIPR ASSAY POTENCY DATA IC ₅₀											
	Human A549 FLIPR IC ₅₀ (M)	SEM	n	Rat KNRK FLIPR IC ₅₀ (M)	SEM	n	Cyno CYNOM- K1 FLIPR IC ₅₀ (M)	SEM	n	Mouse LL/2 FLIPR IC ₅₀ (M)	n
PaB0067	1.16E-10	1.47E-11	5	7.23E-12	1.48E-12	6	5.87E-11		1	2.58E-11	2
PaB670034	2.06E-10		1	7.92E-12		1					
PaB670045	1.42E-10		1	1.02E-11		1					
PaB670048	1.31E-10	6.15E-12	3	1.17E-11	2.41E-12	4					
PaB670061	NI		1	NI		1					
PaB670062	2.34E-09		1	7.89E-10		1					
PaB670066	7.22E-10		1	3.84E-09		1					
PaB670075	8.04E-10		1	NI		1					
PaB670076	1.15E-10	5.10E-12	2	7.89E-11	3.82E-11	2					
PaB670077	9.28E-10		1	1.56E-09		1					
PaB670078	5.88E-10		1	1.25E-09		1					
PaB670079	7.01E-10		1	4.64E-10		1					
PaB670080	2.61E-10		1	1.44E-11		1					
PaB670084	1.23E-10	3.64E-11	2	2.27E-11	7.73E-12	2					
PaB670103	2.38E-10		1	1.46E-11		1					
PaB670114	1.62E-10		1	1.35E-09		1					
PaB670115	1.28E-10		1	2.97E-10		1					
PaB670116	3.48E-10		1	2.60E-08		1					
PaB670117	1.64E-10		1	5.79E-10		1					
PaB670118	1.41E-10		1	1.04E-10		1					
PaB670119	1.08E-10		1	8.48E-11		1					
PaB670120	1.50E-10	8.95E-12	2	9.53E-11	2.02E-11	2					
PaB670121	1.13E-10		1	1.41E-10		1					
PaB670122	2.18E-10		1	NI		1					
PaB670123	2.55E-10		1	2.54E-09		1					
PaB670124	NI		1	NI		1					
PaB670125	2.27E-10		1	1.34E-09		1					
PaB670126	1.64E-10		1	3.95E-10		1					
PaB670127	1.13E-10		1	2.12E-10		1					
PaB670128	1.23E-10	4.05E-12	2	2.85E-10	8.33E-11	3	3.71E-11		1		
PaB670129	1.09E-10	1.41E-11	4	5.21E-10	7.47E-11	6	4.64E-11	3.87E-12	3	5.09E-11	2
PaB670130	NI		1	NI		1					
PaB670131	NI		1	NI		1					
PaB670132	NI		1	NI		1					
PaB670133	NI		1	NI		1					
PaB670134	NI		1	7.04E-10		1					
PaB670135	NI		1	4.32E-10		1					
PaB670136	1.37E-10	2.43E-11	2	4.45E-10	3.12E-11	2					
PaB670137	1.57E-10		1	1.14E-09		1					
PaB670139	9.62E-11	7.73E-12	2	3.06E-11	7.38E-12	2					
PaB670140	NI		1	NI		1					
PaB670129 Fab	3.5E-09		1	3.44E-08		1					

FIGURE 3E

Figure 4

4A



PaB670129	Trypsin	Trypsase	Matriptase
IC50 [M]	2.2E-10	4.4E-10	1.4E-10

Figure 5

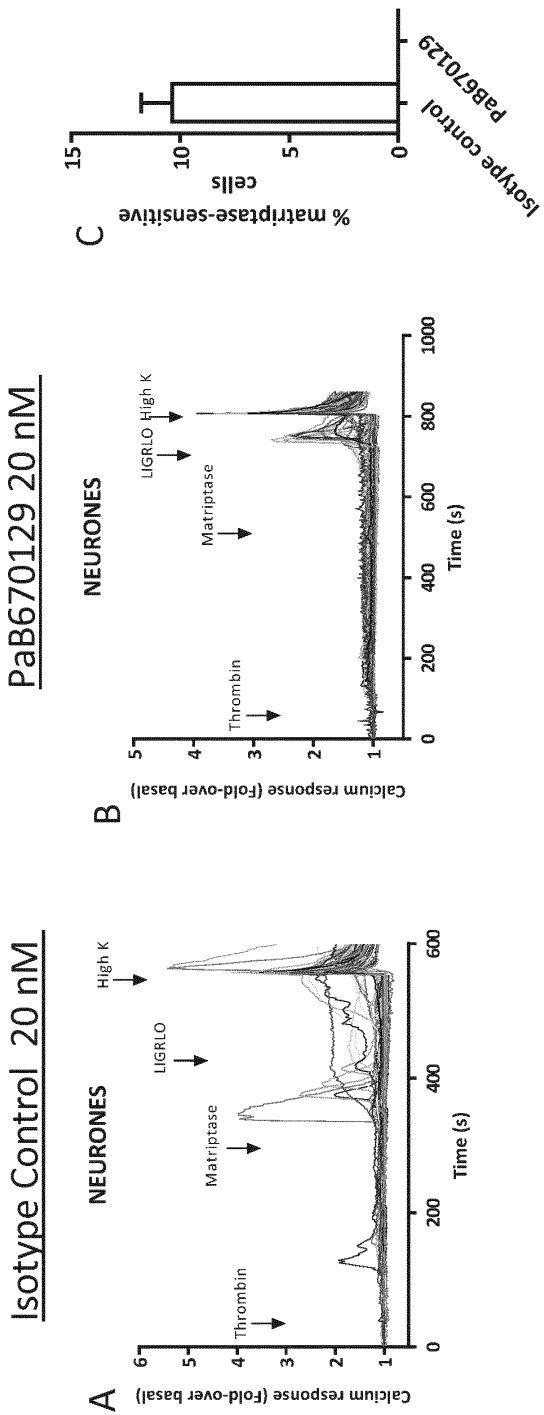


Figure 5

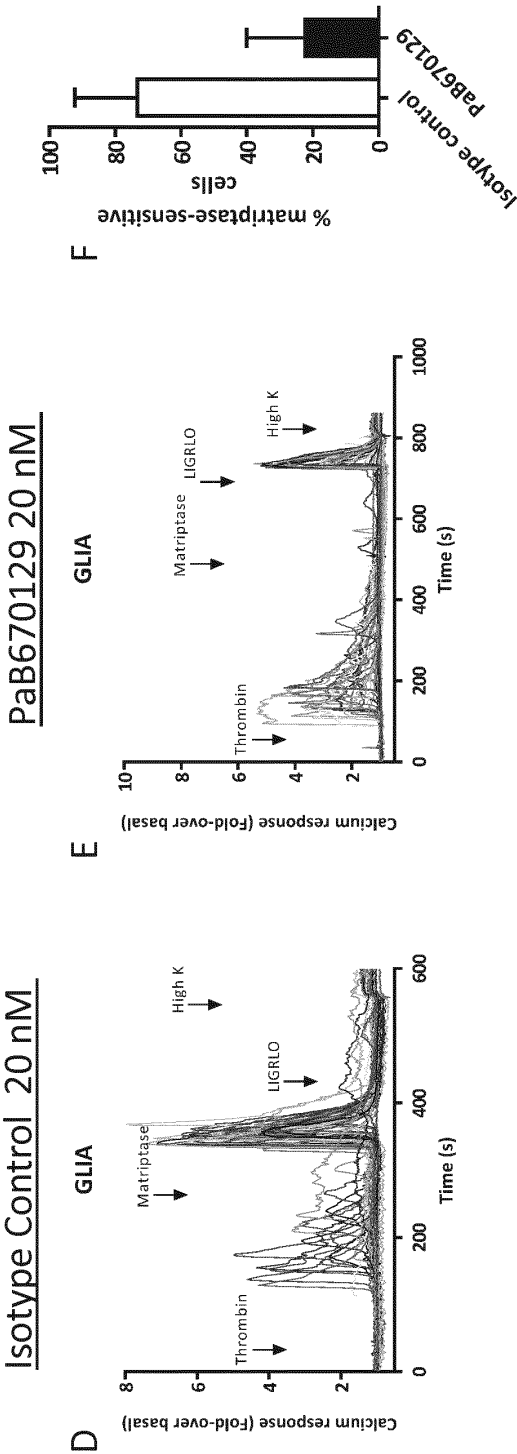
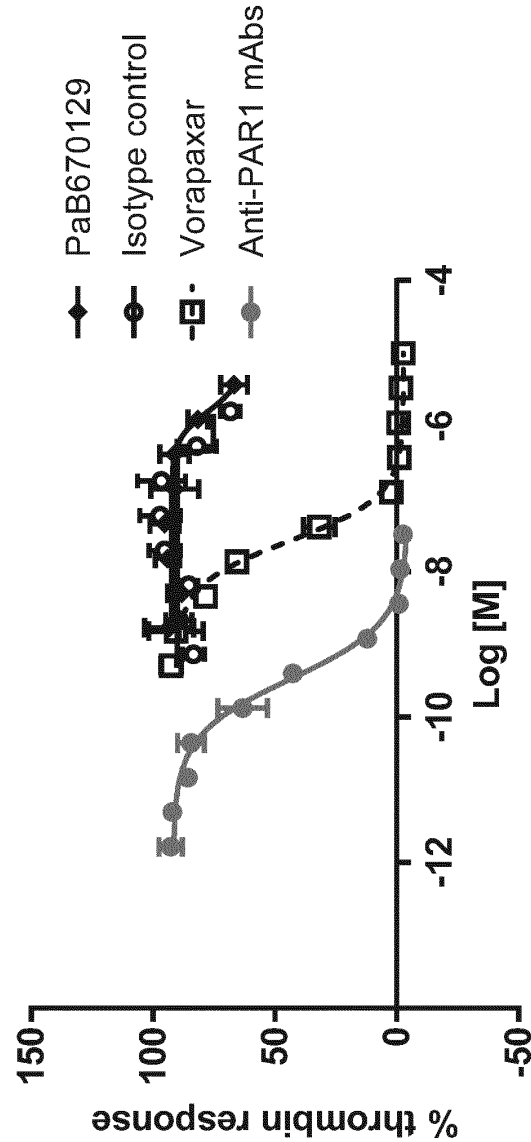


Figure 6



	PaB670129	Anti-PAR-1 WEDE15/ATAP2	Vorapaxar
PAR-1 IC50 [nM]	Non-Inhibitory Tested up to 4 µM (0.6 mg/mL)	0.33	30.3 (± 3.8)

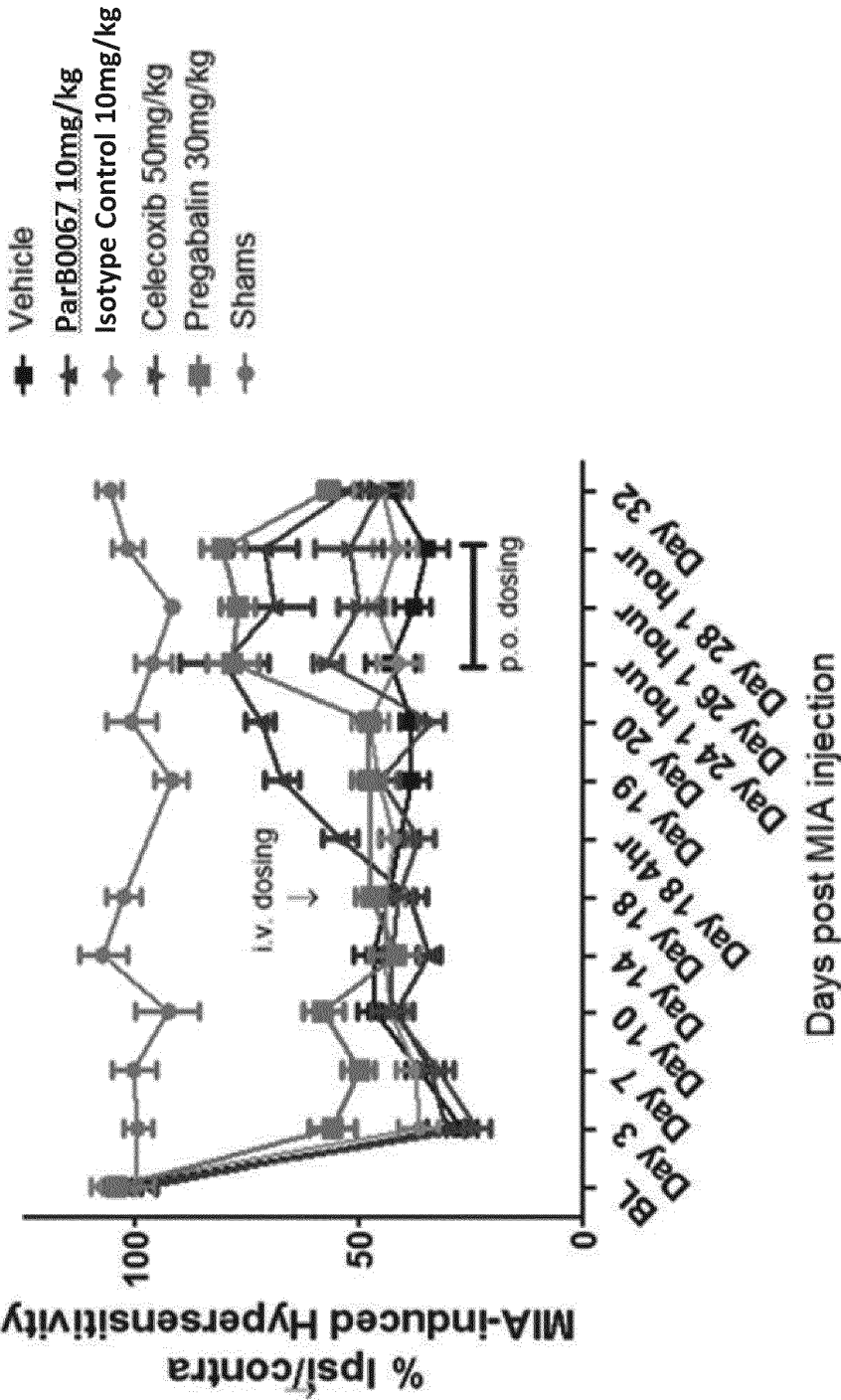
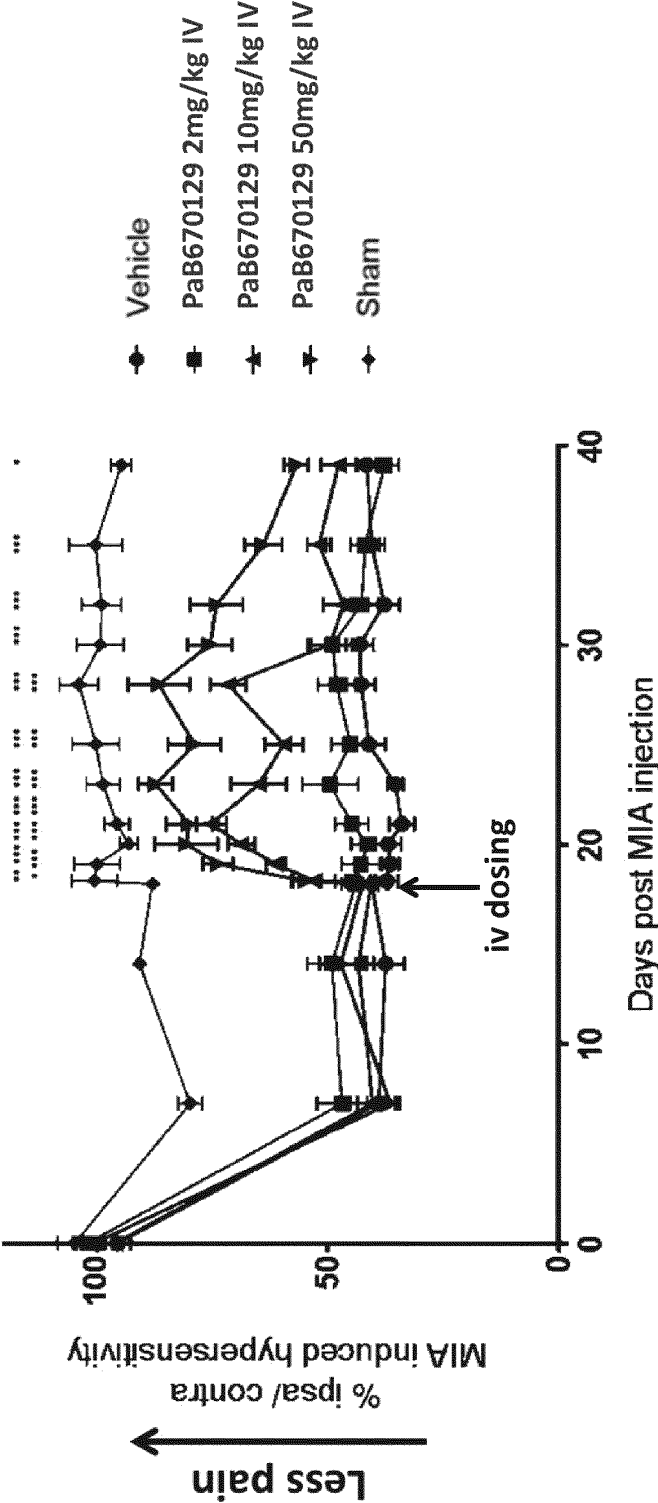


Figure 7A

Fig 7B



Statistical analysis - Repeated measures ANOVA, followed by a planned comparison test, using InVivoStat.

Significant hyperalgesia (*** $p < 0.001$) post injection of MIA with vehicle from day 7 to day 42 when compared to baseline and sham.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ Significant reversal of hyperalgesia when compared to vehicle at each time point.

