

Antibody	Immunogen	Protocol	Mouse strain	
GM37	FL human Alpha- synuclein fibrils Alternating with 1-60 alpha- synuclein 1-119 alpha- synuclein	Complete Freunds adjuvant and incomplete Freunds adjuvant	HCo17-Balb/c	
GM285	FL human alpha- synuclein monomer followed by fibrils or monomer	Complete Freunds adjuvant and incomplete Freunds adjuvant	HCo12-Balb/c	

Fig 1

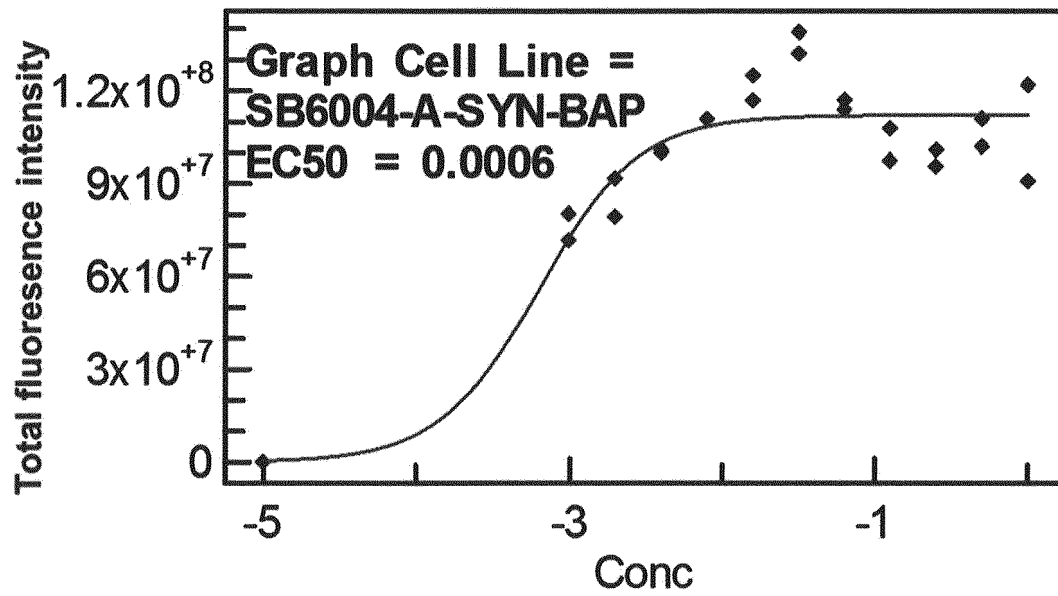


Fig 2A

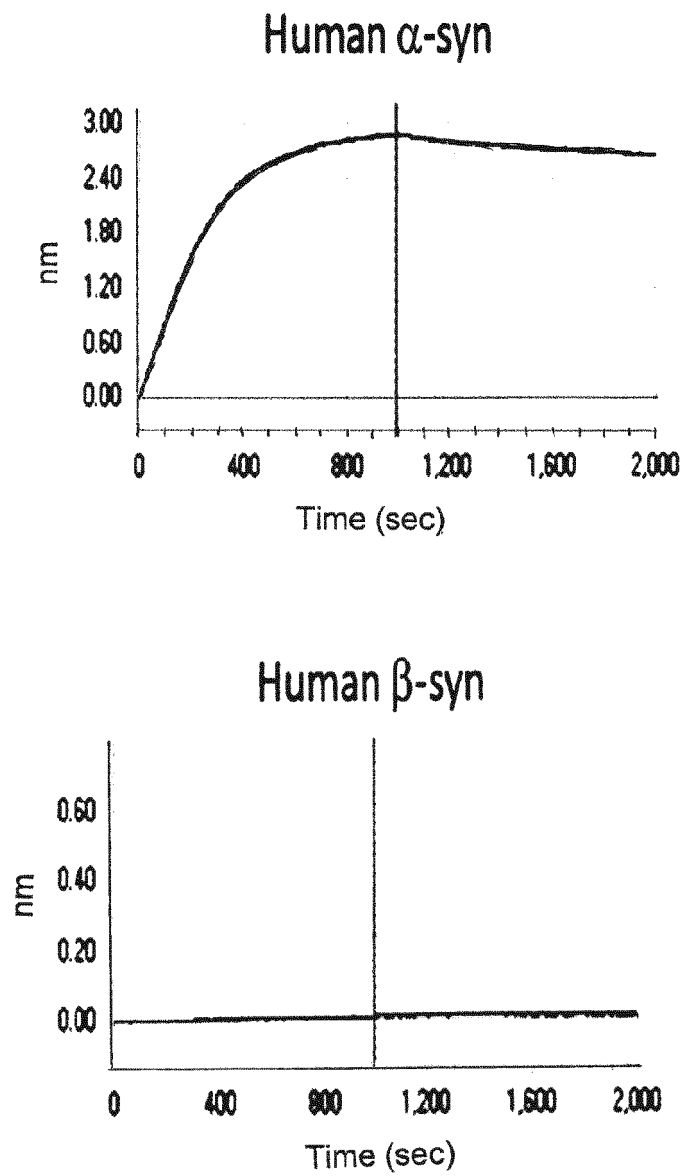


Fig 2B

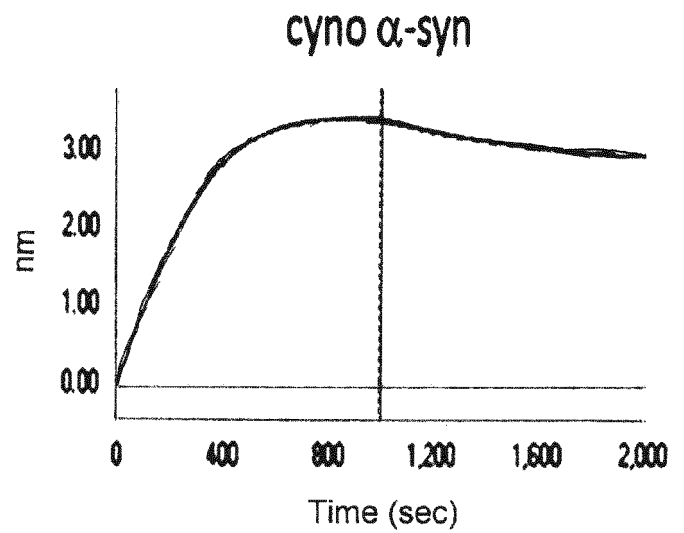
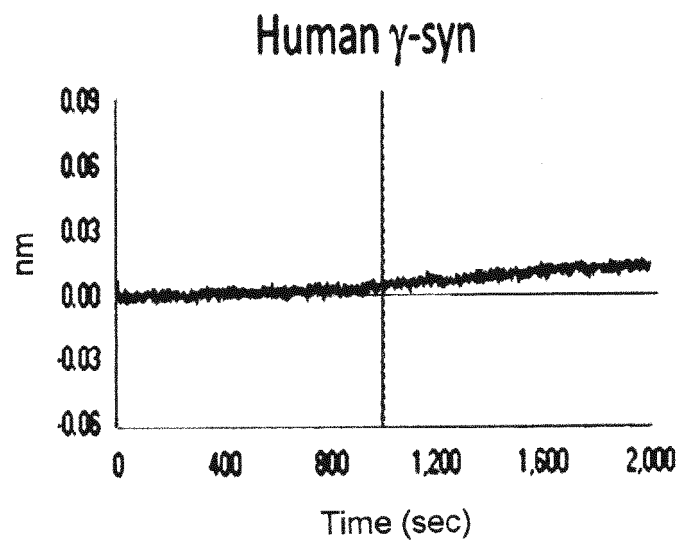


Fig 2B (continued)

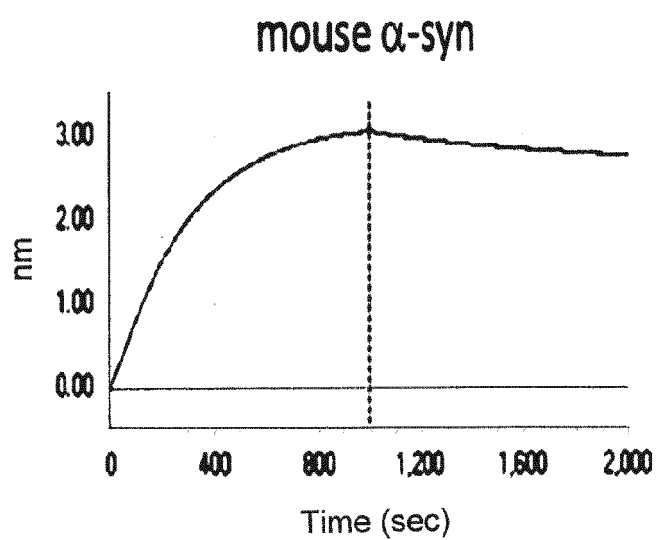


Fig 2B (continued)

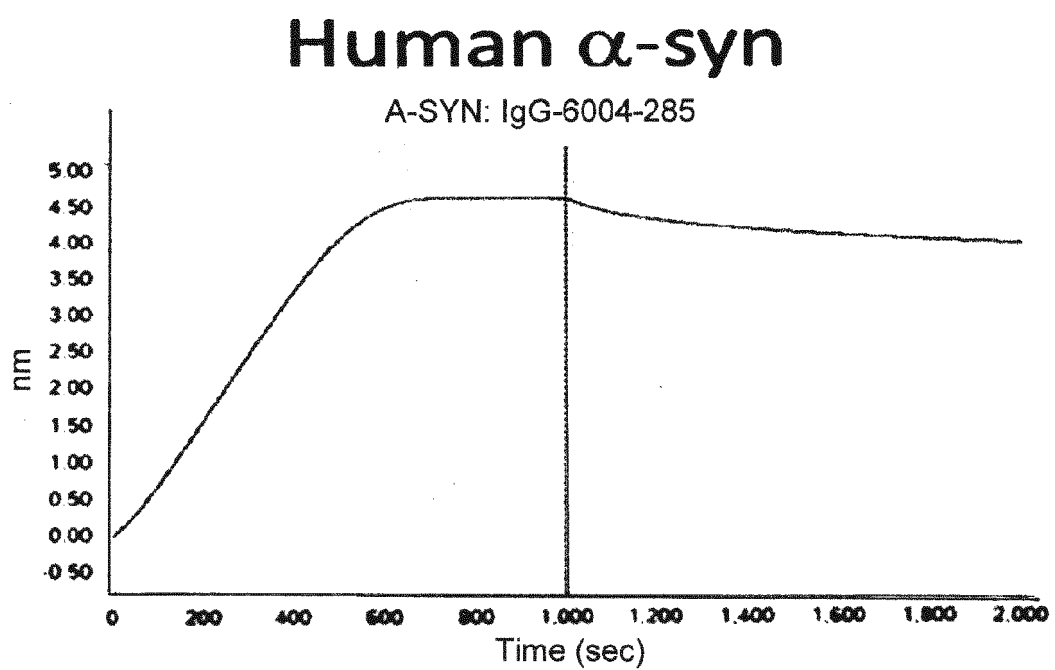


Fig 2C

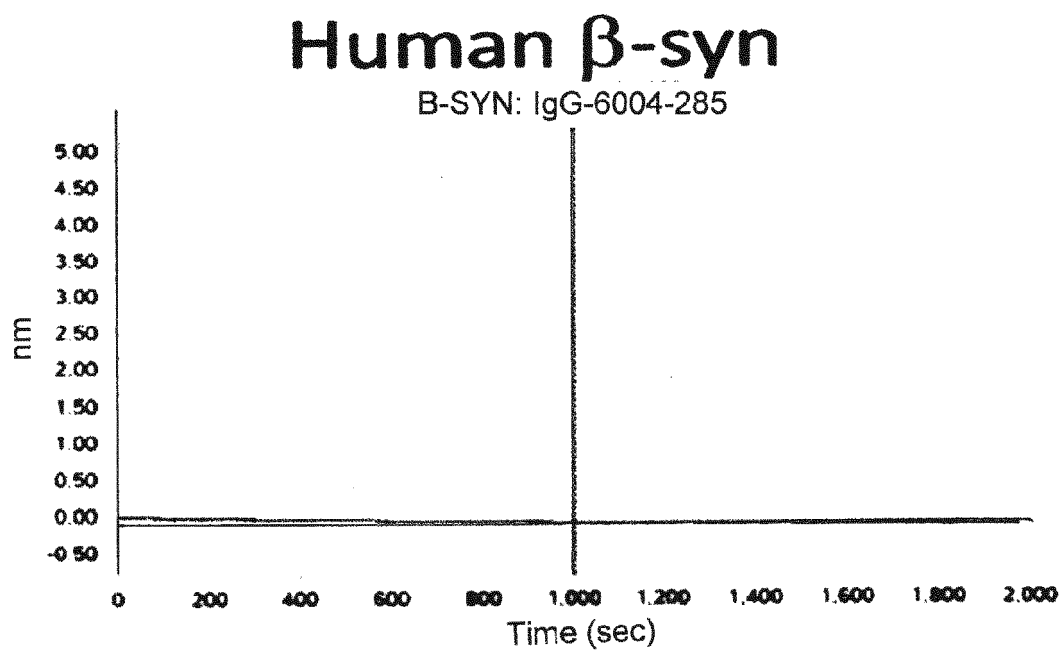


Fig 2C (continued)

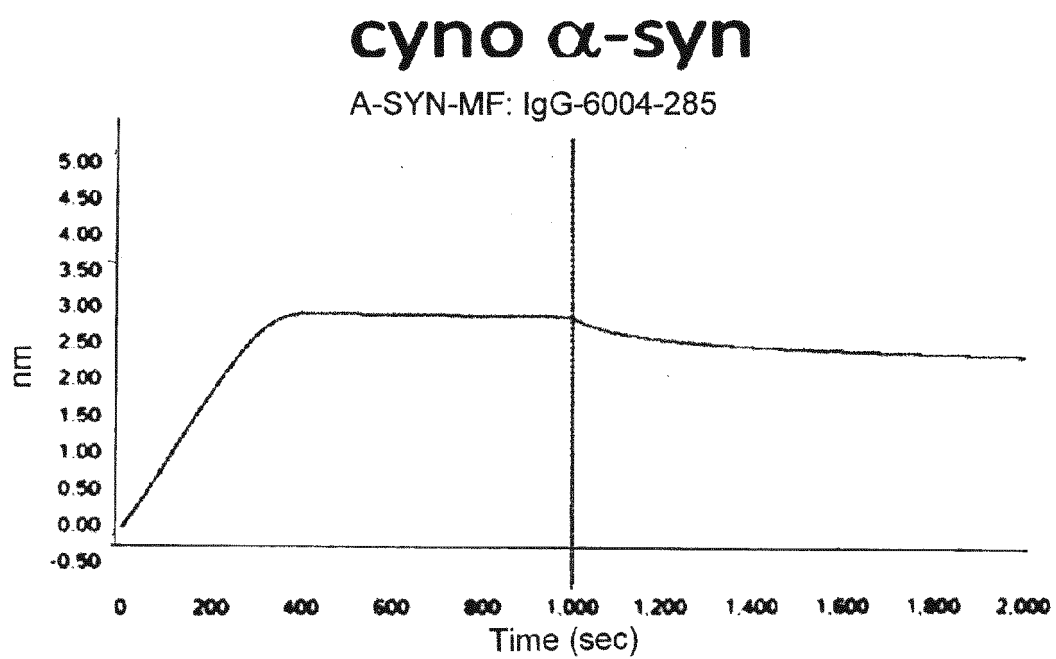


Fig 2C (continued)

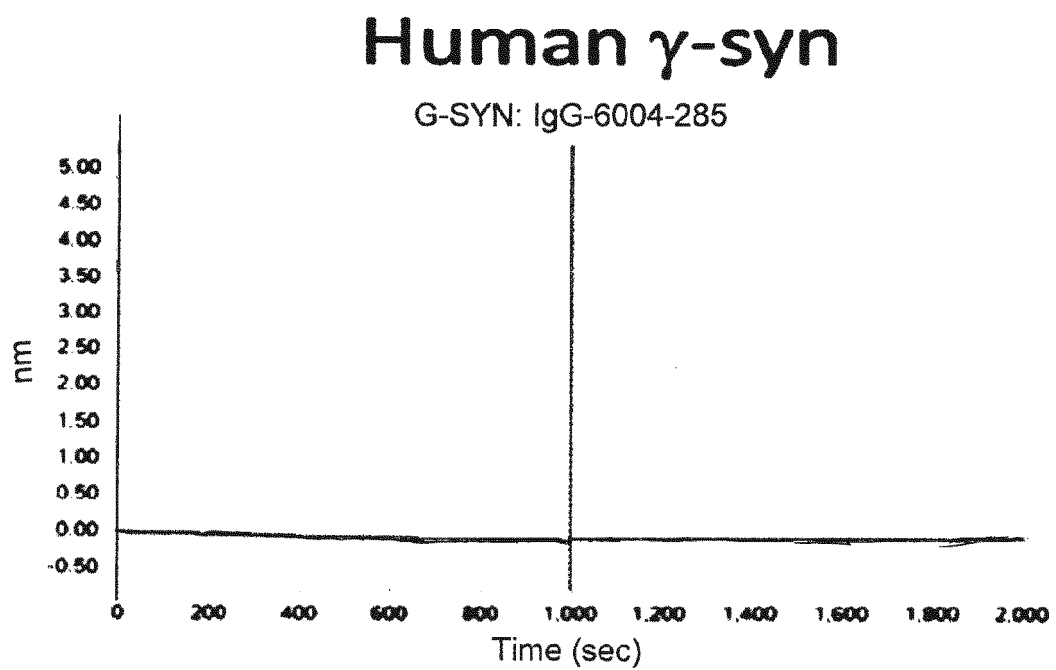


Fig 2C (continued)

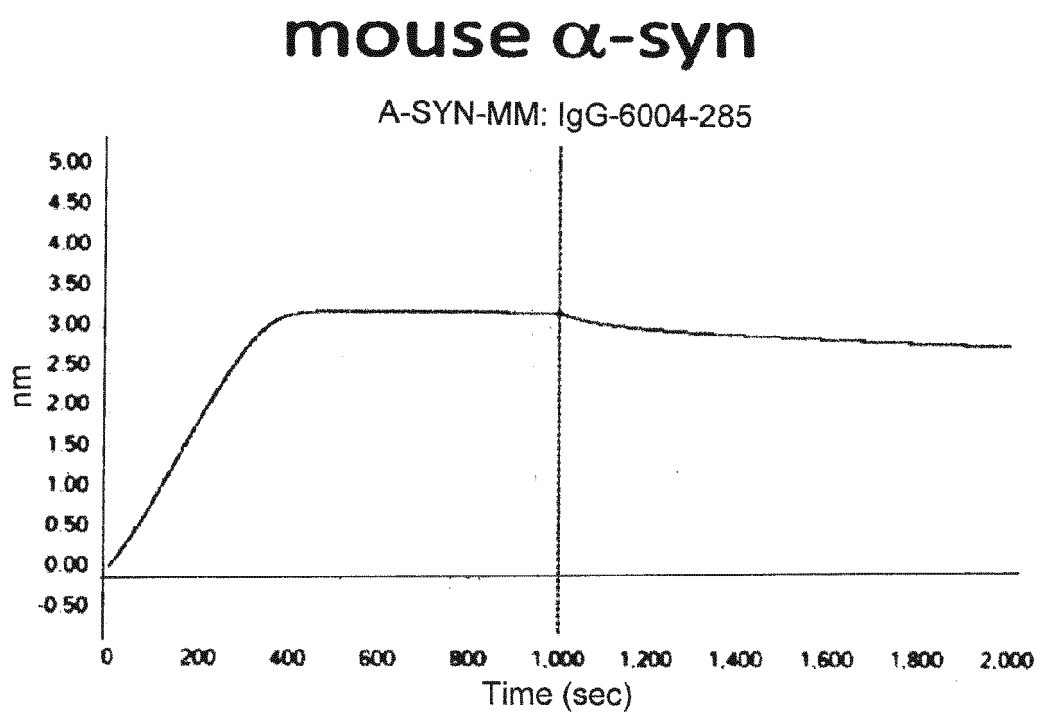


Fig 2C (continued)

A

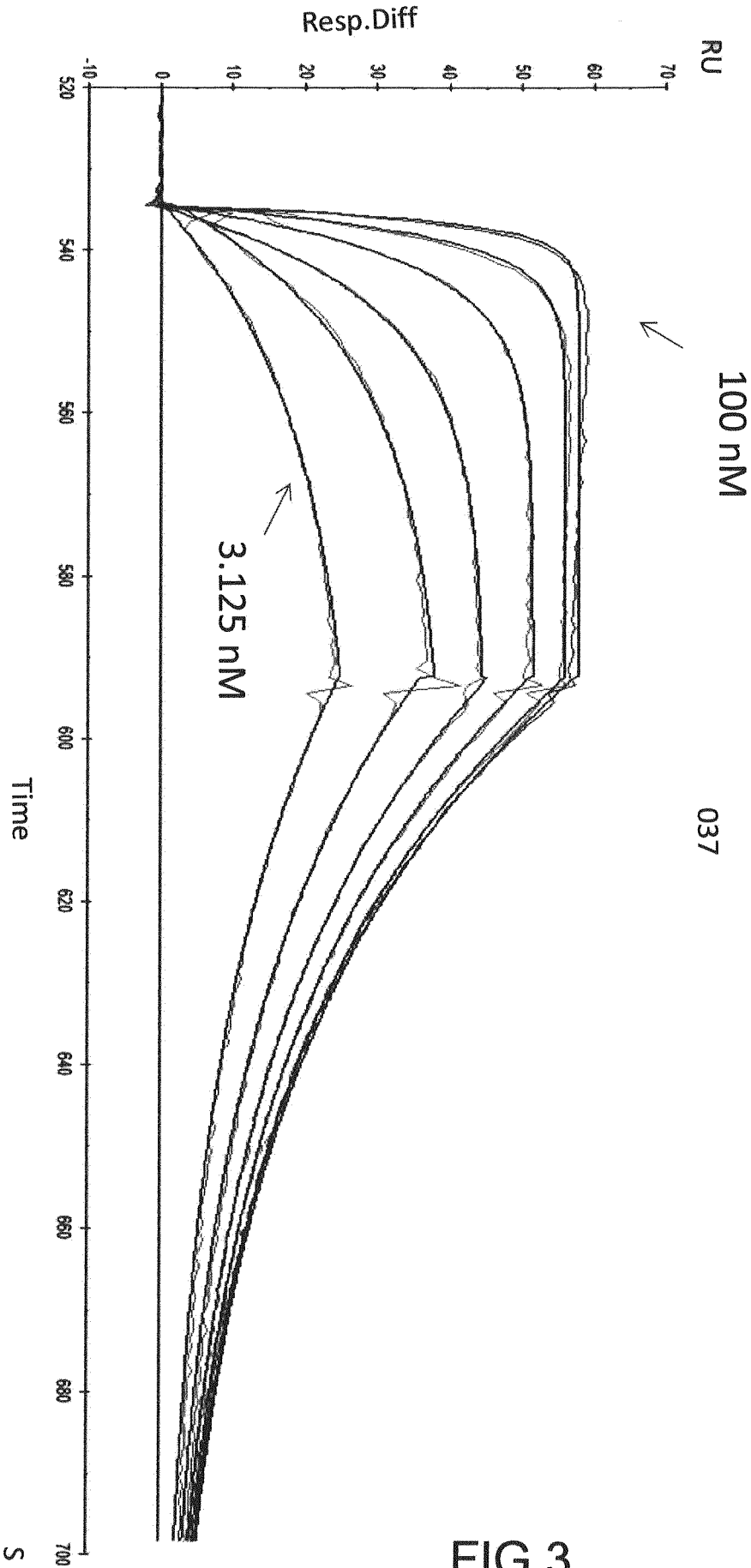
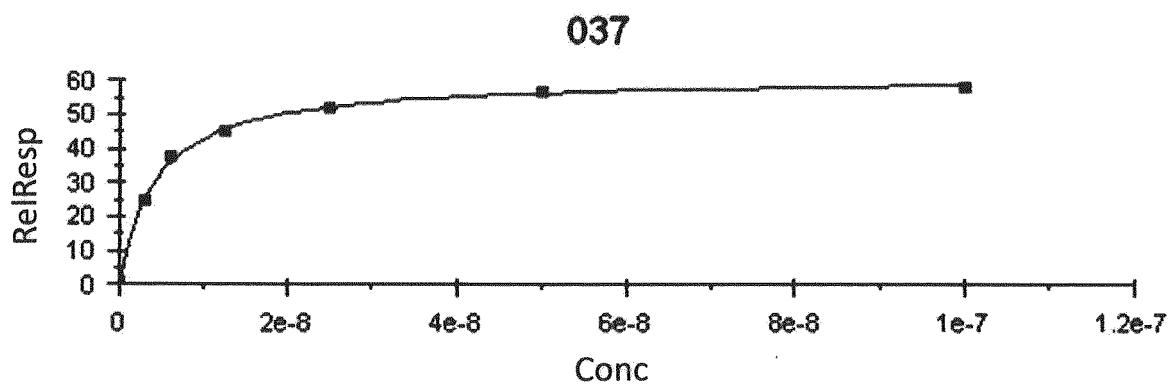


FIG 3

B**C**

Name	KA(1/M)	KD(nM)	Rmax	Chi2
hlG1-6004-037 C106S	2.33E+08	4.29	61.1	0.96

Fig 3 (continued)

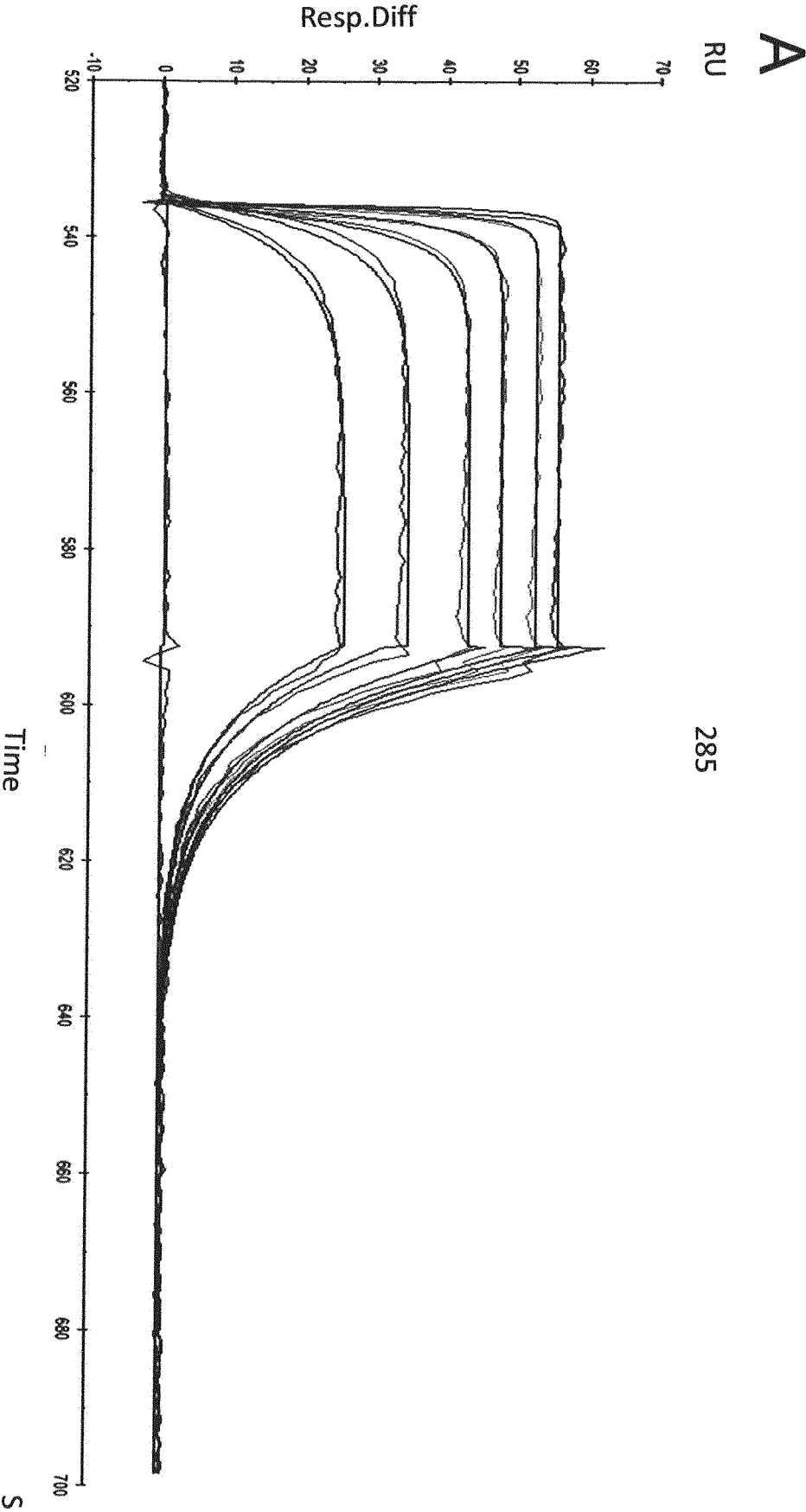
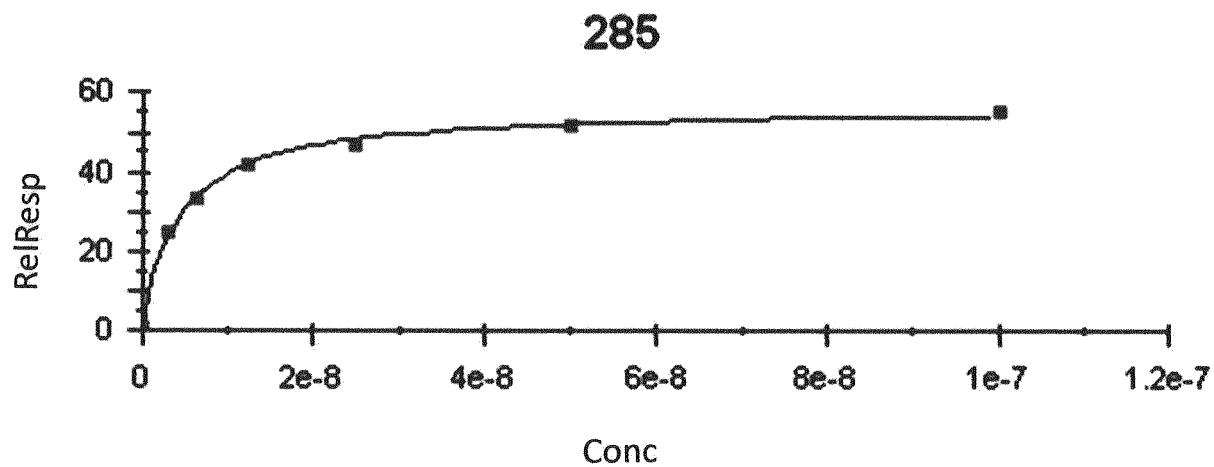


FIG 4

B**C**

Name	KA(1/M)	KD(nM)	Rmax	Chi2
hlgG1-6004-085	2.33E+08	4.30	56.3	0.77

Fig 4 (continued)

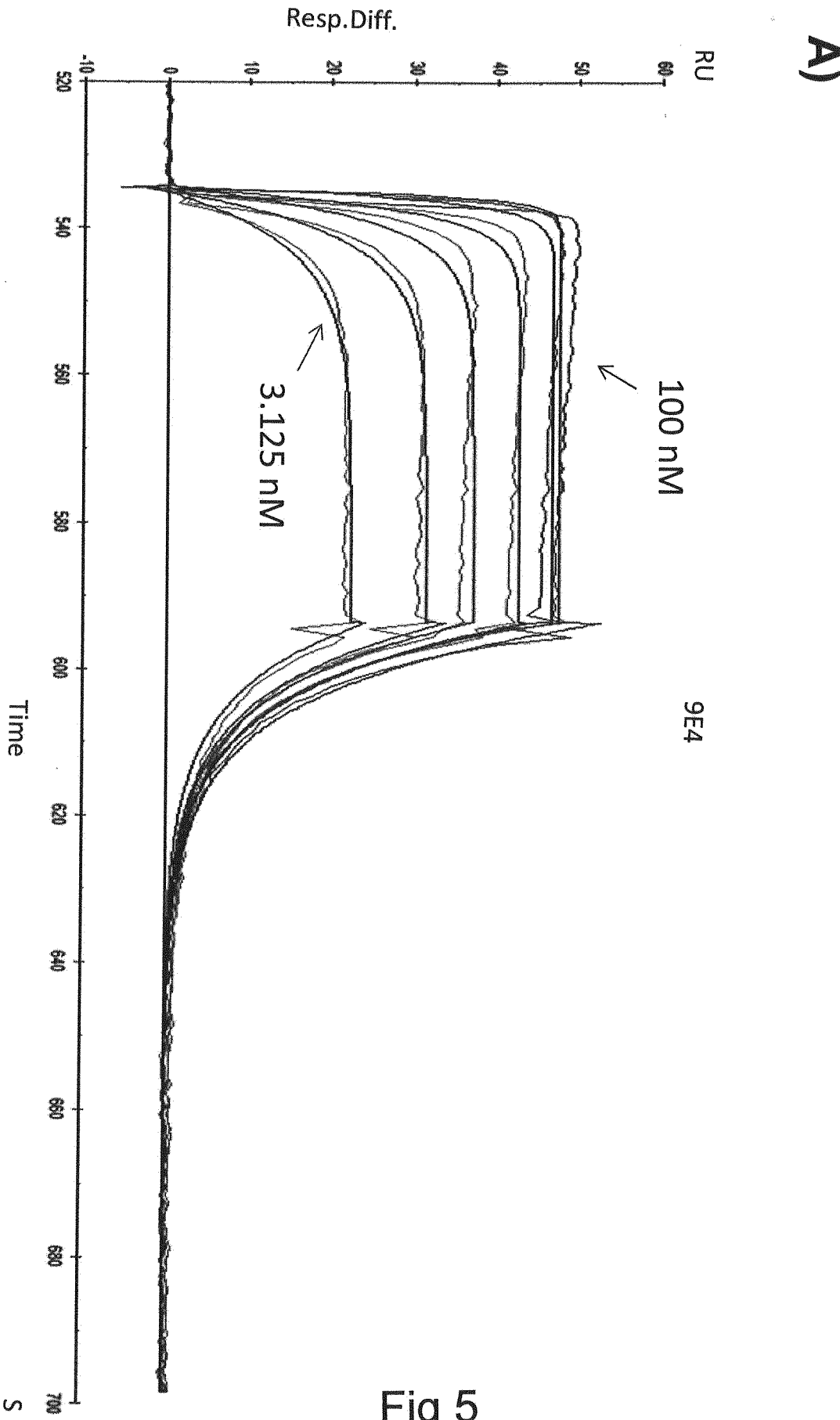
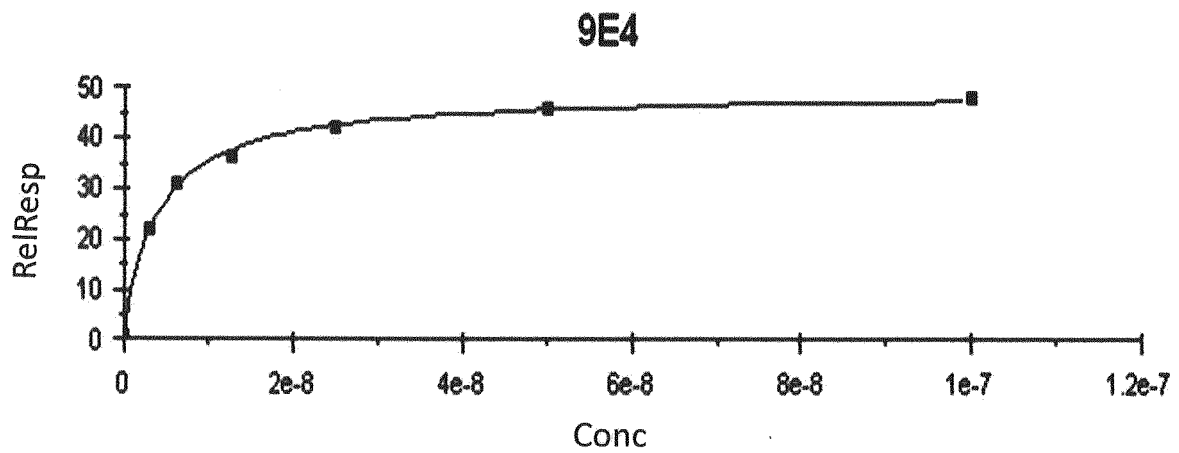


Fig 5

B)



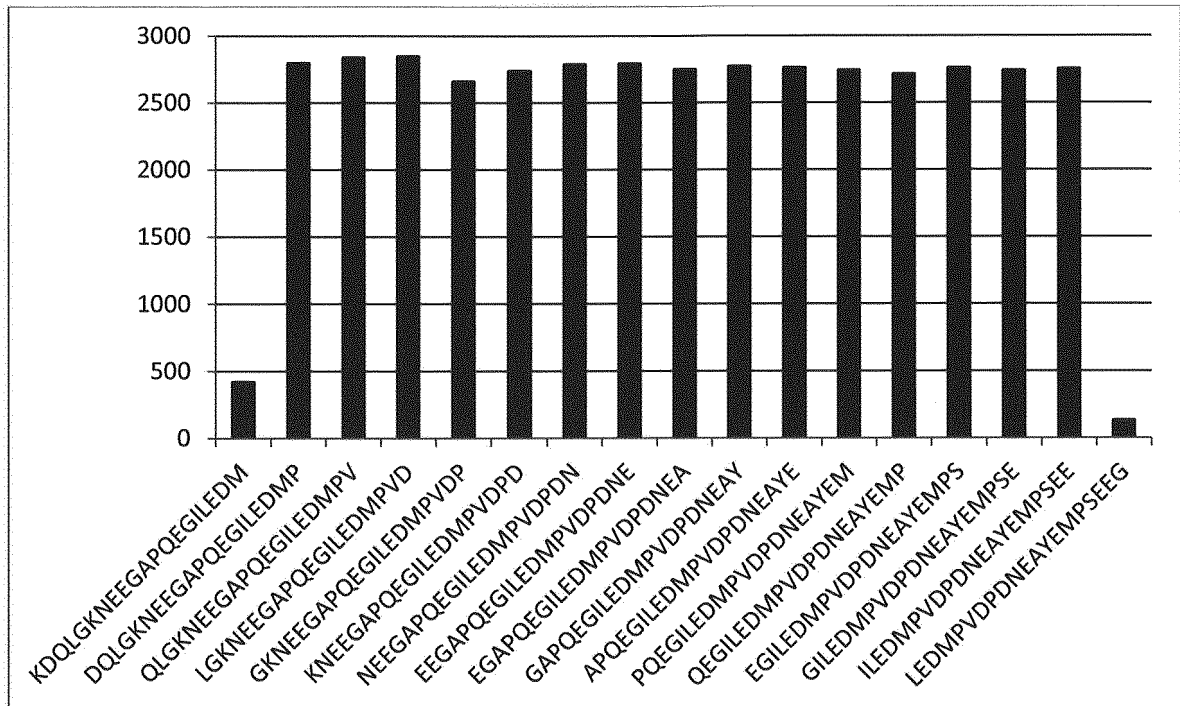
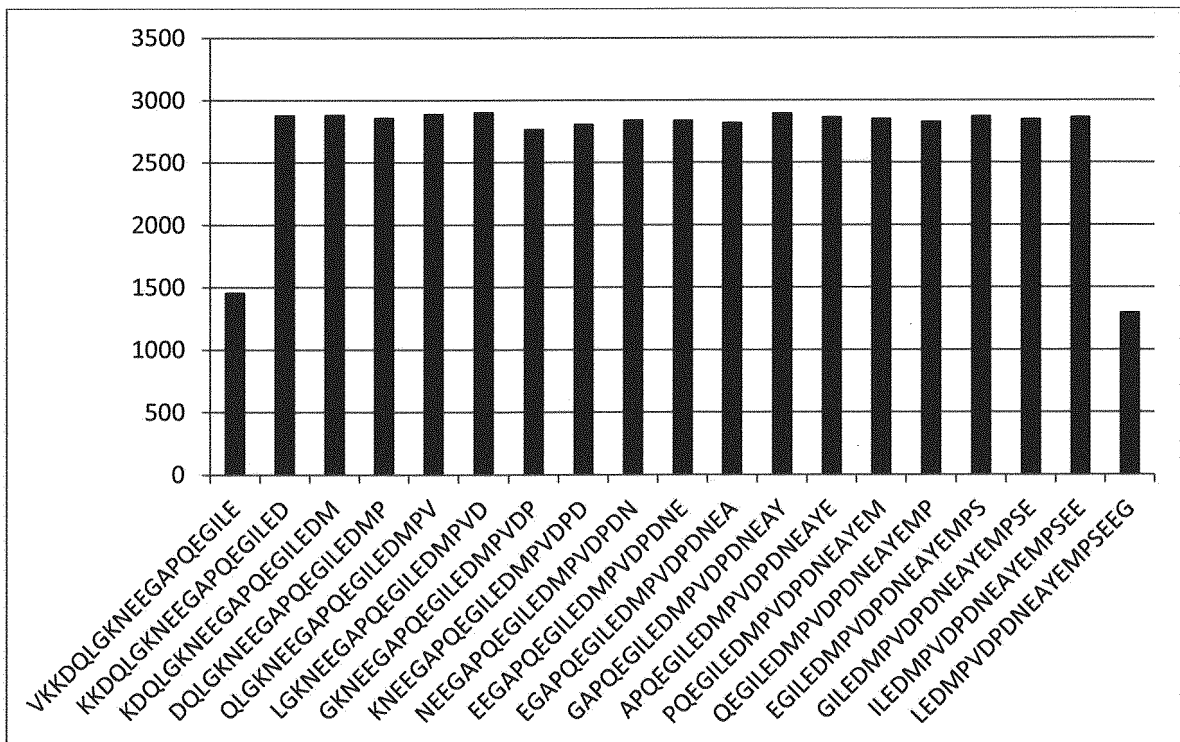
C)

Name	KA(1/M)	KD(nM)	Rmax	Chi2
hlgG1-9E4	2.58E+08	3.88	49.2	0.61

Fig 5 (continued)

↓
MDVFMKGLSKAKEGVVAAAETKQGVAAAGKTKEGVLYVGSKTKEGVVHGVATVAEKTKEQVTNVGGAVV
TGVTAQAQKTVEGAGSIAAATGFVKKDQLGKNEEGAPQEGILEDMPVDPDNEAYEMPSEEGYQDYEPEA
↑ ↑ ↑

Fig 6

A**B****Fig 7**

A

MDVFMKGLSKAKEGVVAAAEKTKQGVAEAAGKTKEGVLYVGSKTKEGVVHGVATVAEKTKEQVTNVGGAVVTGVTAV
AQKTVEGAGSIAAATGFVKKDQLGKNEEGAPQEG**I****L****E****D****M****P****V****D****P****D****N****E****A****Y****E****M****P****S****E****E****G****Y****Q****D****Y****E****P****E****A**

↑ ↑ ↑

B



Fig 8

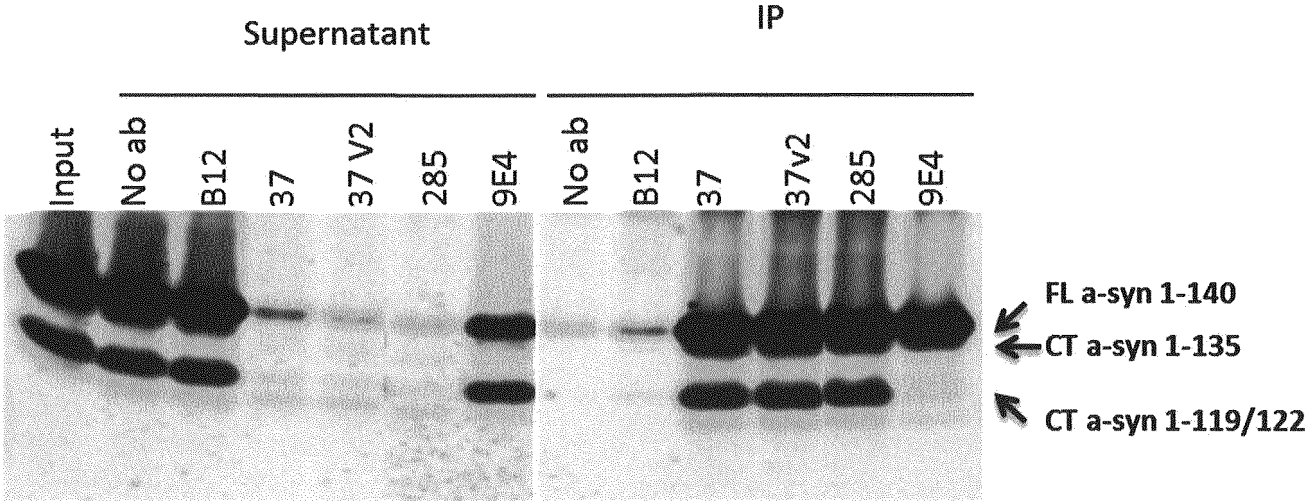
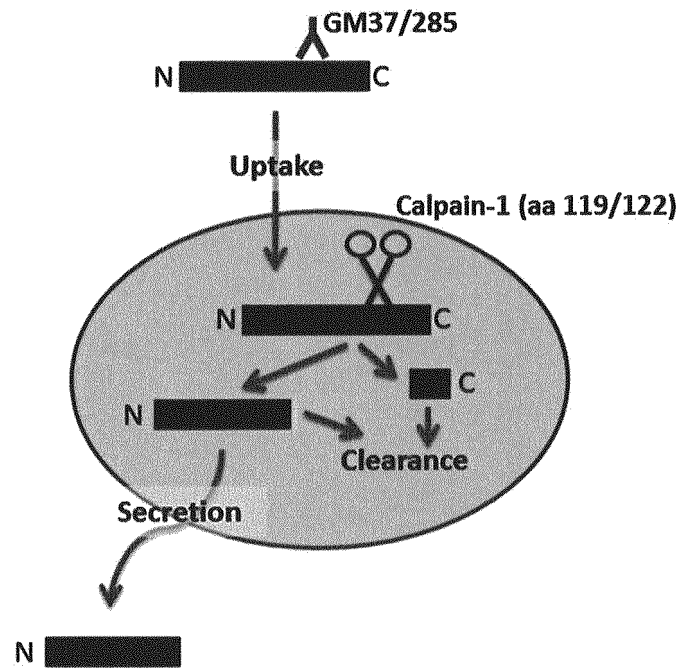


Fig 9

**Fig 10**

A

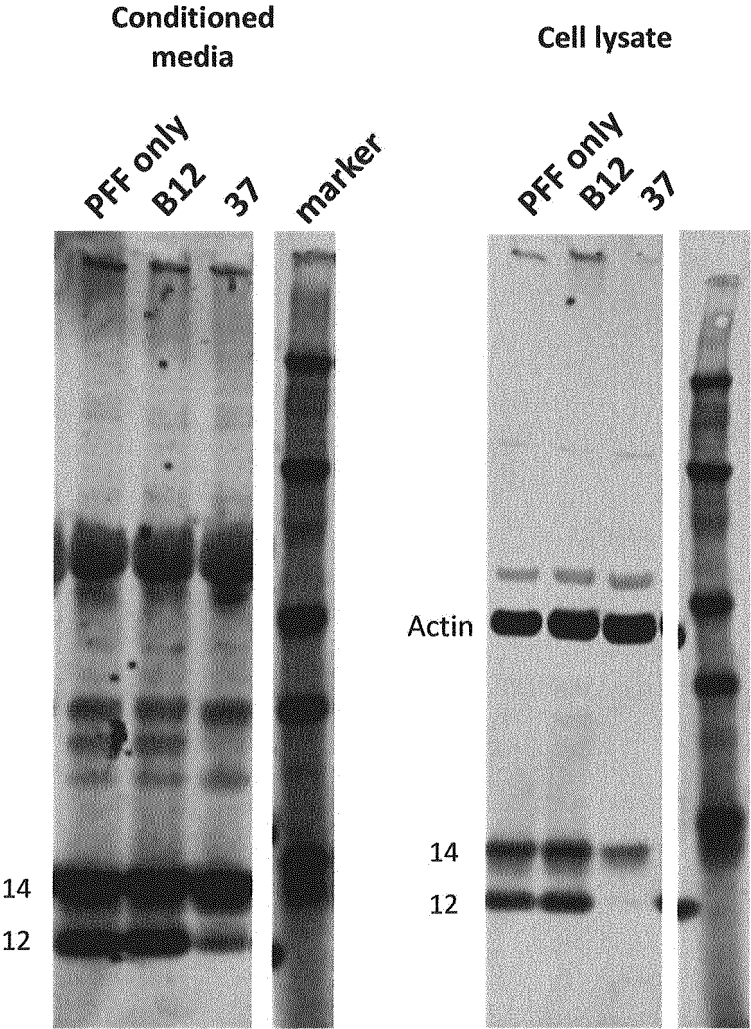


Fig 11A

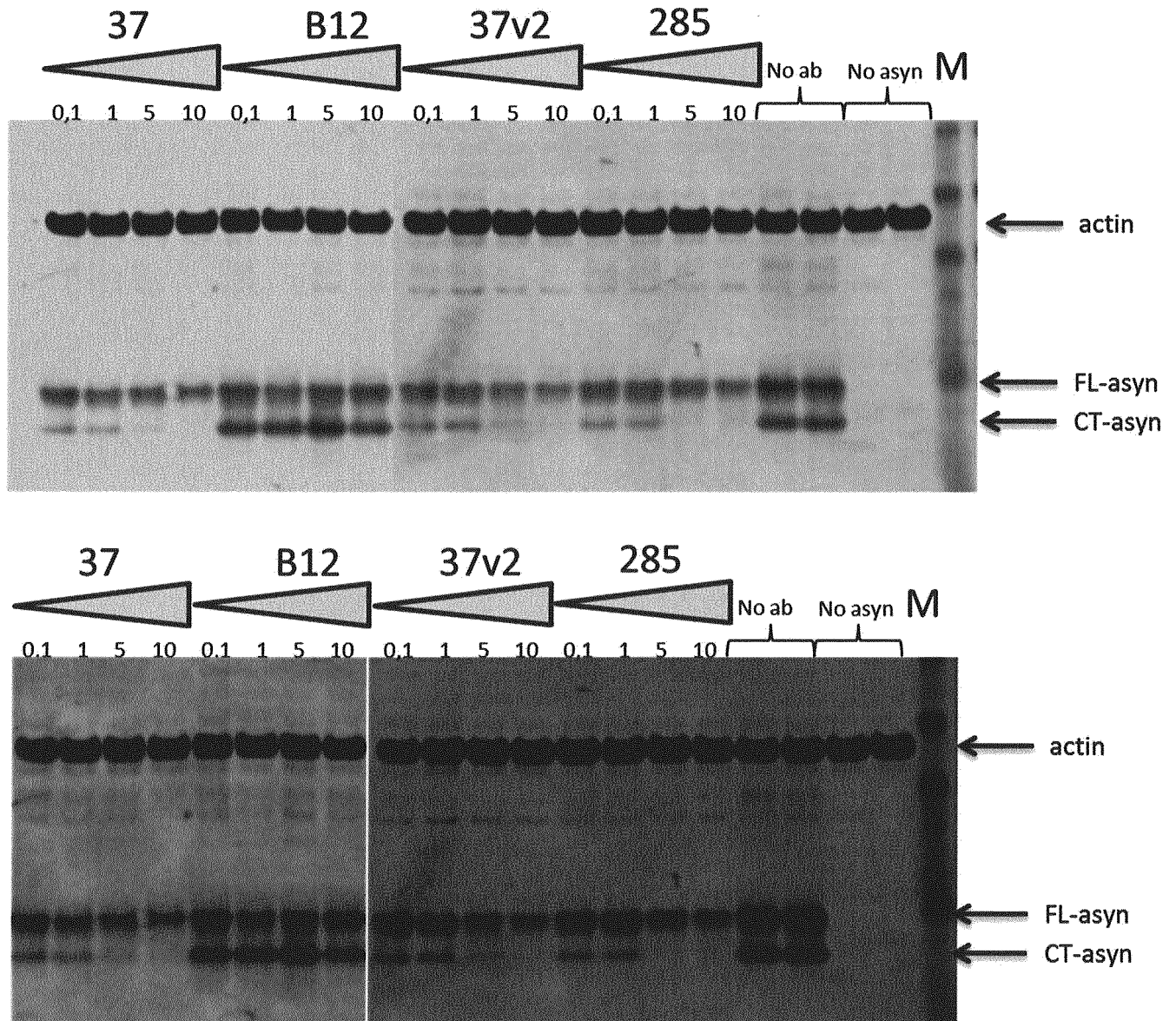


Fig 11B

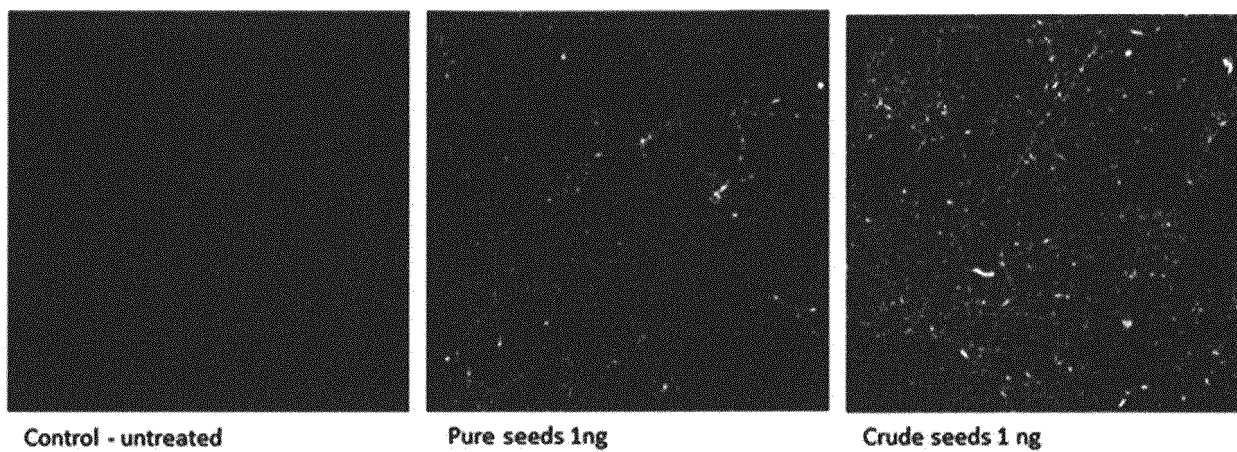


Fig 12A

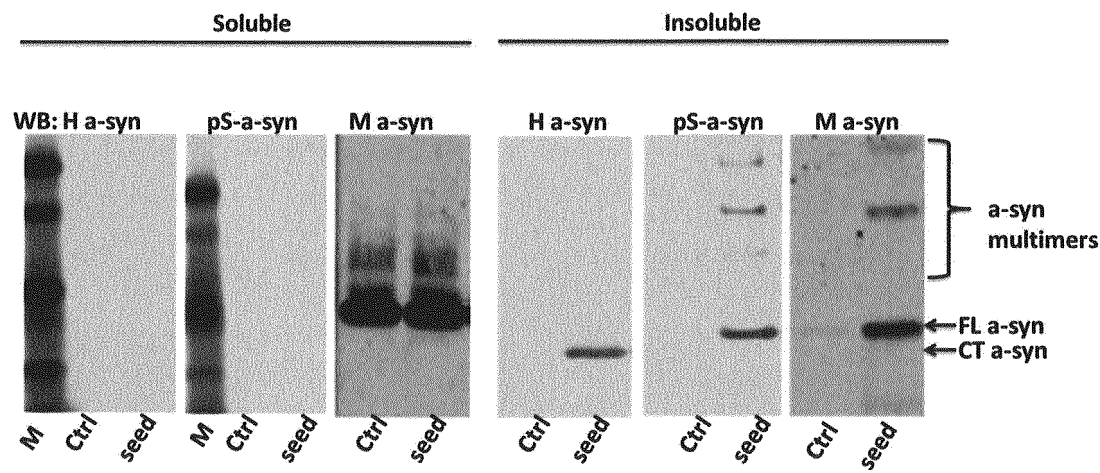


Fig 12B

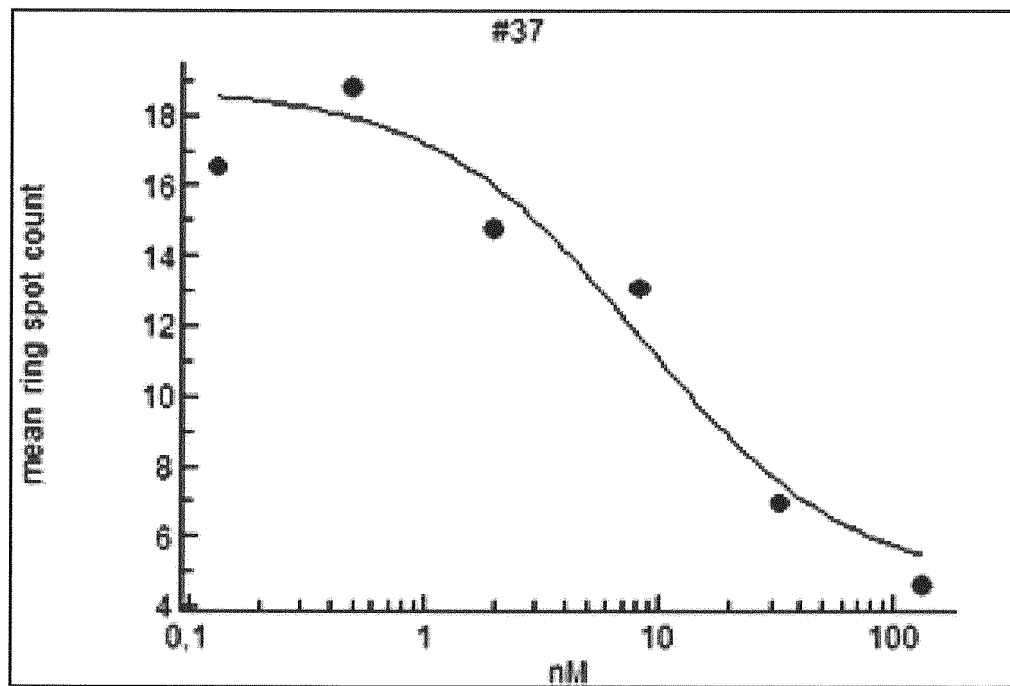
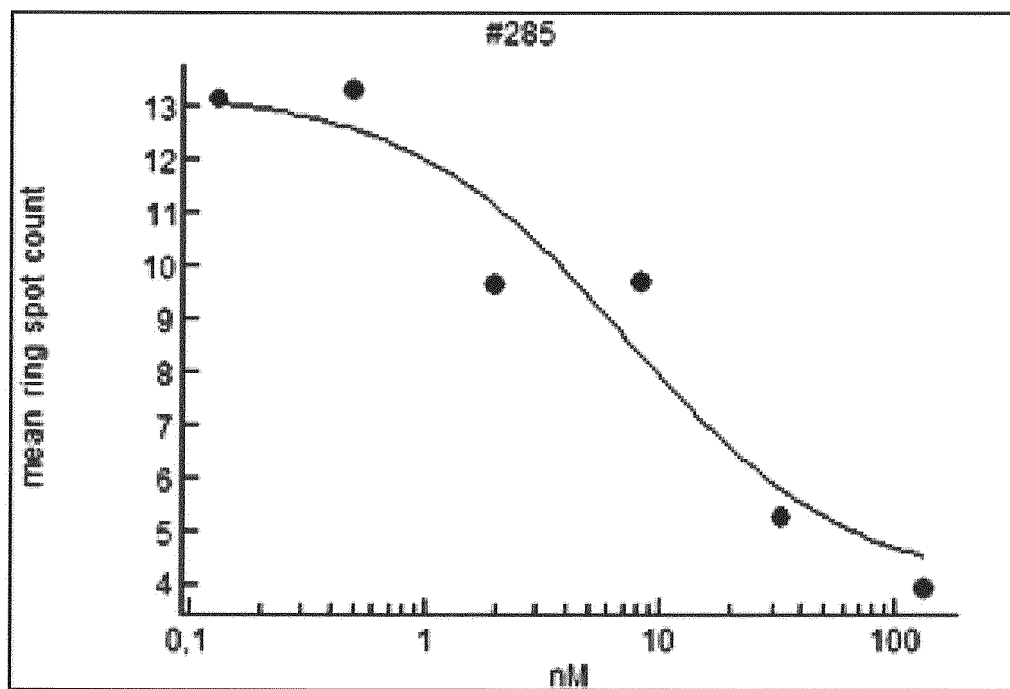


Fig 12C

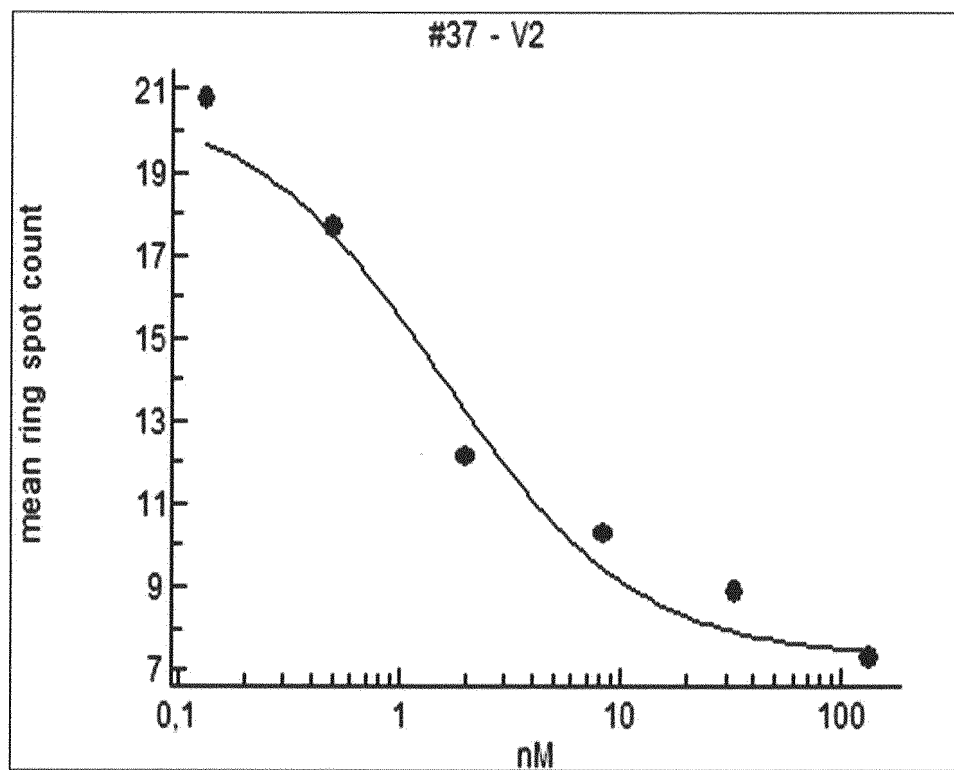


Fig 12C (continued)

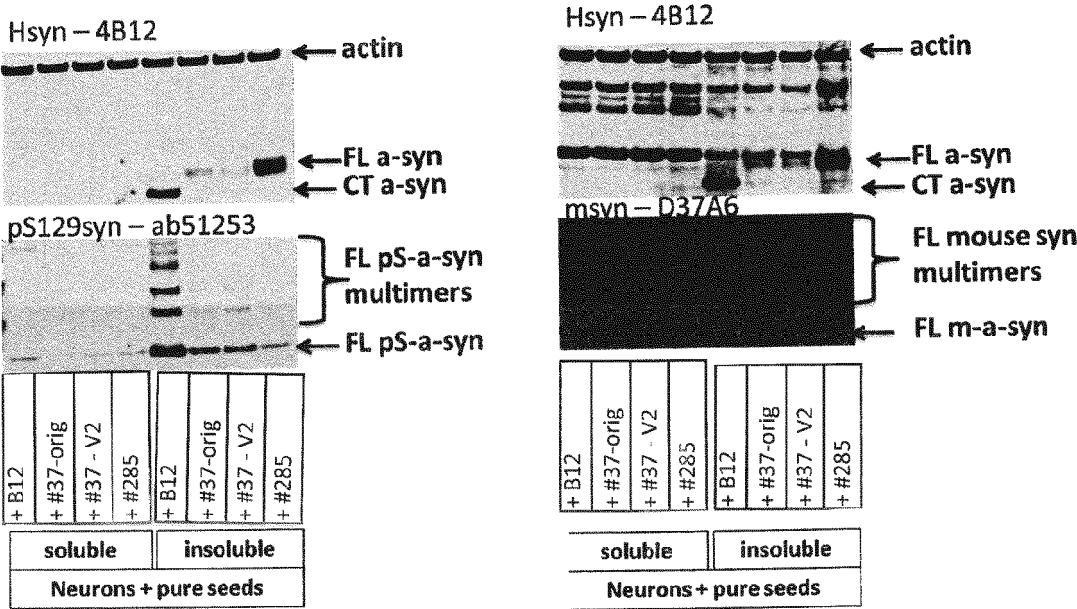
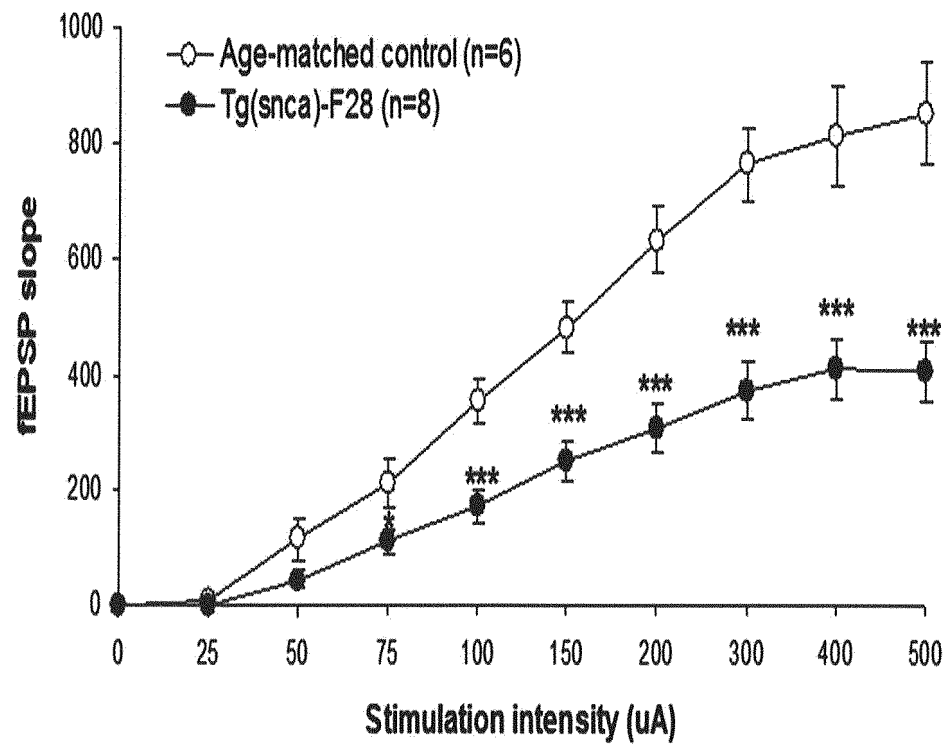
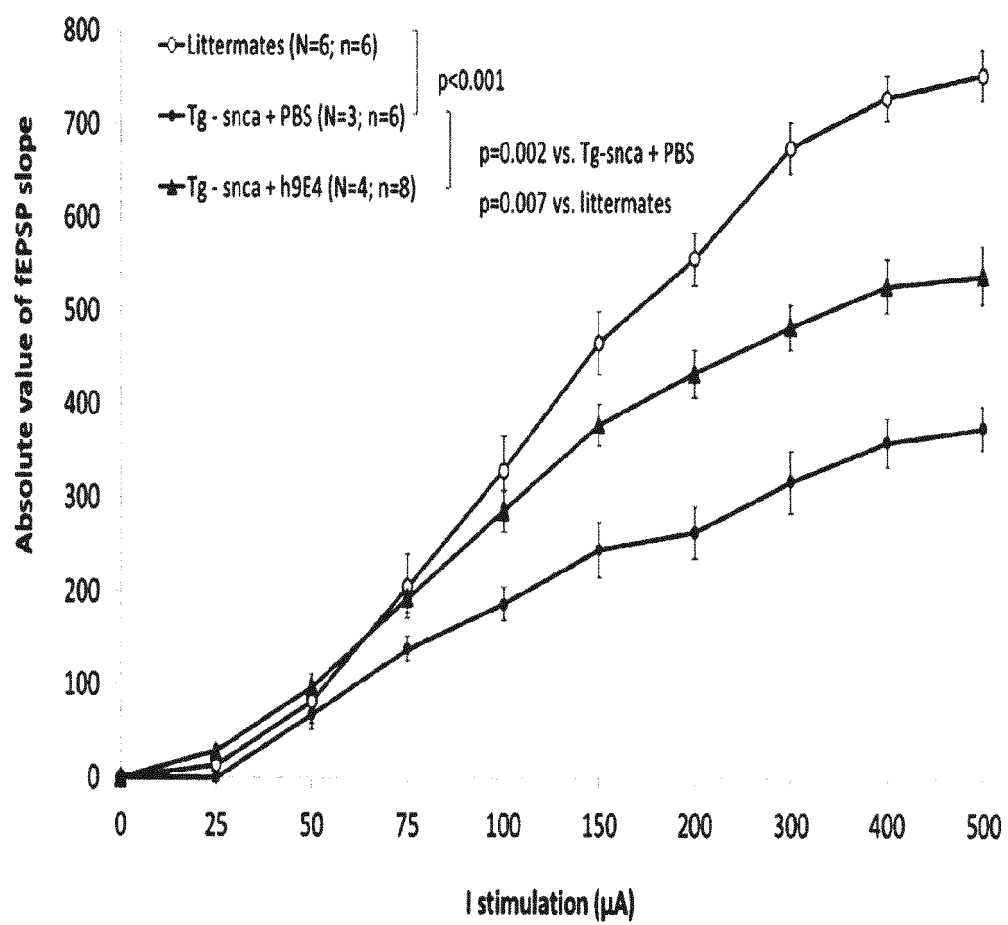


Fig 12D

**Fig 13**

**Fig 14**

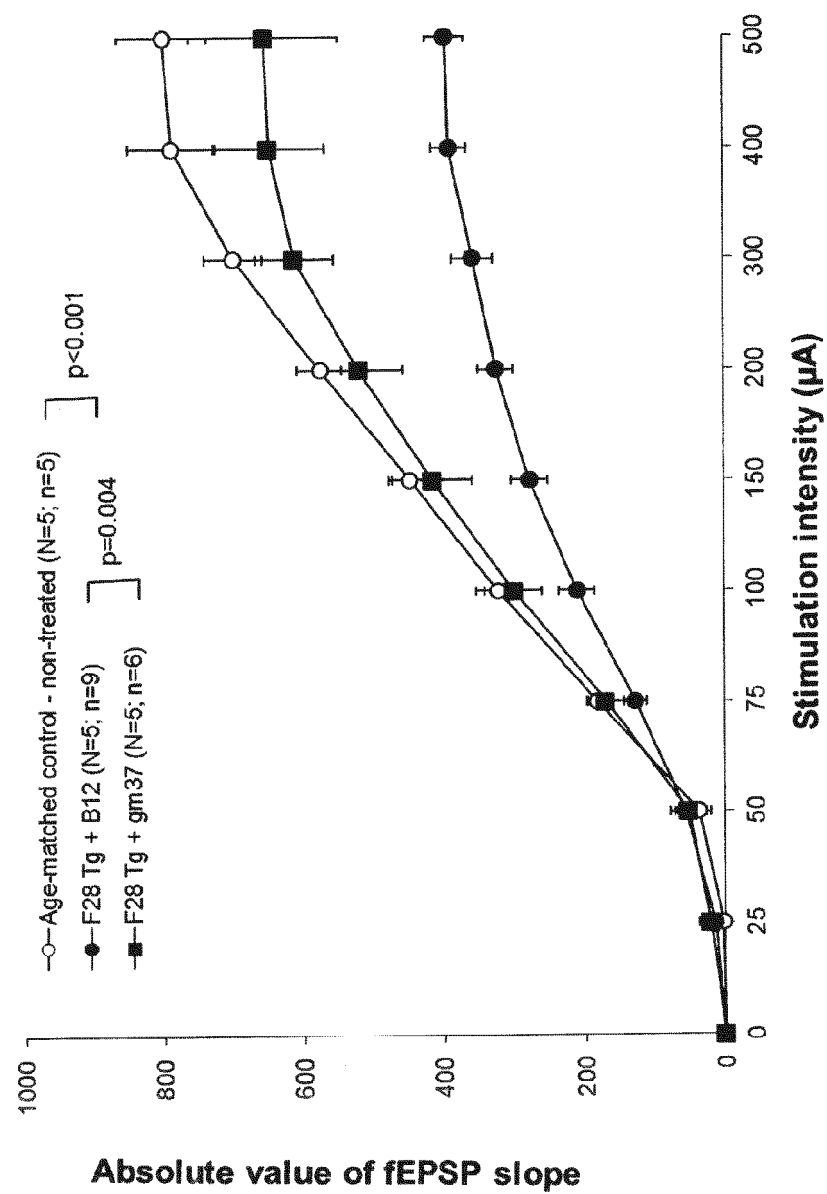


Fig 15

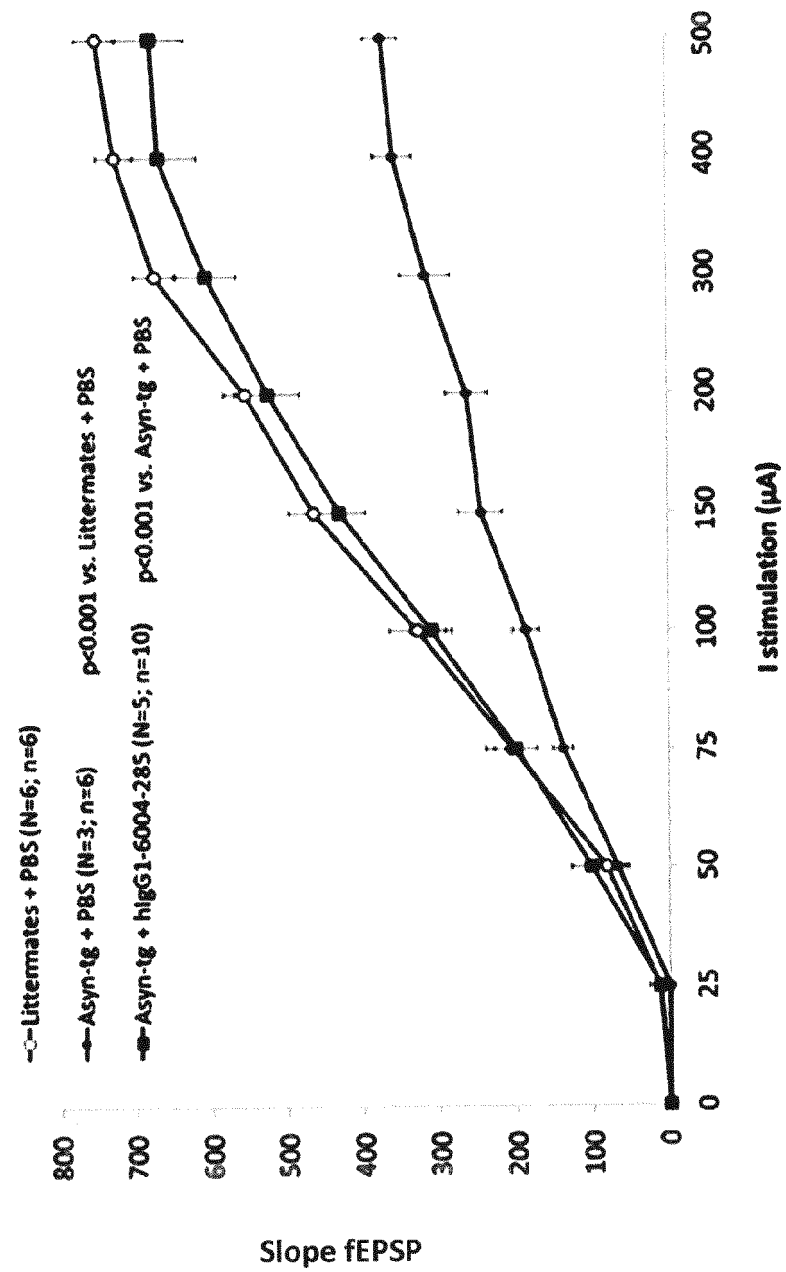
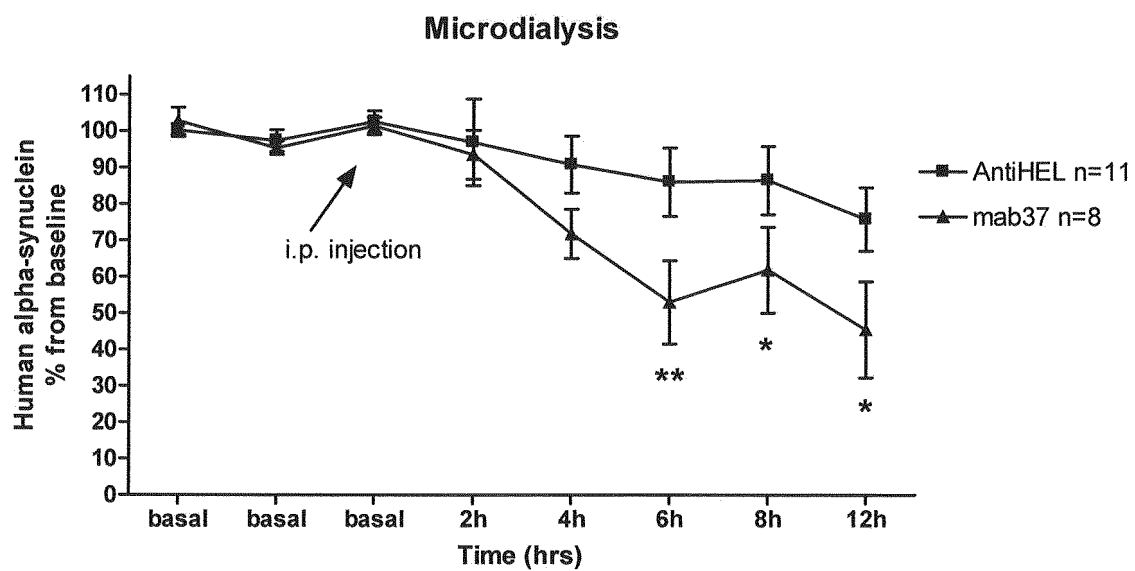
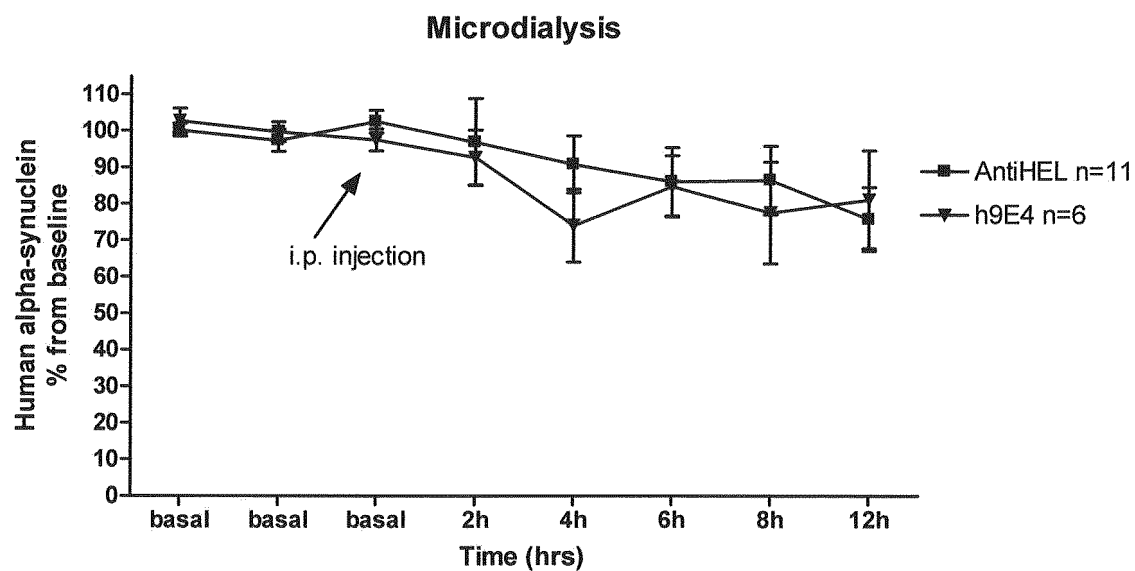
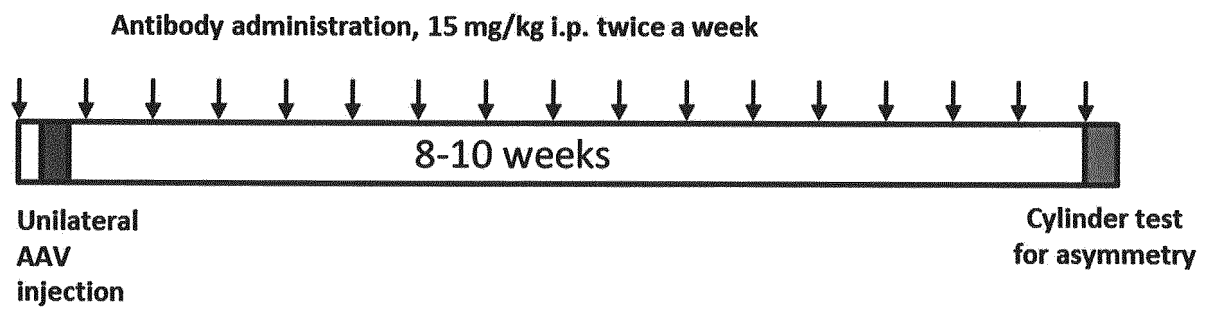
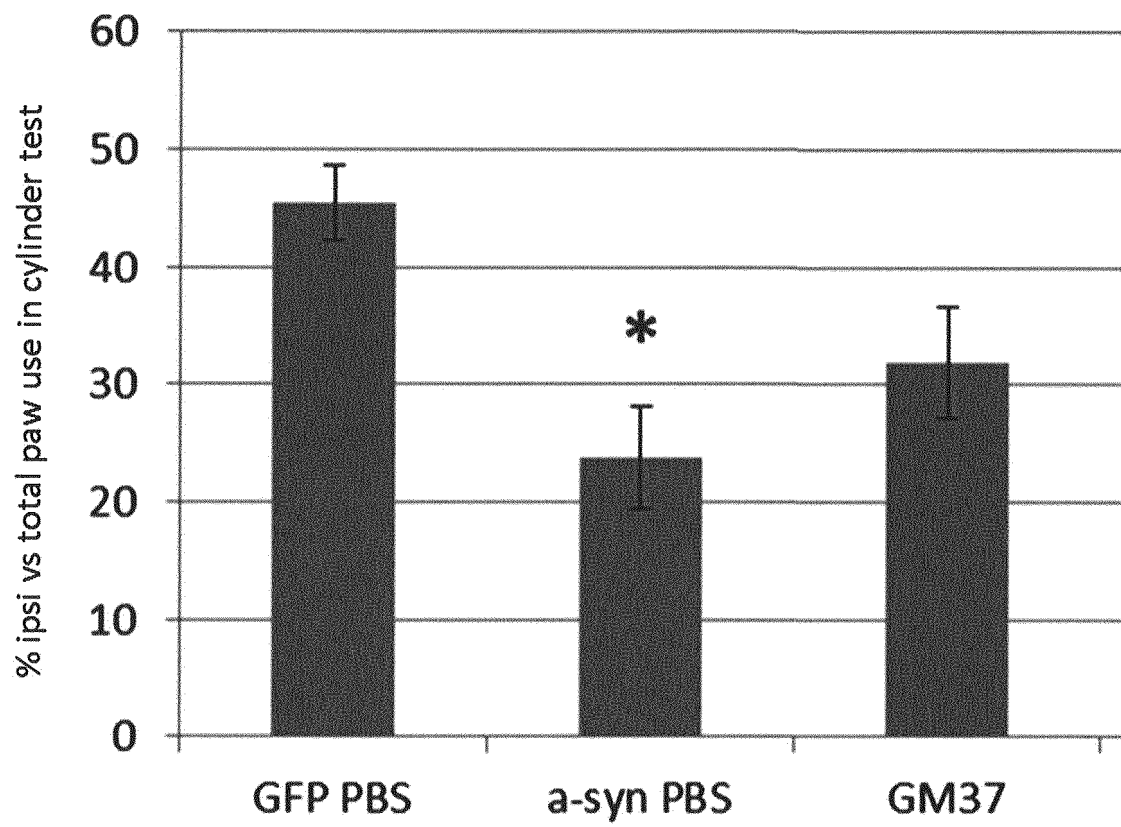
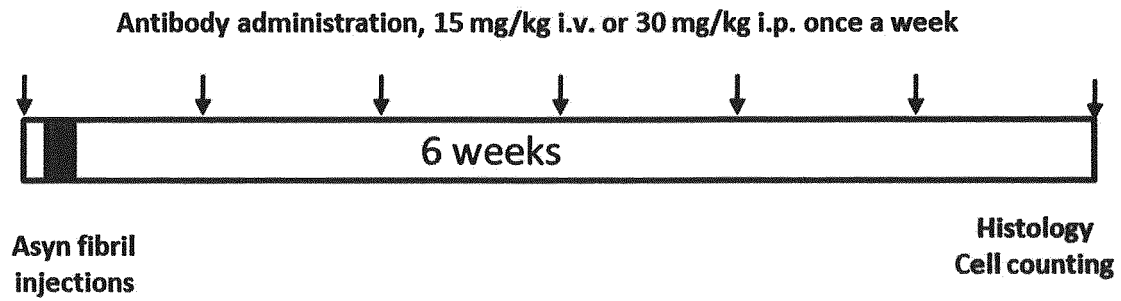


Fig 16

**Fig 17**

**Fig 18**

**Fig 19**

**Fig 20A**

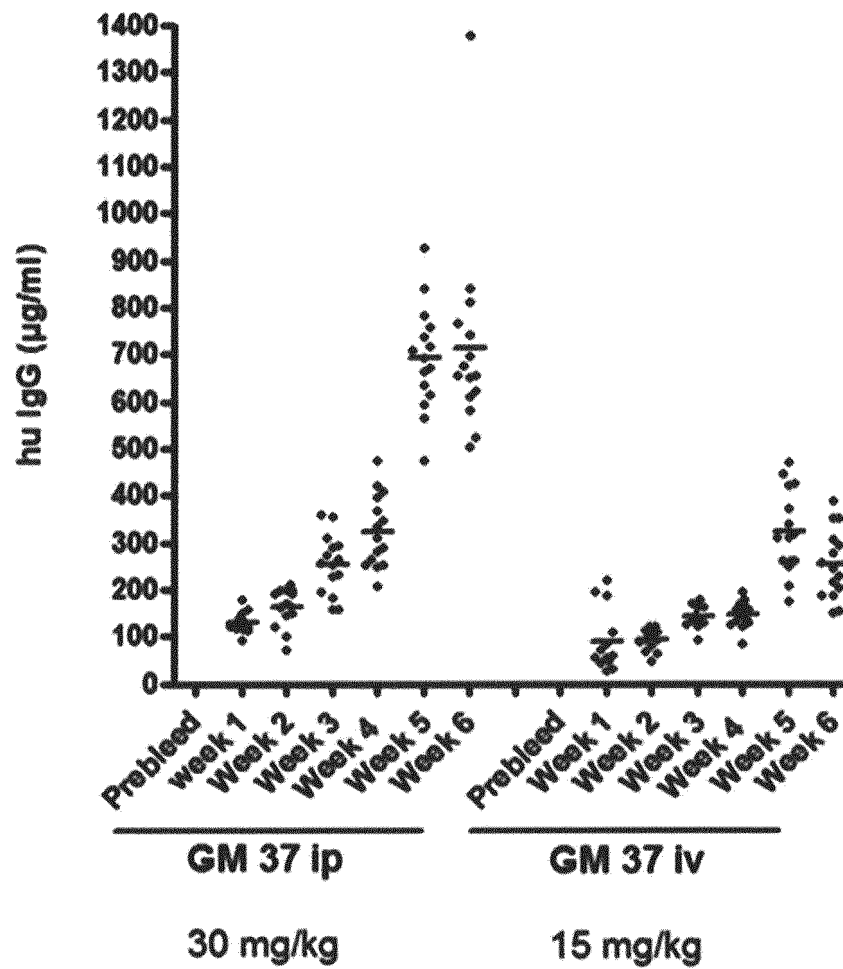


Fig 20B

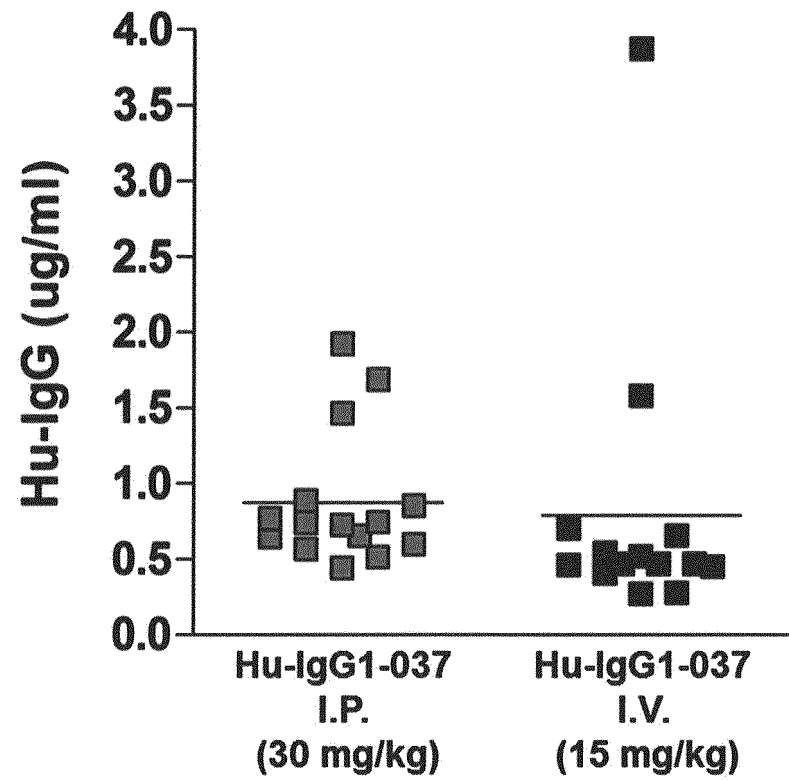


Fig 20C

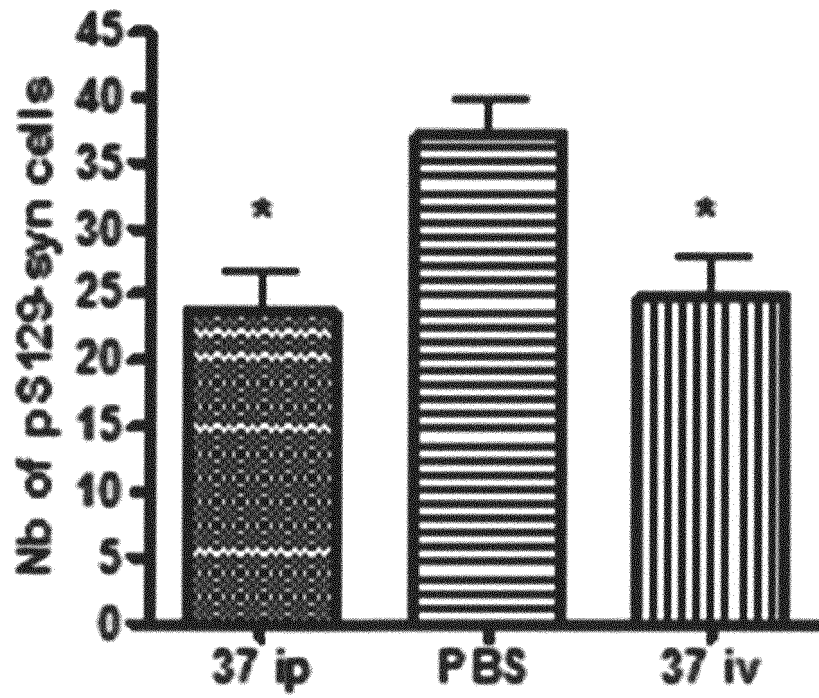


Fig 20D

	α - synuclein (P37840)	β - synuclein (Q16143)	γ - synuclein (O76070)		α - synuclein (P37840)	β - synuclein (Q16143)	γ - synuclein (O76070)
1		M	M	37	V	V	V
2		D	M	38	L	L	M
3		V	D	39	Y	Y	Y
4		F	D	40	V	V	Y
5		M		41	G	G	G
6		K	K	42	S	S	A
7		L	G	43	T	K	T
8		L	L	44	T	K	T
9		S	F	45	K	R	K
10		K	M	46	E	E	E
11		A	I	47	G	G	N
12		K	A	48	V	V	V
13		E	K	49	V	V	V
14		G	E	50	H	Q	Q
15		V	V	51	G	G	S
16		V	V	52	V	V	V
17		A	G	53	T	A	T
18		A	V	54	T	S	S
19		A	V	55	V	V	V
20		E	E	56	A	A	A
21		K	K	57	E	E	E
22		T	K	58	K	K	K
23		K	K	59	T	K	T
24		Q	Q	60	K	K	K
25		G	G	61	E	E	E
26		V	V	62	Q	Q	Q
27		T	T	63	V	A	A
28		E	E	64	T	S	N
29		A	A	65	N	H	A
30		A	A	66	V	L	V
31		G	E	67	G	G	S
32		K	K	68	A	A	E
33		T	K	69	V	V	A
34		K	K	70	V	V	A
35		E	E	71	F	F	S
36		K	K	72	S	S	S
				73			

Fig 21

	α - synuclein (P37840)	β - synuclein (Q16143)	γ - synuclein (O76070)		α - synuclein (P37840)	β - synuclein (Q16143)	γ - synuclein (O76070)
74					110		
75					111		
76					112		
77					113		
78					114		
79					115		
80					116		
81					117		
82					118		
83					119		
84					120		
85					121		
86					122		
87					123		
88					124		
89					125		
90					126		
91					127		
92					128		
93					129		
94					130		
95					131		
96					132		
97					133		
98					134		
99					135		
100					136		
101					137		
102					138		
103					139		
104					140		
105					141		
106					142		
107					143		
108					144		
109					145		
					146		

Fig 21 (continued)

	Human (P37840)	Cyno (P61142)	Rat (P37377)	Mouse (O55042)		Human (P37840)	Cyno (P61142)	Rat (P37377)	Mouse (O55042)
1	M	M	M	M	36	G	G	G	G
2	D	D	D	D	37	V	V	V	V
3	F	F	F	F	38	L	L	L	L
4	F	F	F	F	39	Y	Y	Y	Y
5	M	M	M	M	40	V	V	V	V
6	K	K	K	K	41	G	G	G	G
7	G	G	G	G	42	S	S	S	S
8	L	L	L	L	43	K	K	K	K
9	S	S	S	S	44	T	T	T	T
10	K	K	K	K	45	K	K	K	K
11	A	A	A	A	46	E	E	E	E
12	K	K	K	K	47	G	G	G	G
13	E	E	E	E	48	V	V	V	V
14	G	G	G	G	49	V	V	V	V
15	V	V	V	V	50	H	H	H	H
16	V	V	V	V	51	G	G	G	G
17	A	A	A	A	52	V	V	V	V
18	A	A	A	A	53	A	A	T	T
19	A	A	A	A	54	T	T	T	T
20	E	E	E	E	55	V	V	V	V
21	K	K	K	K	56	A	A	A	A
22	T	T	T	T	57	E	E	E	E
23	K	K	K	K	58	K	K	K	K
24	Q	Q	Q	Q	59	T	T	T	T
25	G	G	G	G	60	K	K	K	K
26	V	V	V	V	61	E	E	E	E
27	A	A	A	A	62	Q	Q	Q	Q
28	E	E	E	E	63	V	V	V	V
29	A	A	A	A	64	T	T	T	T
30	A	A	A	A	65	N	N	N	N
31	G	G	G	G	66	V	V	V	V
32	K	K	K	K	67	G	G	G	G
33	T	T	T	T	68	G	G	G	G
34	E	E	E	E	69	A	A	A	A
35	K	K	K	K	70	V	V	V	V

Fig 22

	Human (P37840)	Cyno (P61142)	Rat (P37377)	Mouse (O55042)		Human (P37840)	Cyno (P61142)	Rat (P37377)	Mouse (O55042)
71	V	V	V	V	106	G	G	G	G
72	T	T	T	T	107	A	A	A	A
73	G	G	G	G	108	P	P	P	P
74	V	V	V	V	109	Q	Q	Q	Q
75	A	A	A	A	110	E	E	E	E
76	T	T	T	T	111	G	G	G	G
77	V	V	V	V	112	I	I	I	I
78	A	A	A	A	113	L	L	L	L
79	Q	Q	Q	Q	114	E	Q	E	E
80	K	K	K	K	115	D	D	D	D
81	T	T	T	T	116	M	M	M	M
82	V	V	V	V	117	P	P	P	P
83	E	E	E	E	118	V	V	V	V
84	G	G	G	G	119	D	D	D	D
85	A	A	A	A	120	P	P	P	P
86	S	S	N	N	121	D	D	S	S
87	I	I	N	N	122	N	N	S	S
88	A	A	I	I	123	E	E	E	E
89	A	A	A	A	124	A	A	A	A
90	T	T	T	T	125	Y	Y	Y	Y
91	A	A	A	A	126	M	M	M	M
92	G	G	G	G	127	E	E	E	E
93	F	F	F	F	128	P	P	P	P
94	V	I	V	V	129	S	S	S	S
95	K	K	K	K	130	E	E	E	E
96	K	K	K	K	131	E	E	E	E
97	K	K	K	K	132	G	G	G	G
98	D	D	D	D	133	Y	Y	Y	Y
99	Q	Q	Q	Q	134	Y	Y	Y	Y
100	L	M	M	M	135	D	D	D	D
101	G	G	G	G	136	Y	Y	Y	Y
102	K	K	K	K	137	E	E	E	E
103	N	G	G	G	138	P	P	P	P
104	E	E	E	E	139	E	E	E	E
105	E	E	E	E	140	A	A	A	A

Fig 22 (continued)

Product	Lot number	Concentration [‡] (mg/ml)	Volume [‡] (ml)	Yield [‡] (mg)	Titre [†] (mg/L)
GM37 _wt	319-121115-01	2.11	6.0	12.6	31.6
GM37 _var1	319-121115-02	1.70	5.0	8.5	21.2
GM37 _var2	319-121115-03	2.57	5.8	14.9	37.2
GM37 _var3	319-121115-04	1.85	5.0	9.3	23.2

Fig 23

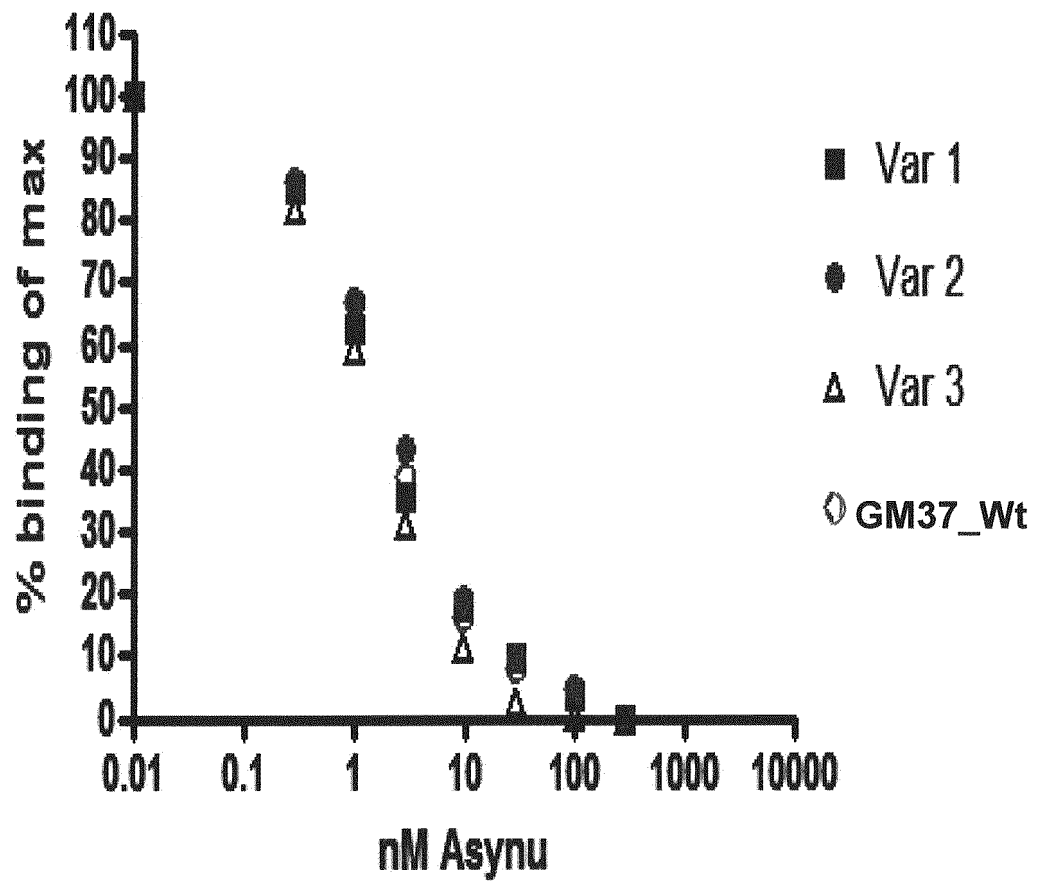
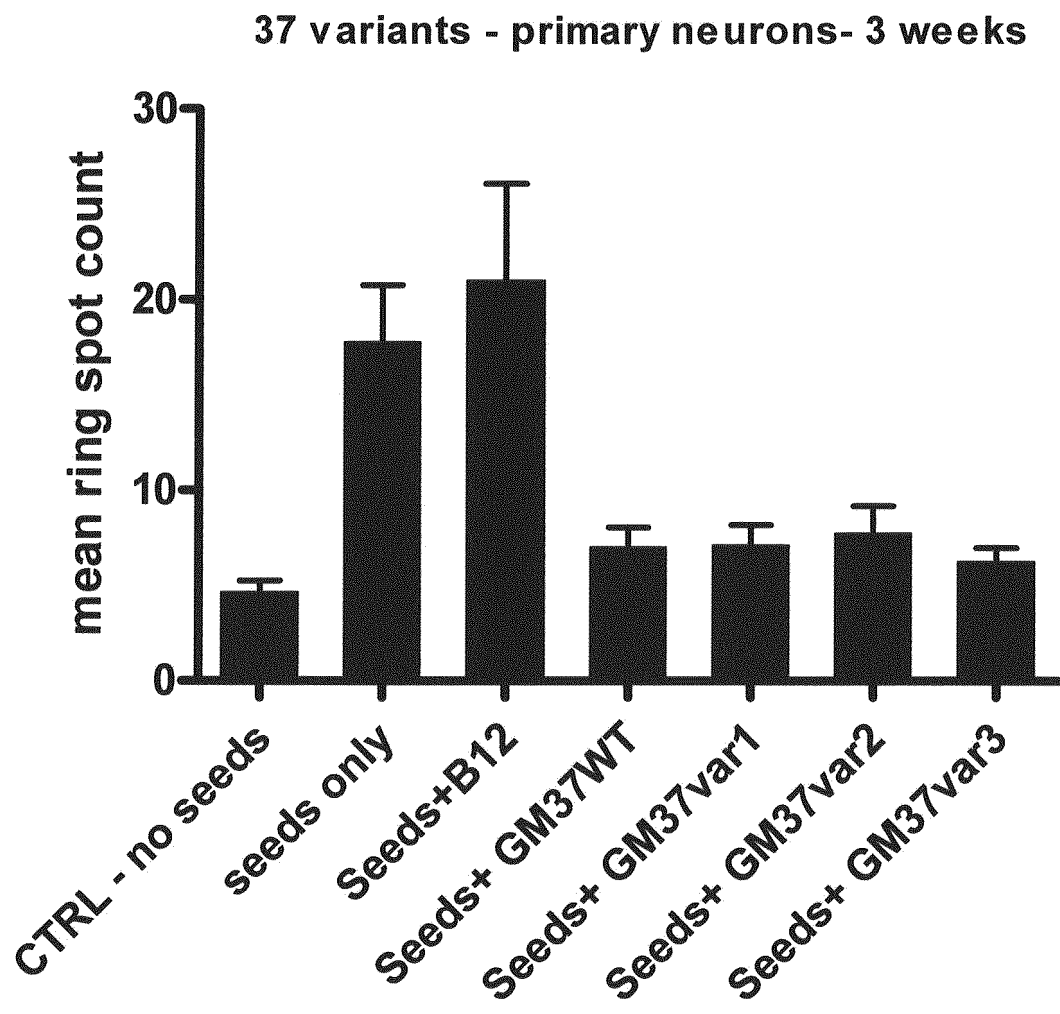
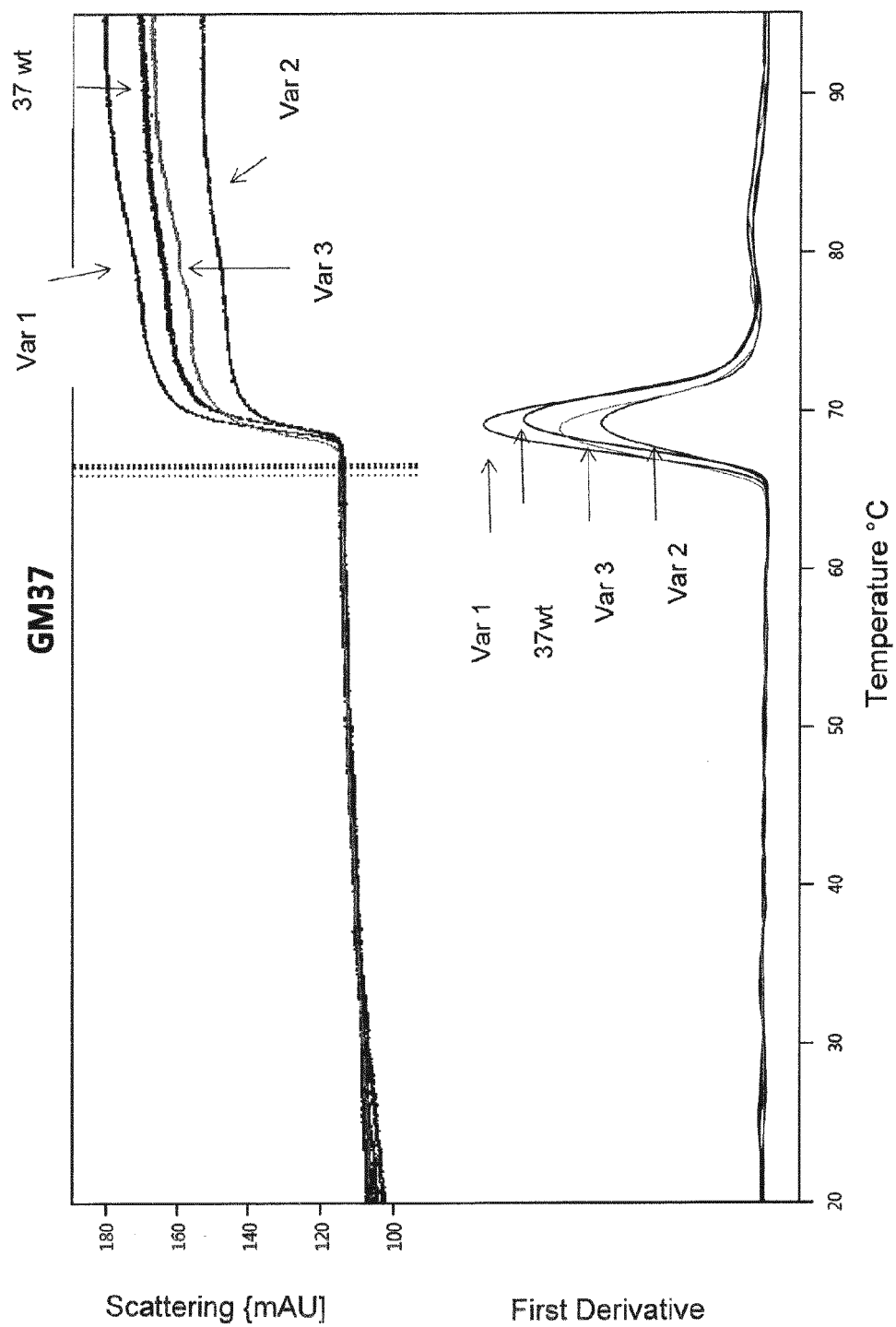


Fig 24

Sample	ka (1/Ms)	kd (1/s)	KD (nM)	Rmax (RU)	Chi ² (RU ²)	U-value
GM37_wt , batch 2	7,01E+05	1,92E-02	27	1,4	0,0022	3
GM37_wt, batch 1	5,28E+05	1,48E-02	28	1,5	0,0024	2
GM37_Variant 1	6,34E+05	1,37E-02	22	1,5	0,0022	2
GM37_Variant 2	4,15E+05	1,24E-02	30	1,4	0,0021	3
GM37_Variant 3	5,77E+05	2,28E-02	40	1,5	0,0016	2
Isotype control			NB	NB		

Fig 25

**Fig 26**

**Fig 27**