

	10	20	30	40	50	60
hBP VL	D V V M T Q S P L S L P V T L G E P A S I S C K S S Q S L L D S D G K T Y L N W L L Q K P G Q S P Q R L I Y L V S K L D	60				
IGKV2-30*02	D V V M T Q S P L S L P V T L G E P A S I S C R S S Q S L V H S D G N T Y L N W F Q Q R P G Q S P R R L I Y K V S N R D	60				
hBP_VK_hu1 VL	D V V M T Q S P L S L P V T L G E P A S I S C K S S Q S L L D S D G K T Y L N W L L Q K P G Q S P Q R L I Y K V S N R D	60				
hBP_VK_hu2 VL	D V V M T Q S P L S L P V T L G E P A S I S C K S S Q S L L D S D G K T Y L N W L L Q K P G Q S P Q R L I Y K V S N R D	60				
hBP_VK_hu3 VL	D V V M T Q S P L S L P V T L G E P A S I S C K S S Q S L L D S D G K T Y L N W L L Q K P G Q S P Q R L I Y K V S N R D	60				

	70	80	90	100	110	112
hBP VL	S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V Y Y C W Q G T H F P R T F G Q G T K V E I K	112				
IGKV2-30*02	S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V Y Y C W Q G T H F P R T F G Q G T K V E I K	112				
hBP_VK_hu1 VL	S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V Y Y C W Q G T H F P R T F G Q G T K V E I K	112				
hBP_VK_hu2 VL	S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V Y Y C W Q G T H F P R T F G Q G T K V E I K	112				
hBP_VK_hu3 VL	S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V Y Y C W Q G T H F P R T F G Q G T K V E I K	112				

Decoration #1: Box residues that match IGKV2-30*02 exactly.

- hBP VL (SEQ ID NO:78)
- IGKV2-30*02 (SEQ ID NO:1)
- hBP_VK_hu1 VL (SEQ ID NO:2)
- hBP_VK_hu2 VL (SEQ ID NO:101)
- hBP_VK_hu3 VL (SEQ ID NO:102)

FIG 1

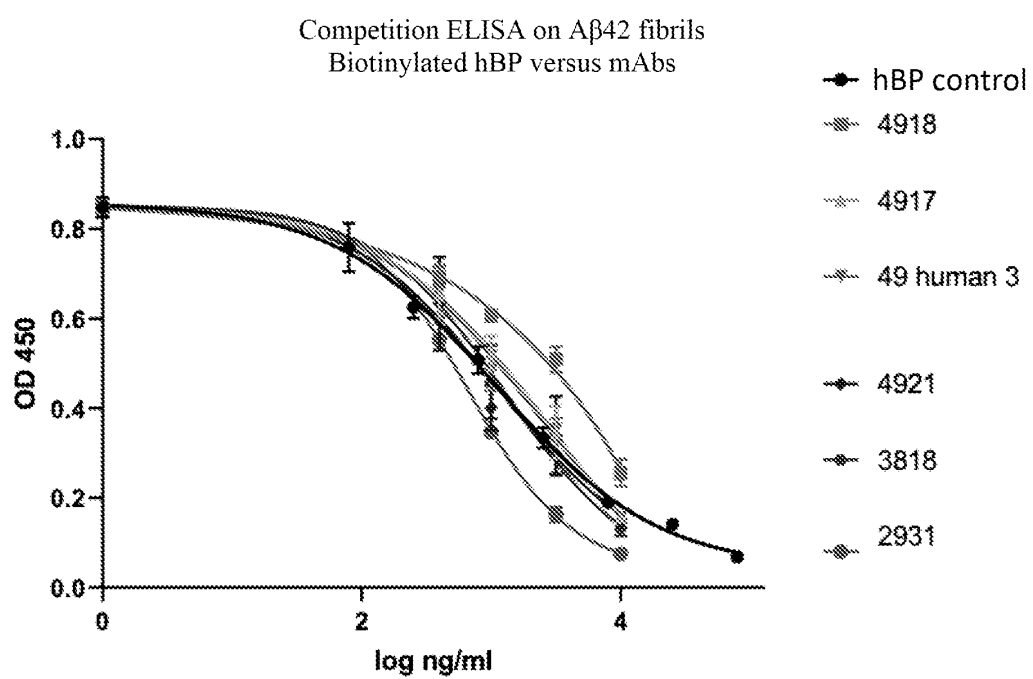


FIG 2

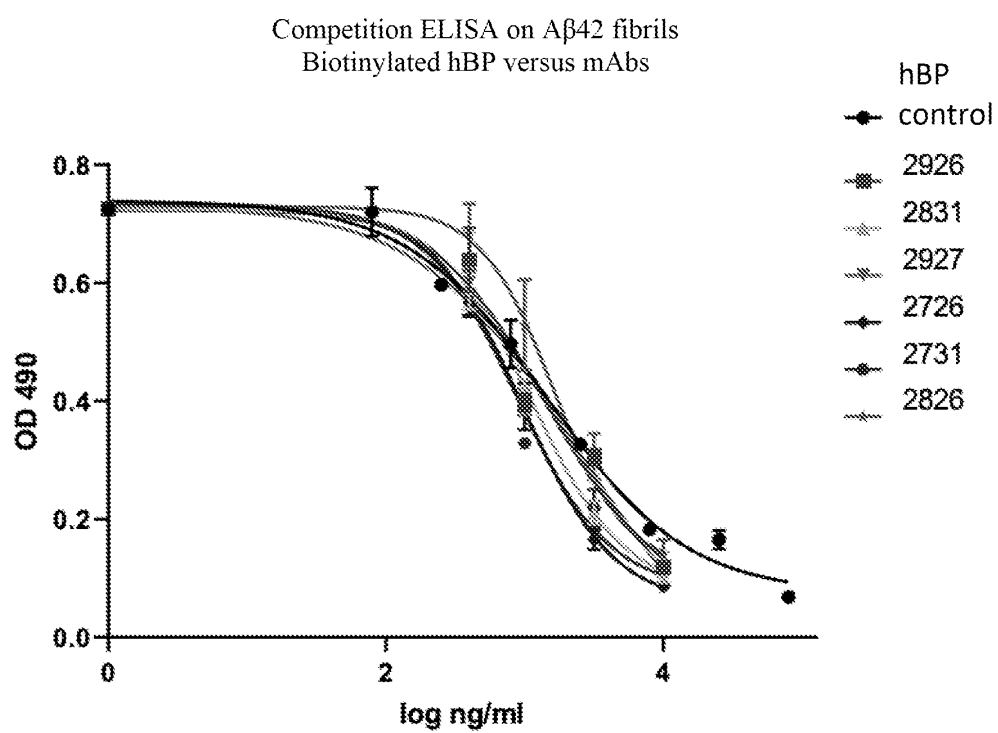


FIG 3

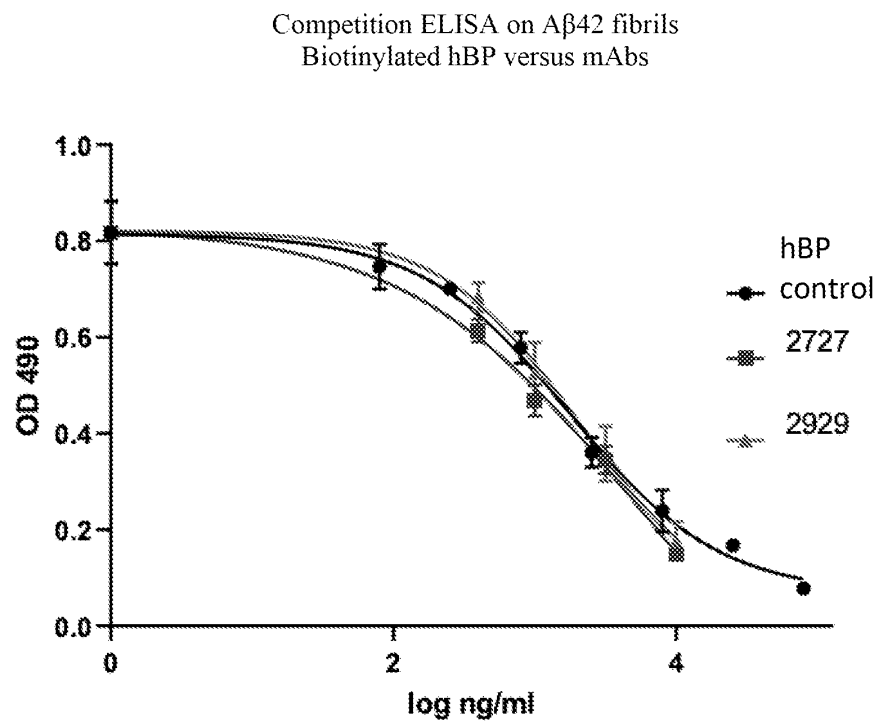


FIG 4

Potency assay
Aggregate on plate Antibody and HBP biotin competition

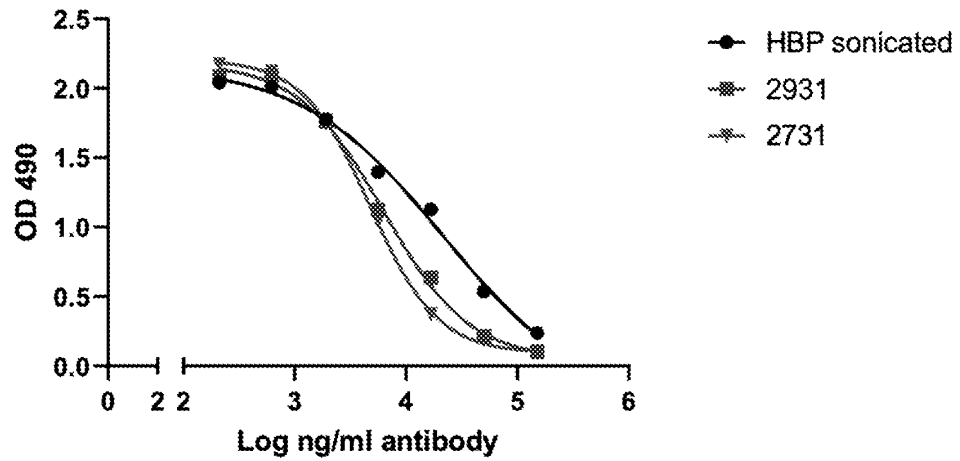


FIG 5A

Potency assay
Aggregate on plate Antibody and HBP biotin competition

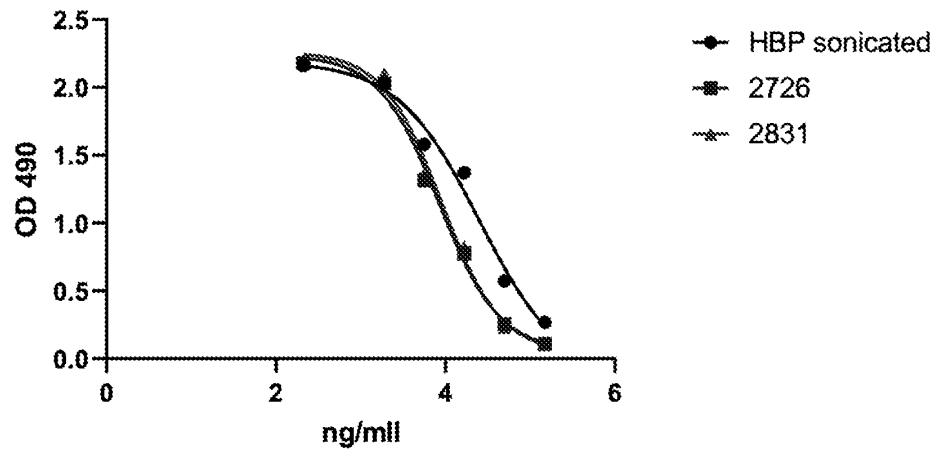


FIG 5B

FIG. 6A

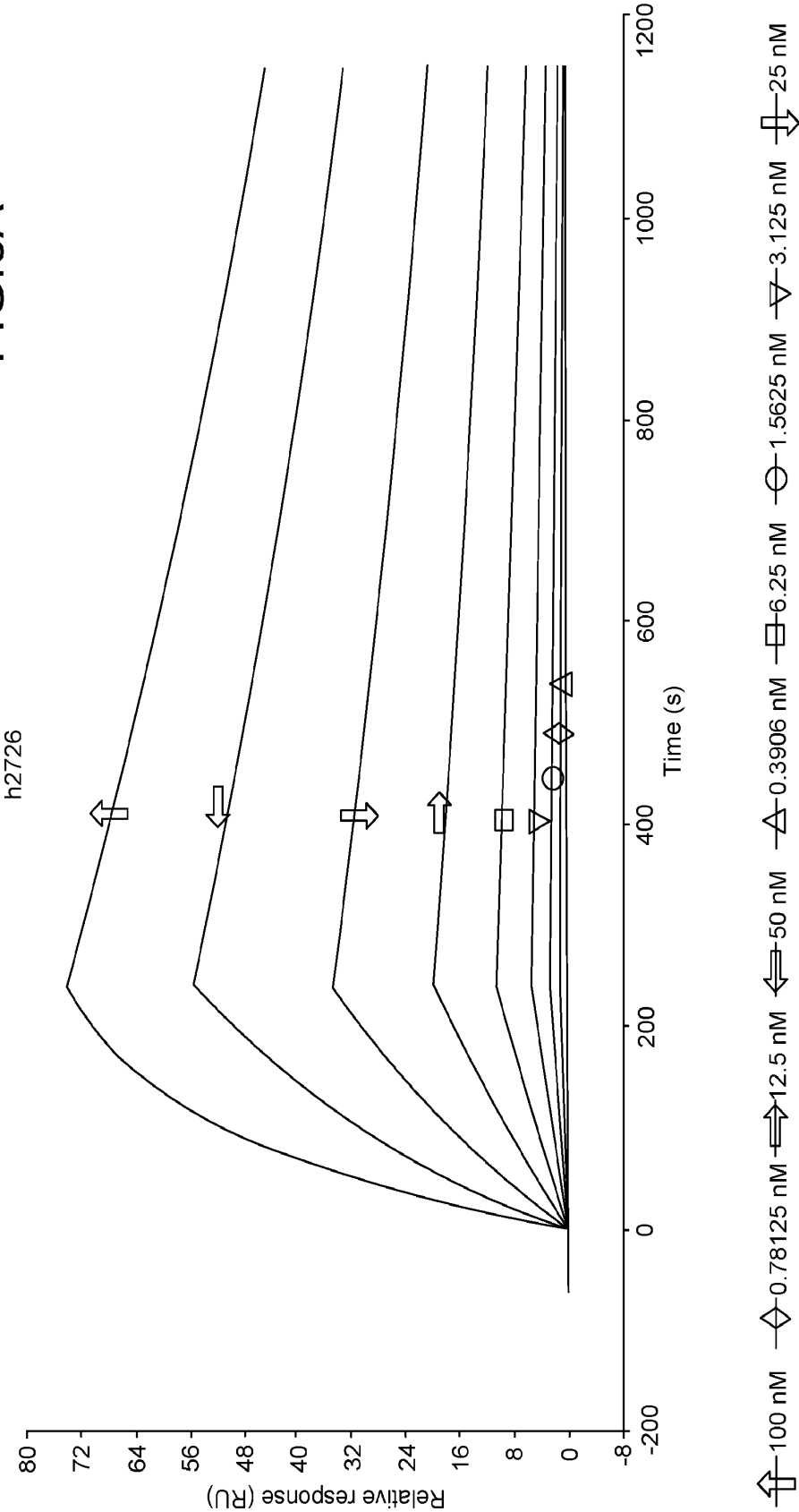
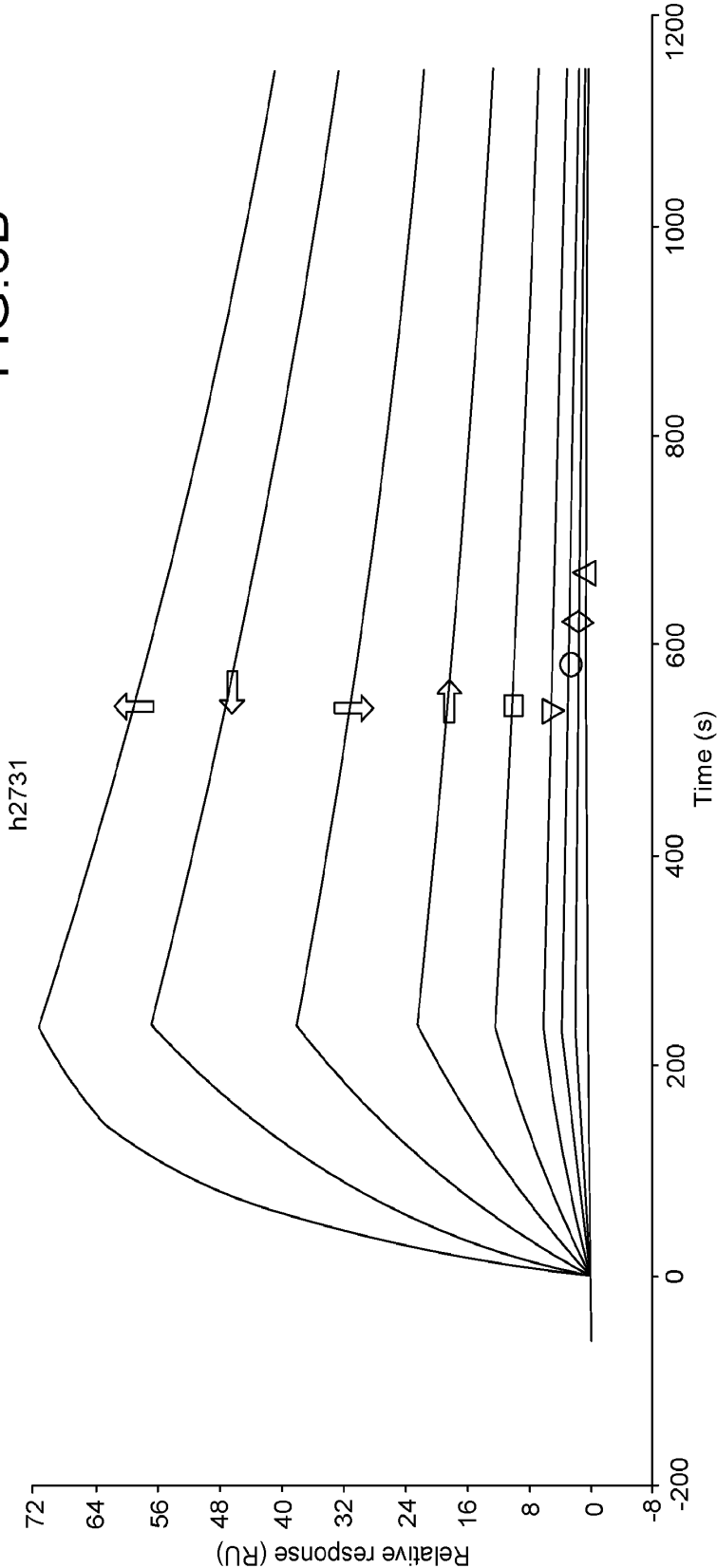


FIG. 6B



⬆ 100 nM ◇ 78.125 nM ⇌ 50 nM ⇌ 25 nM ⇌ 12.5 nM □ 6.25 nM ▽ 3.125 nM ○ 1.5625 nM ◇ 0.78125 nM △ 0.3906 nM

FIG. 6C

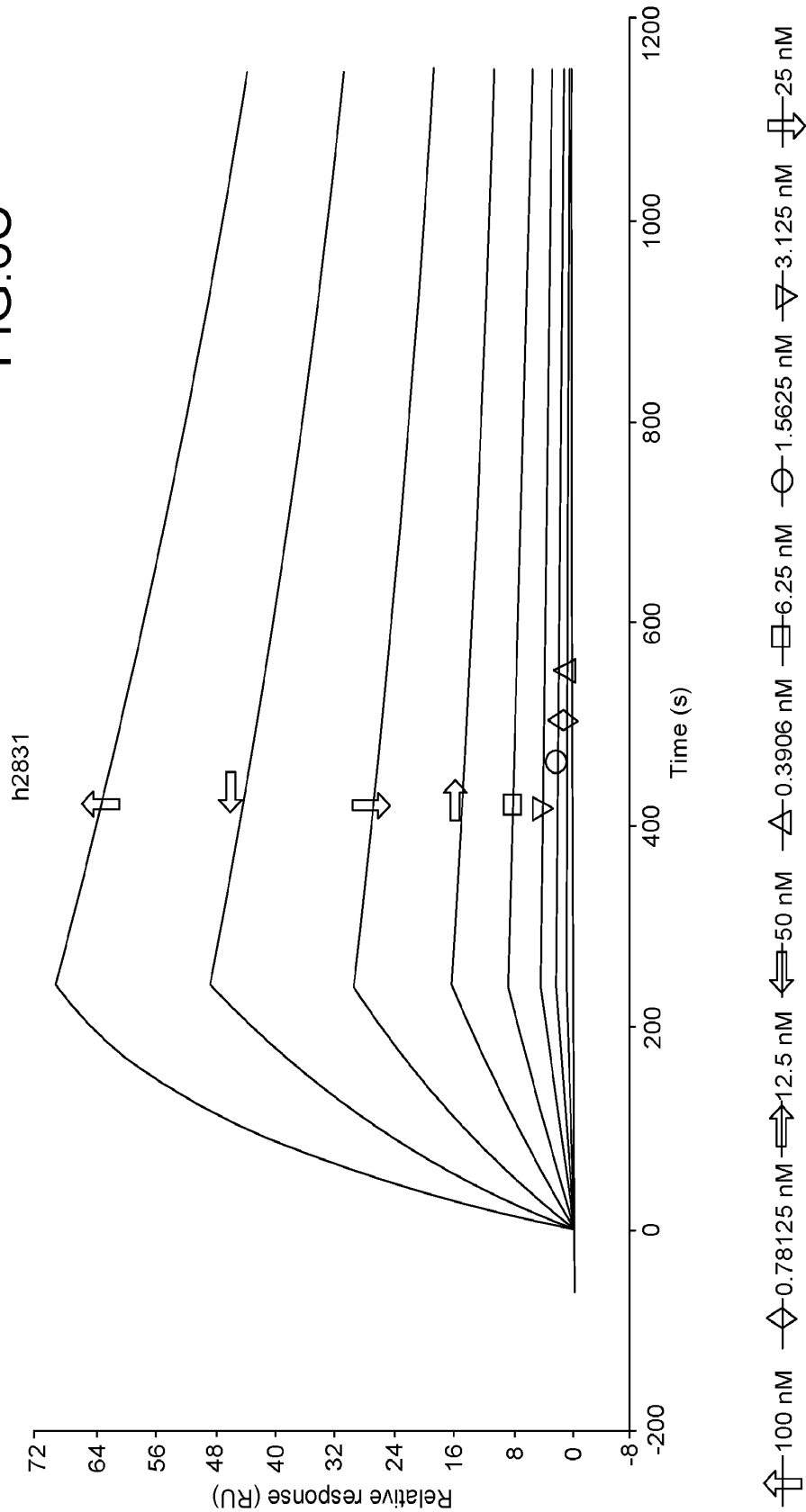
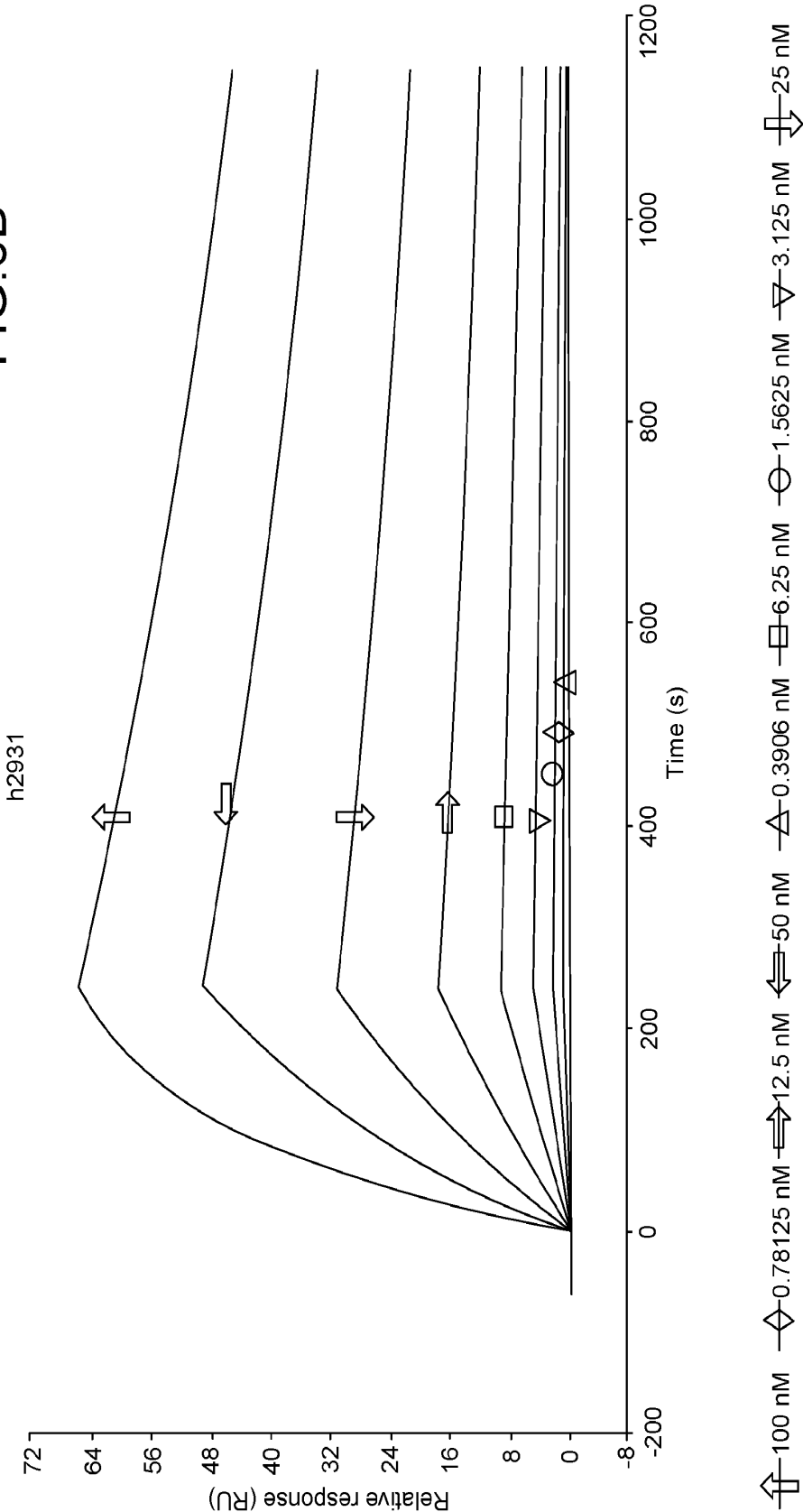


FIG. 6D



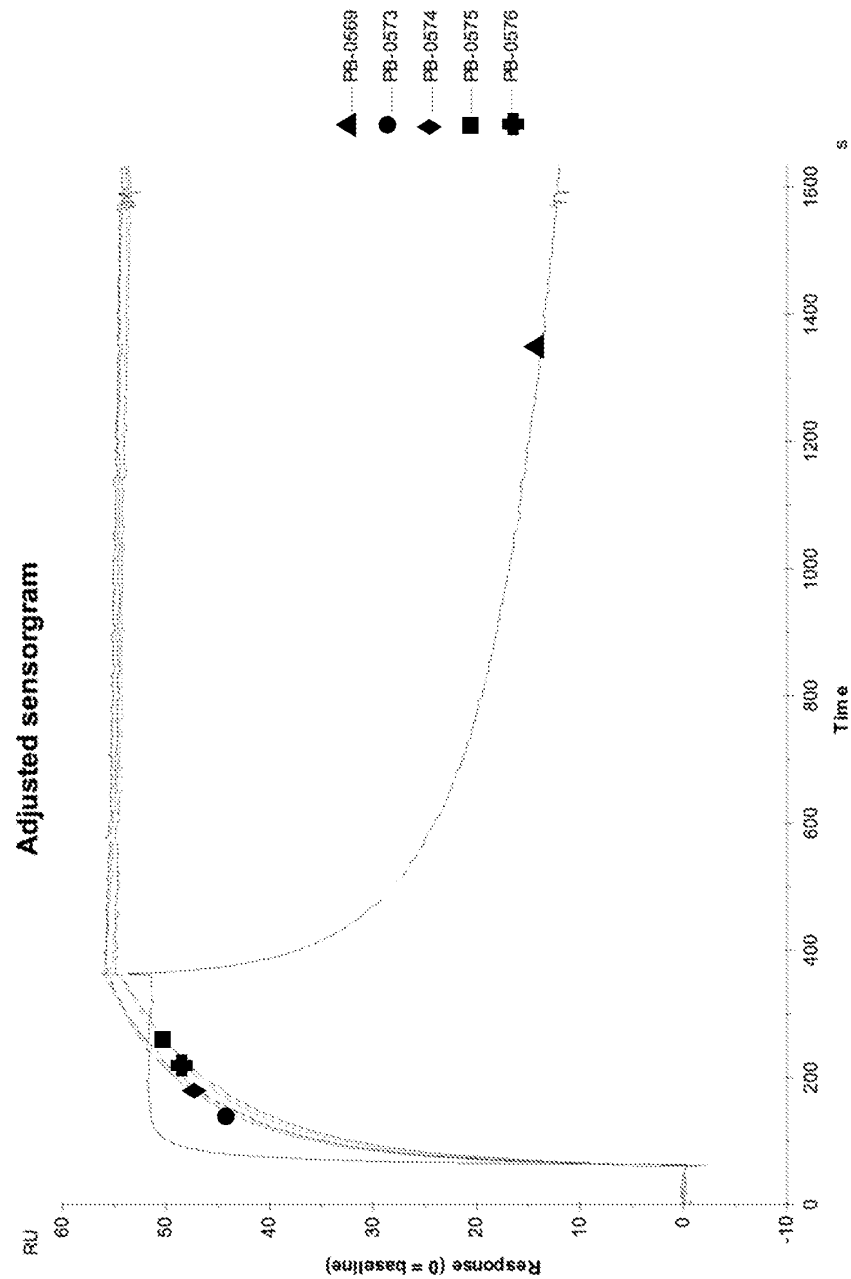


FIG 7

Titration of h2931 on 2.5 $\mu\text{g/mL}$ of A β Oligomer Preparations

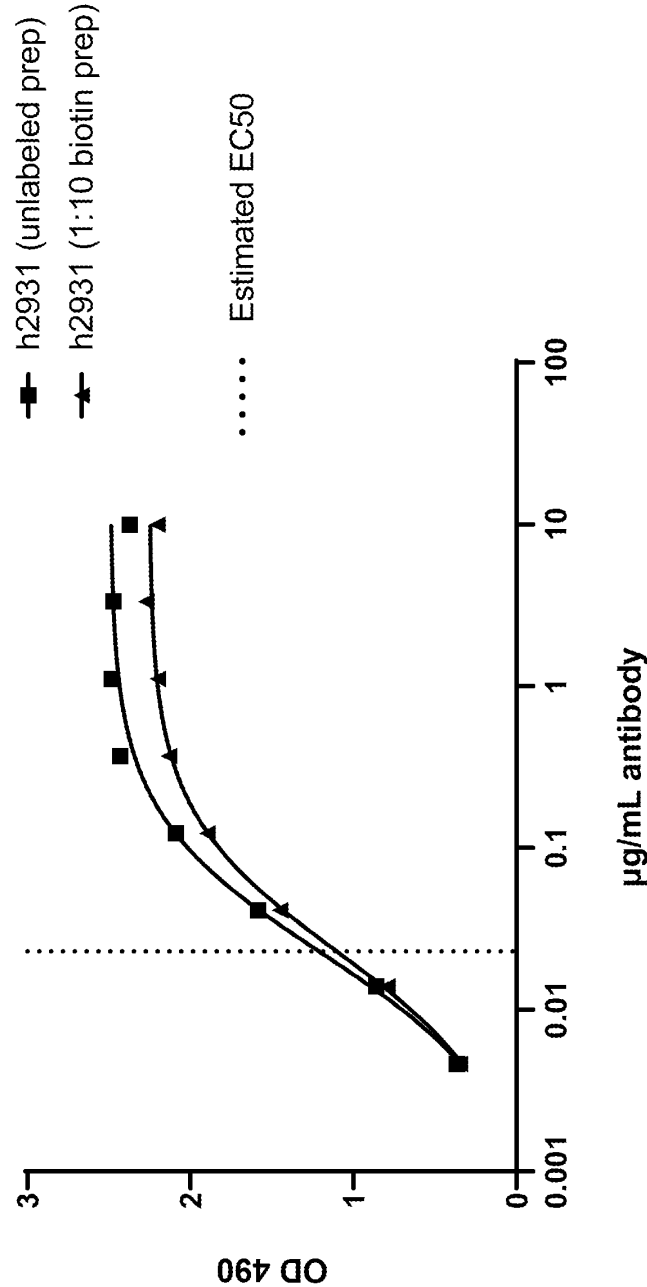


FIG 8

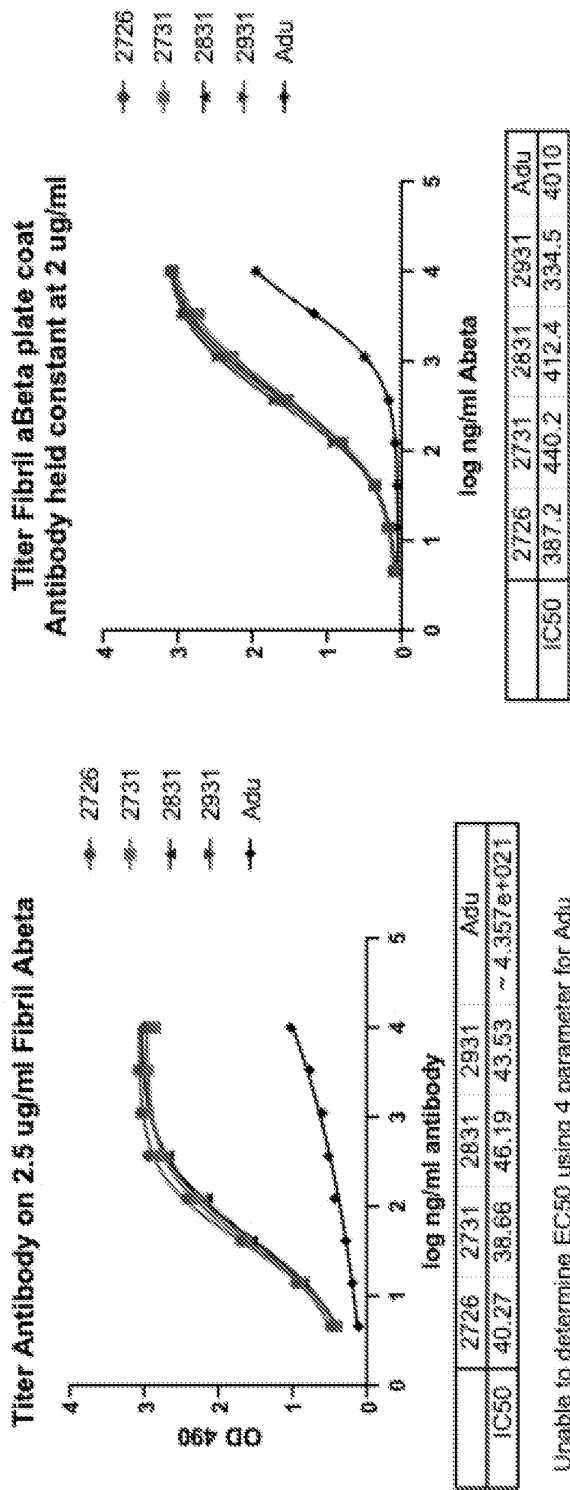


FIG 9

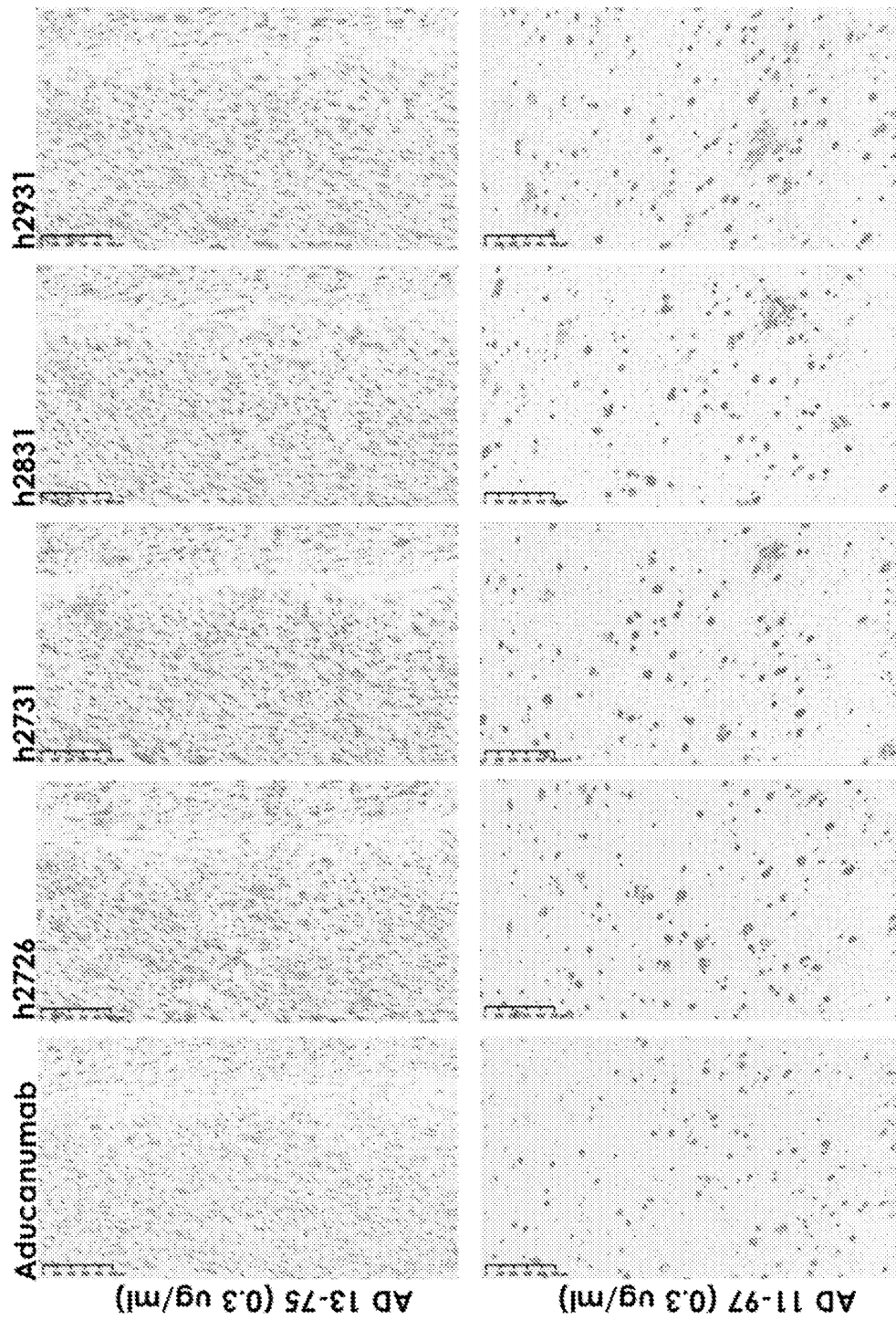


FIG 10

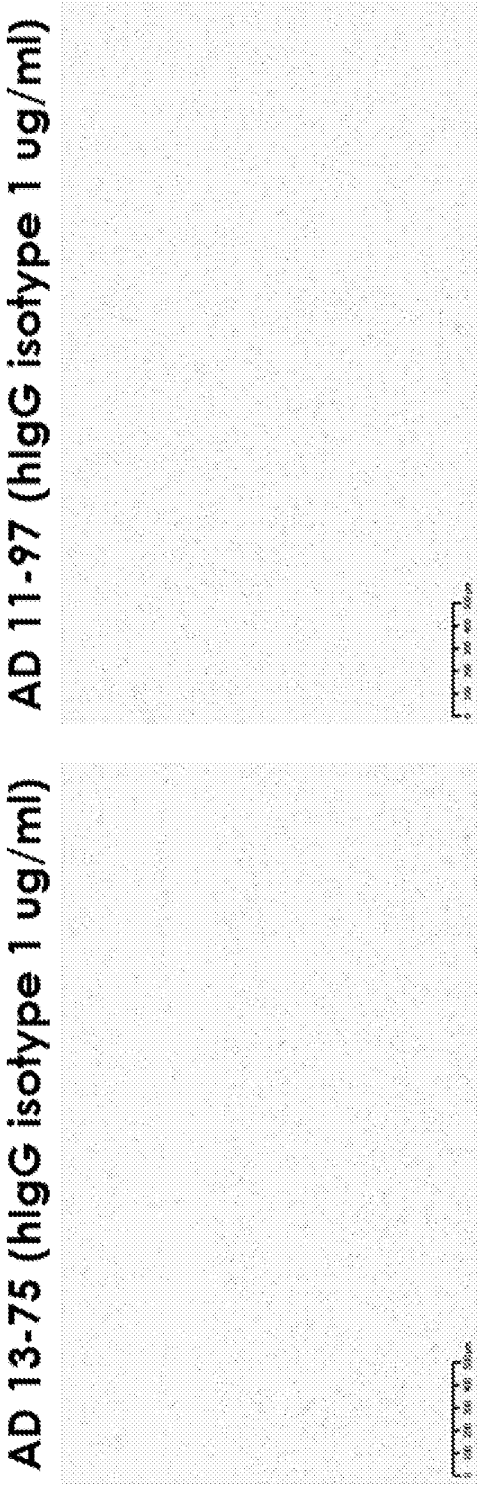


FIG 11

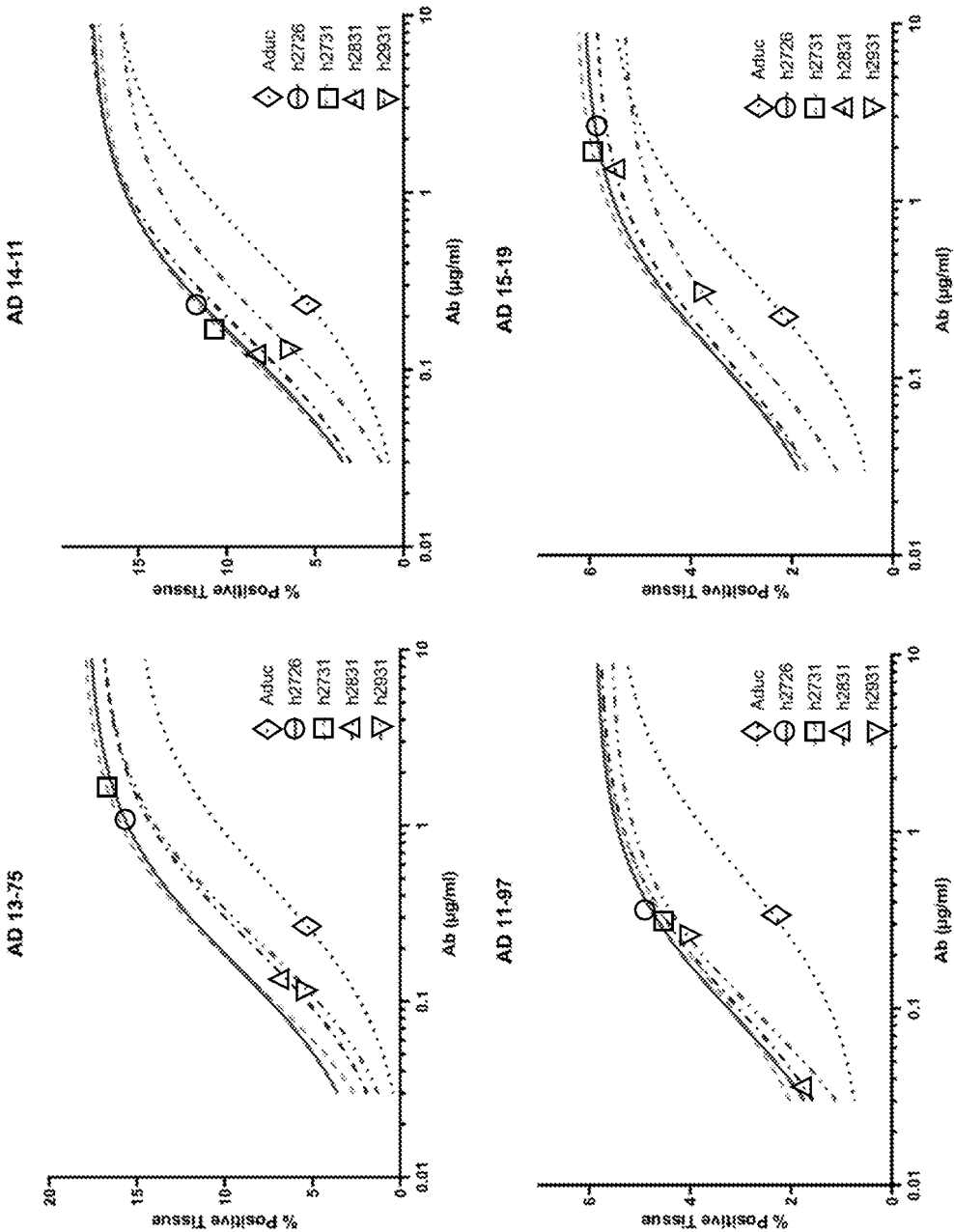


FIG 12

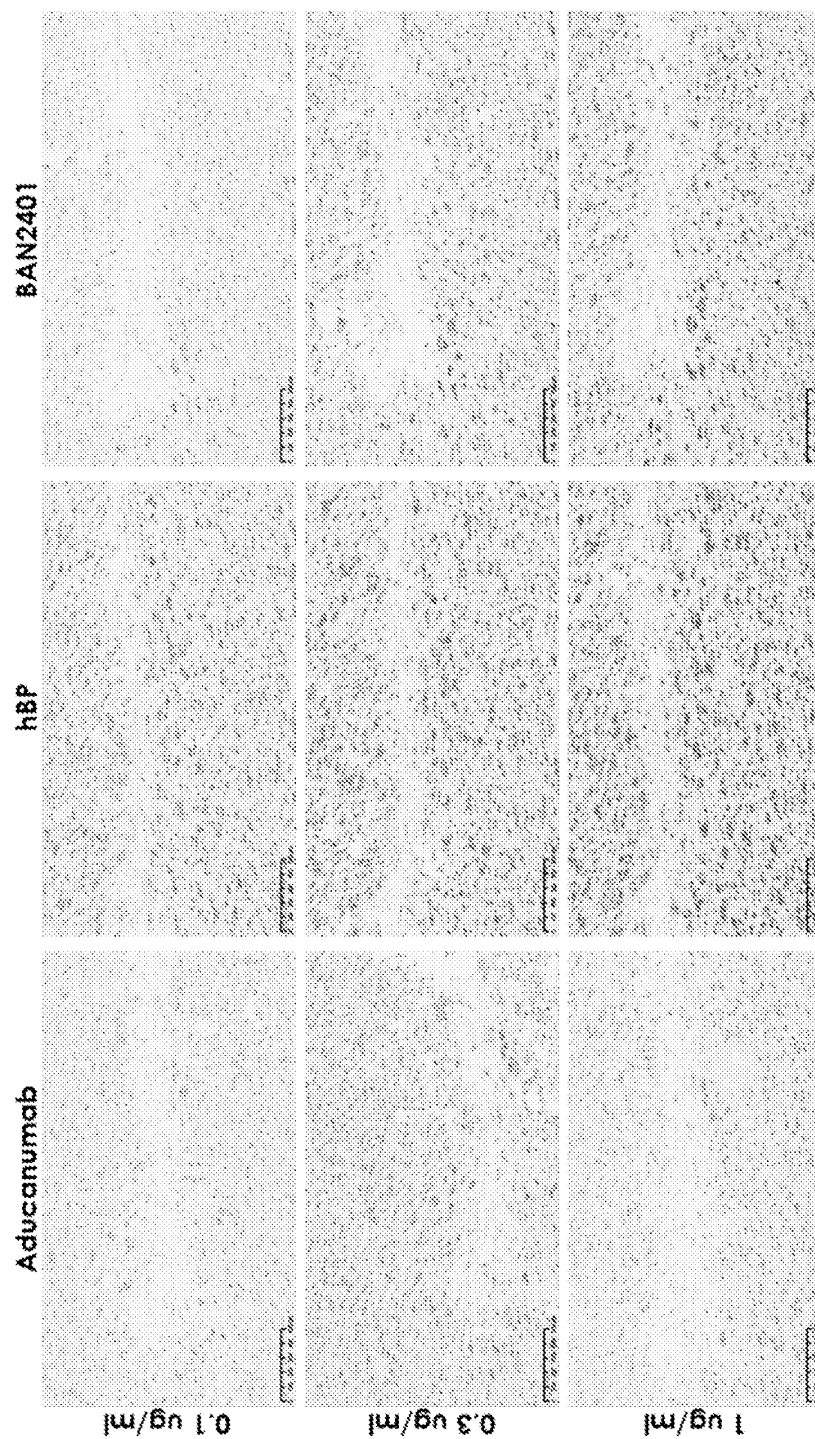


FIG 13

Ex vivo phagocytosis
Quantification of total A β (A β ₁₋₄₂)

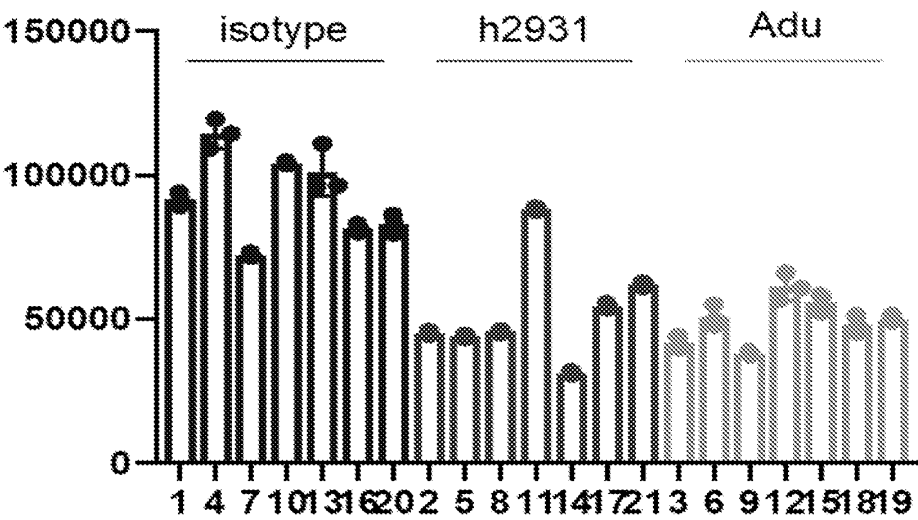


FIG 14A

Ex vivo phagocytosis
Quantification of total A β (A β ₁₋₄₂)

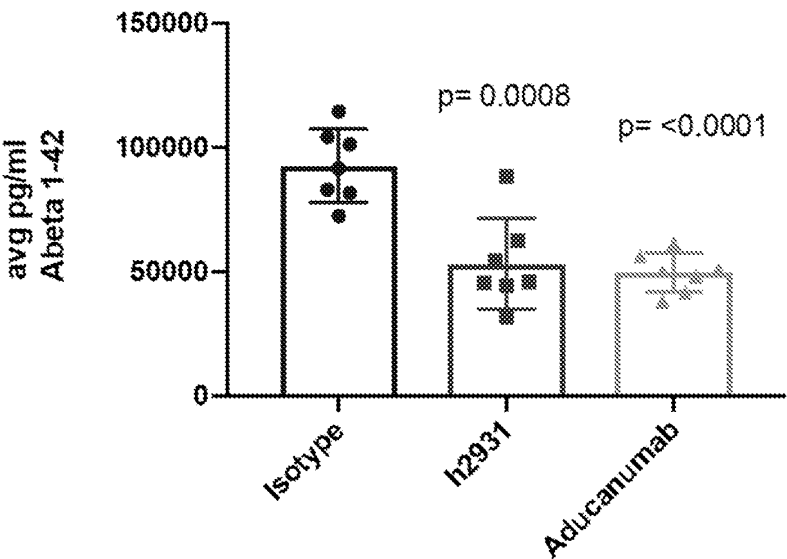


FIG 14B

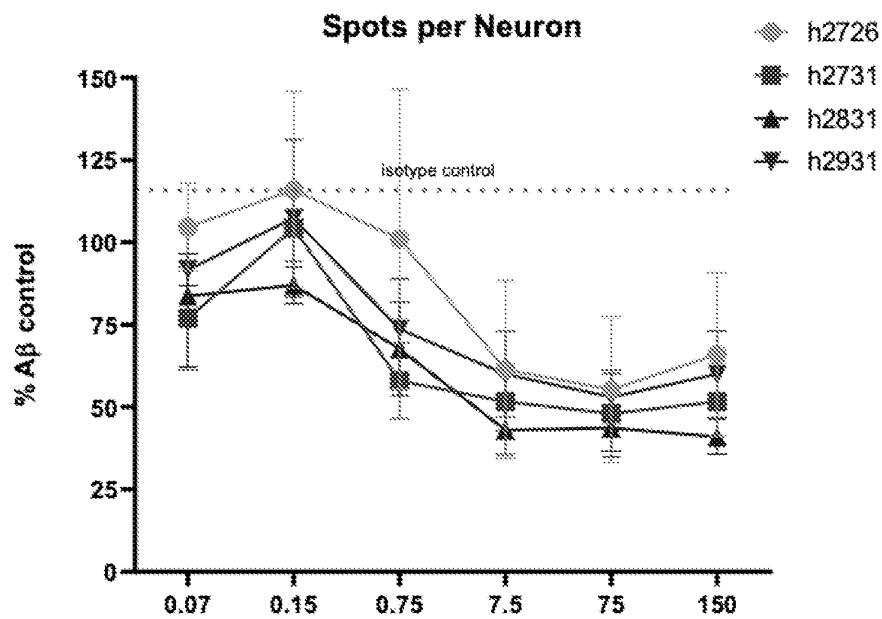


FIG 15A

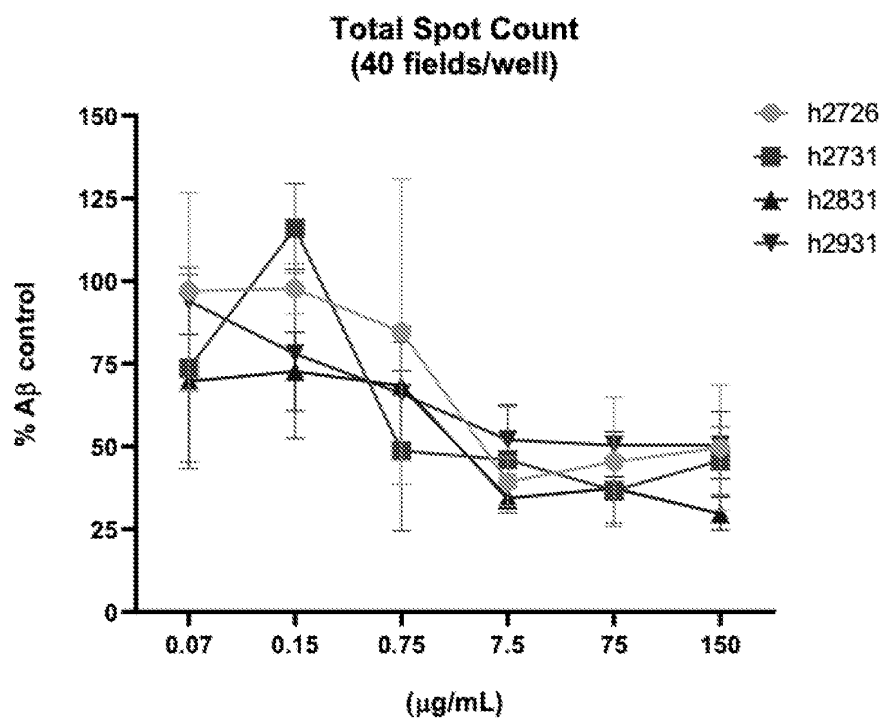
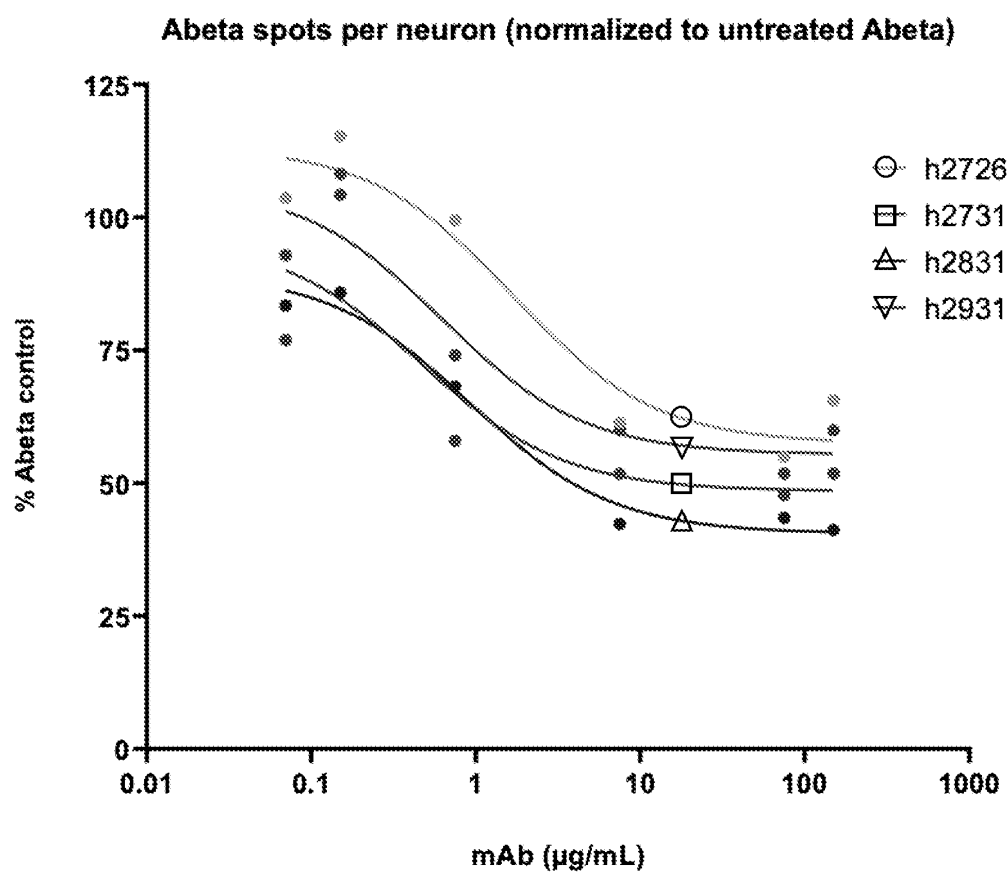


FIG 15B



	h2726	h2731	h2831	h2931
IC50	1.672	0.4700	0.9240	0.6270

	h2726	h2731	h2831	h2931
Total Area	9067	7523	6502	8481

FIG 16

CDRs in bold

FIG 17

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		10	20	30	40								
hBP_LC	DV	VMTQ	SPLS	LPVT	PGEP	ASIS	CKSSQSLLDSDGKTYL	NW	40				
Hm27Lm26_VL	.	.	.	.	.	.	.	.	40				
Hm27Lm31_VL	.	.	.	.	.	L	.	.	40				
Hm28Lm31_VL	.	.	.	.	.	L	.	.	40				
Hm29Lm31_VL	.	.	.	.	.	L	.	.	40				
		50	60	70	80								
hBP_LC	L	LQK	PGQS	PQR	LIY	LVSKLDS	GVPDR	FSGSG	SGTDFTLKI	80			
Hm27Lm26_VL	.	.	.	.	.	K	.	NR	.	80			
Hm27Lm31_VL	.	.	.	.	.	R	.	TNR	.	80			
Hm28Lm31_VL	.	.	.	.	.	R	.	TNR	.	80			
Hm29Lm31_VL	.	.	.	.	.	R	.	TNR	.	80			
		90	100	110	120								
hBP_LC	S	RVEA	EDVG	VYYC	WQGTHF	PR	TFGQGT	KVEIK	R	TVAAPS	V	112	
Hm27Lm26_VL	.	.	.	.	.	.	.	.	.	.	.	112	
Hm27Lm31_VL	.	.	.	.	.	.	.	.	.	.	S	112	
Hm28Lm31_VL	.	.	.	.	.	.	.	.	.	.	S	112	
Hm29Lm31_VL	.	.	.	.	.	.	.	.	.	.	S	112	
		130	140	150	160								
hBP_LC	F	I	FPP	SDEQ	LKSG	TASV	VC	L	NNFY	P	REAKVQWKVDNAL	Q	160
Hm27Lm26_VL	.	.	.	.	.	.	.	.	.	.	.	.	112
Hm27Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	.	112
Hm28Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	.	112
Hm29Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	.	112
		170	180	190	200								
hBP_LC	S	GNSQ	ESVT	EQDS	KDST	YLS	SL	STLT	LSKAD	YEKHKVYACE		200	
Hm27Lm26_VL	.	.	.	.	.	.	.	.	.	.	.	112	
Hm27Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	112	
Hm28Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	112	
Hm29Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	112	
		210											
hBP_LC	V	THQGL	SSP	VT	KS	FNR	GEC					219	
Hm27Lm26_VL	.	.	.	.	.	.	.	.	.	.	.	112	
Hm27Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	112	
Hm28Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	112	
Hm29Lm31_VL	.	.	.	.	.	.	.	.	.	.	.	112	

CDRs in **bold**

FIG.18

SUBSTITUTE SHEET (RULE 26)

#	H-CDRs	Clone ID	CDR1		SEQ ID	CDR2		SEQ ID	CDR3	SEQ ID	VH SEQ ID
			aa 26-35			aa 50-66					
		Bap1	GPTFS NYGMS		16	SIRSG GGRTY YSDNV KG		17	YDHYS GSSDY	18	1
1		h2726	GPTFS NYGMS		16	SIRSG SGRTY YSDNV KG		20	YDHYS GSSDY	18	3
2		h2731	GPTFS NYGMS		16	SIRSG SGRTY YSDNV KG		20	YDHYS GSSDY	18	3
3		h2831	GPTFS NFGMS		19	SVRSG SGRTY YSDNV KG		21	YDHYS GTSDY	24	4
4		h2931	GPTFS NFGMS		19	SVRSG SGRTY YSDNV KG		21	YDHYT GTSDY	25	5
5		h2926	GPTFS NFGMS		19	SVRSG SGRTY YSDNV KG		21	YDHYT GTSDY	25	5
6		h4921G	GPTFS NFGMS		19	SVRSG GGRTY YSDNV KG		22	YDHYS GTSDY	24	6
7		h2826	GPTFS NFGMS		19	SVRSG SGRTY YSDNV KG		21	YDHYS GTSDY	24	4
8		h2929	GPTFS NFGMS		19	SVRSG SGRTY YSDNV KG		21	YDHYT GTSDY	25	5
9		h3818G	GPTFA NYGMS		20	SVRSG GSRTY YSDNV KG		23	YDHYS GSSDY	18	7
10		h2927	GPTFS NFGMS		19	SVRSG SGRTY YSDNV KG		21	YDHYT GTSDY	25	5
11		h49k3G	GPTFS NFGMS		19	SVRSG GGRTY YSDNV KG		22	YDHYS GTSDY	24	6
12		h4917G	GPTFS NFGMS		19	SVRSG GGRTY YSDNV KG		22	YDHYS GTSDY	24	6
13		h2727	GPTFS NYGMS		16	SIRSG SGRTY YSDNV KG		20	YDHYS GSSDY	18	3
14		h4918G	GPTFS NFGMS		19	SVRSG GGRTY YSDNV KG		22	YDHYS GTSDY	24	6

FIG 19A

#	Clone ID	CDR1		SEQ ID	CDR2		SEQ ID	CDR3		SEQ ID	VL SEQ ID
		aa 24-39			aa 55-61			aa 94-102			
	Bapi	KSSQS	LLDSD GKTYL N	26	LVS KL DS	27	WQGT H FPRT	28	2		
1	h2726	KSSQS	LLDYD GKTYL N	29	KVSNR DS	33	WQGT H FPRT	28	8		
2	h2731*	KSSQS	LLDYD GKTYL N	29	RV TNR DT	34	WQGT H FPRS	38	9		
3	h2831*	KSSQS	LLDYD GKTYL N	29	RV TNR DT	34	WQGT H FPRS	38	9		
4	h2931*	KSSQS	LLDYD GKTYL N	29	RV TNR DT	34	WQGT H FPRS	38	9		
5	h2926	KSSQS	LLDYD GKTYL N	29	KVSNR DS	33	WQGT H FPRT	28	8		
6	H4921G*	KSSQS	LLDSD GKTYL N	26	RV TNR DT	34	WQGT H FPRT	28	10		
7	h2826	KSSQS	LLDYD GKTYL N	29	KVSNR DS	33	WQGT H FPRT	28	8		
8	h2929	RSSQS	LVDYD GKTYL N	31	KVSNR DS	33	WQSH FERSY	39	11		
9	h3818G*	KSSQS	LMSTD GKTYL N	32	KVSNR ES	35	WQGT H FPRT	28	12		
10	h2927	KSSQS	LLDYD GKTYL N	29	KVSNR DS	33	WQGT H FPRS	38	13		
11	h49k3G*	KSSQS	LLDSD GKTYL N	26	KVSNR DS	33	WQGT H FPRT	28	14		
12	h4917G*	KSSQS	LLDSD GKTYL N	26	KV TNR ES	36	WQGT H FPRS	38	15		
13	h2727	KSSQS	LLDYD GKTYL N	29	KVSNR DS	33	WQGT H FPRS	38	13		
14	h4918G*	KSSQS	LMSTD GKTYL N	32	KVSNR ES	35	WQGT H FPRT	28	12		
	* = LC P15L										

FIG 19B

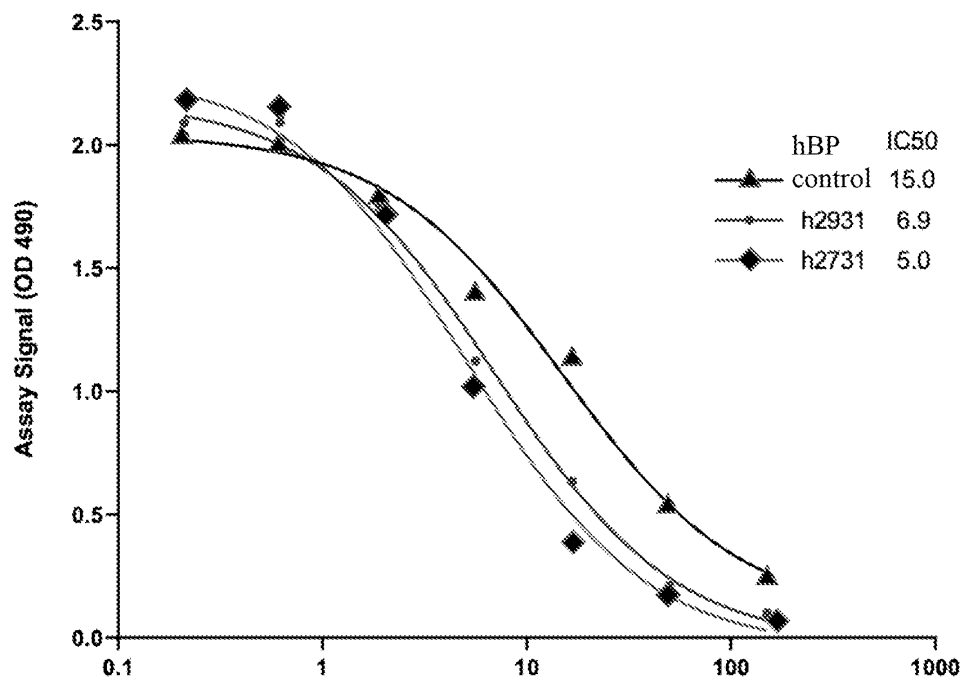


FIG 20A

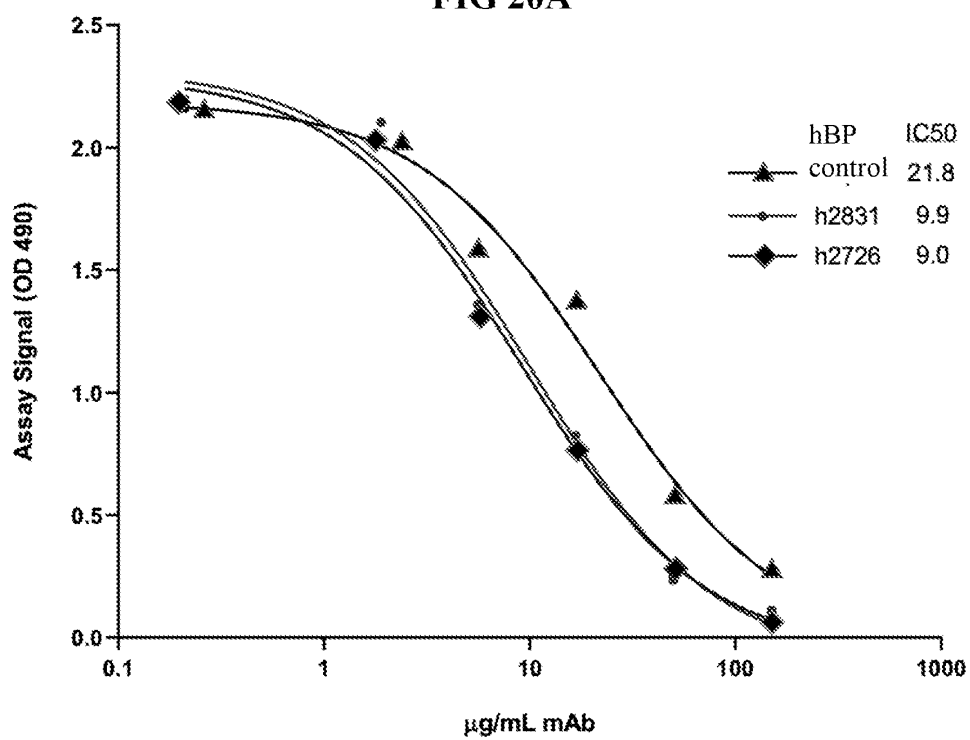


FIG 20B

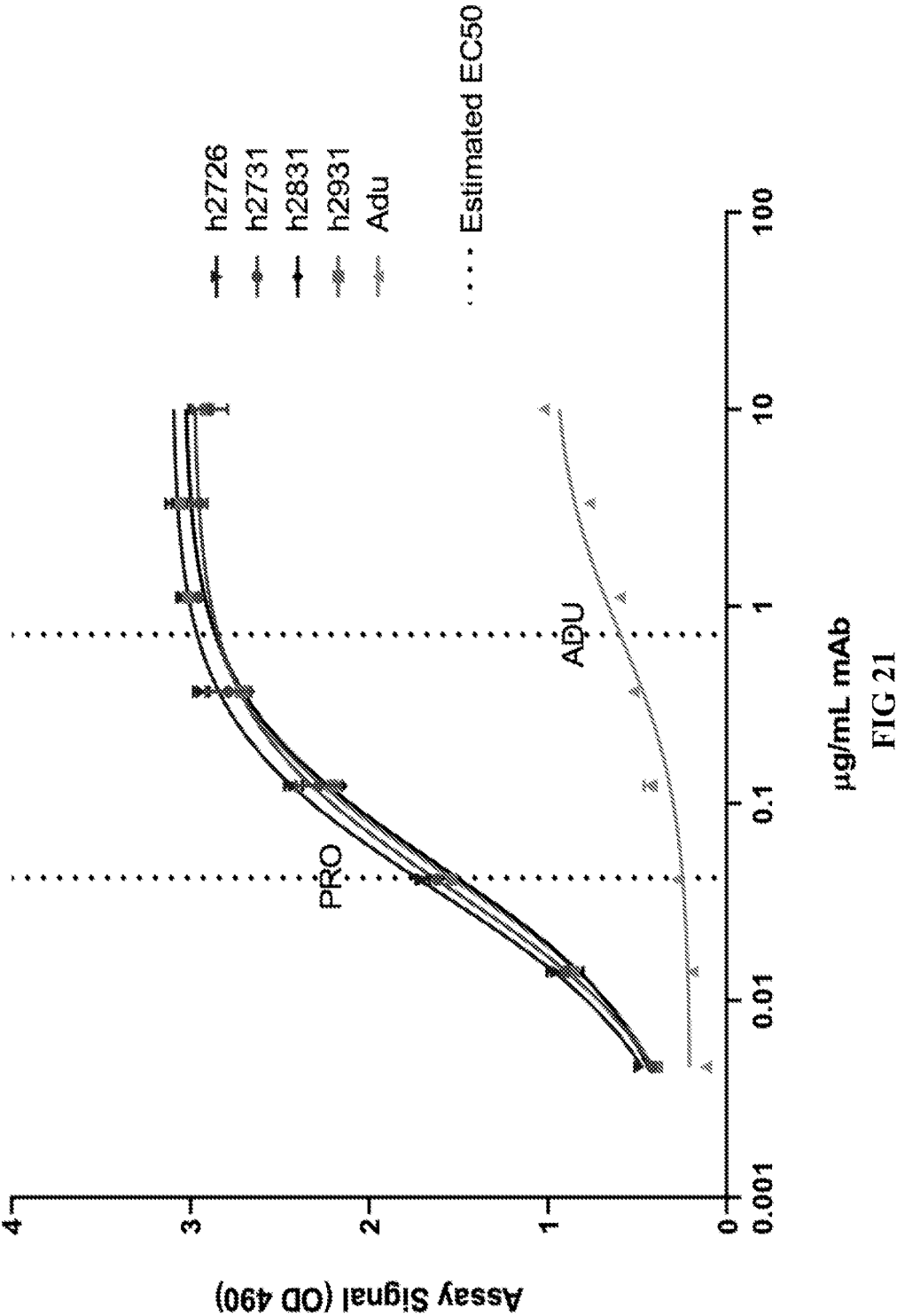


FIG 21

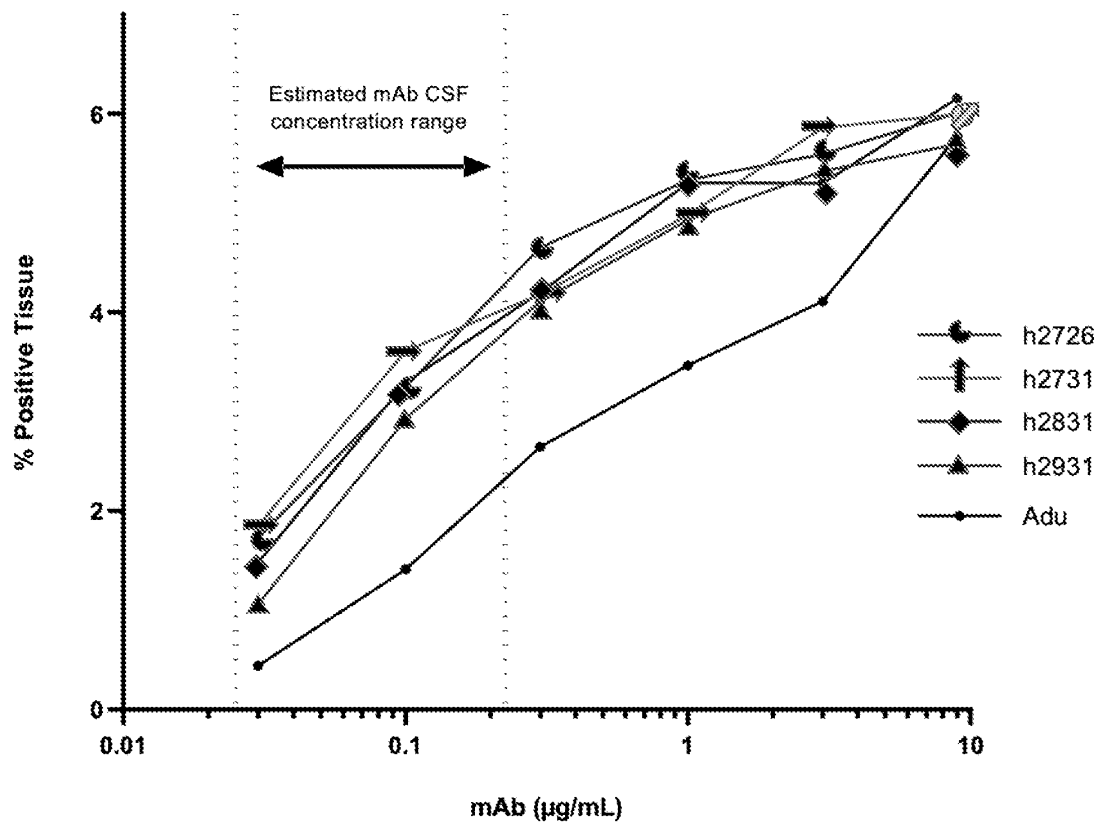


FIG 22

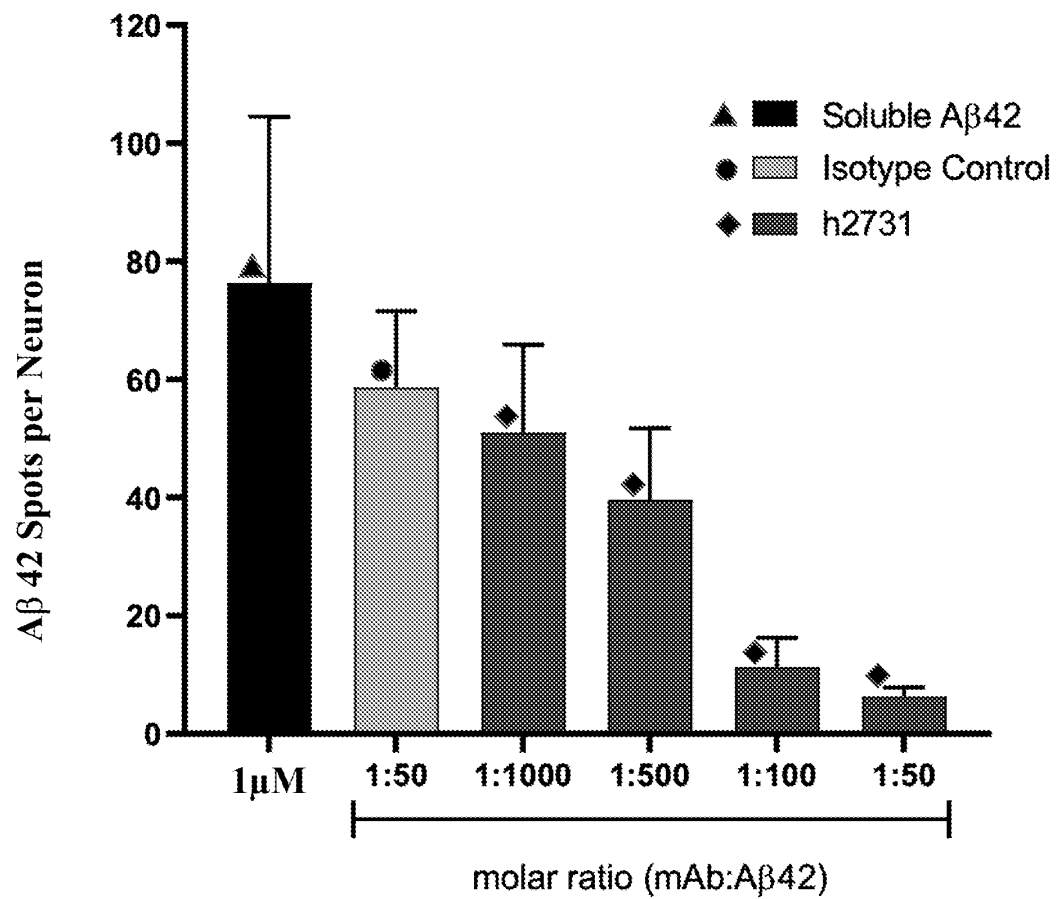


FIG 23



FIG. 24

Anti-pyro-Glu (Ab822301) (10 µg/ml)

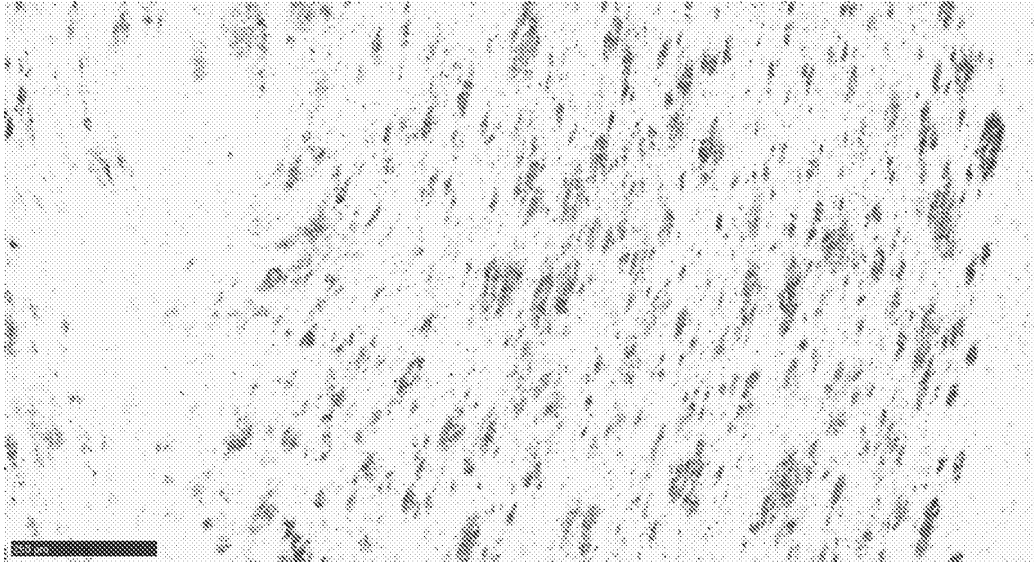


FIG 25A

H2931 (1 µg/ml)

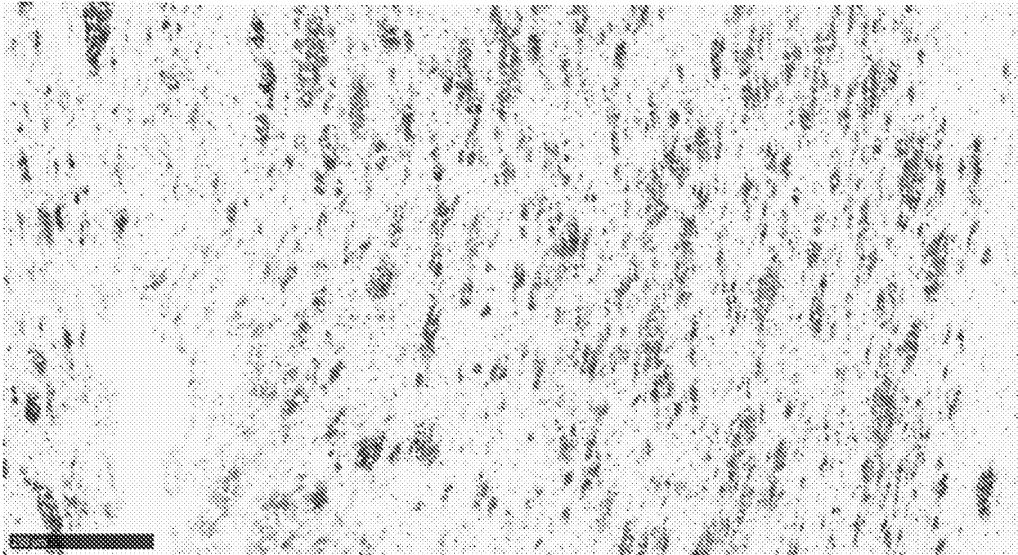


FIG 25B

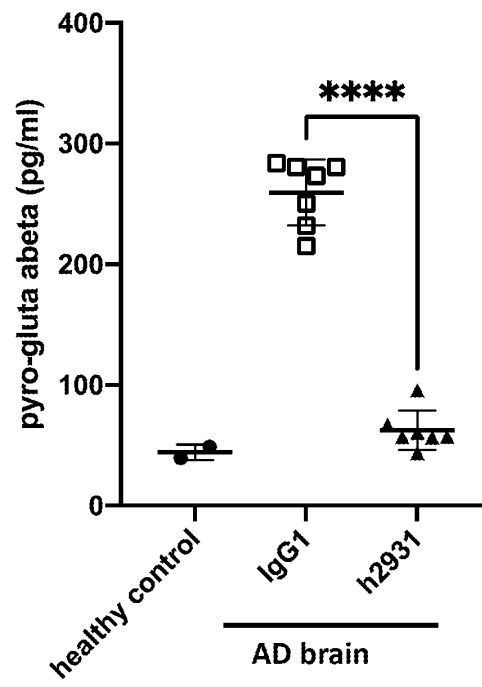


FIG 26A

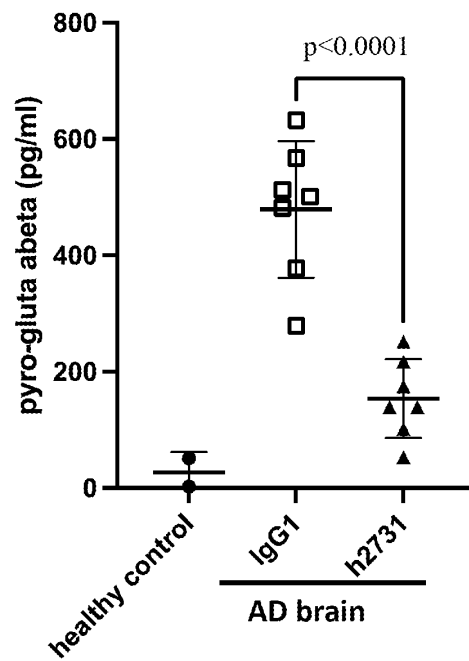


FIG 26B

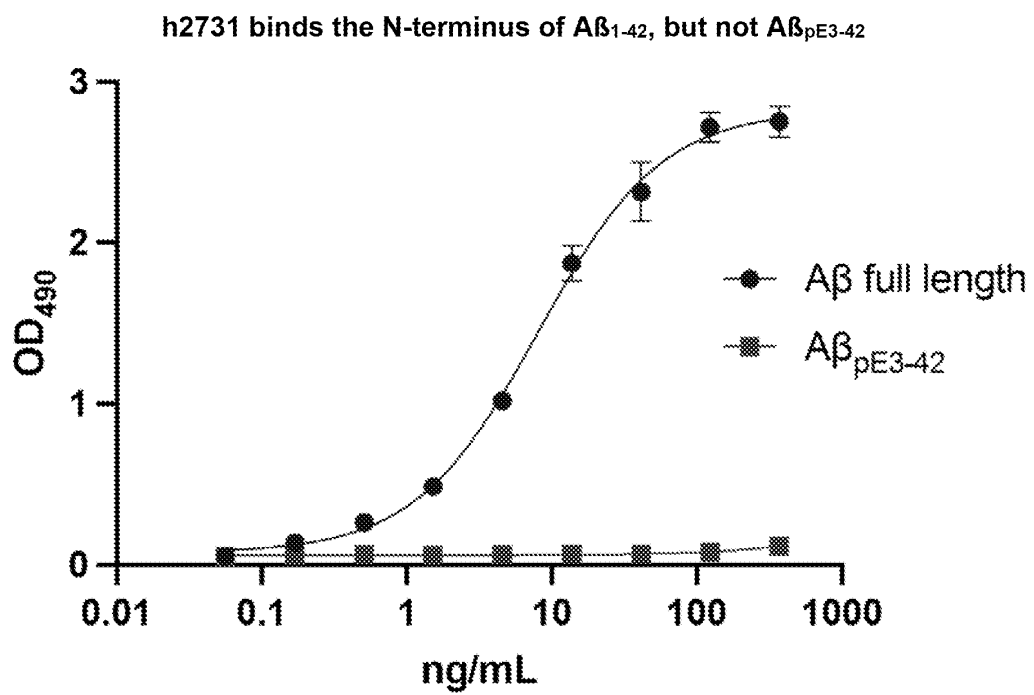


FIG. 27

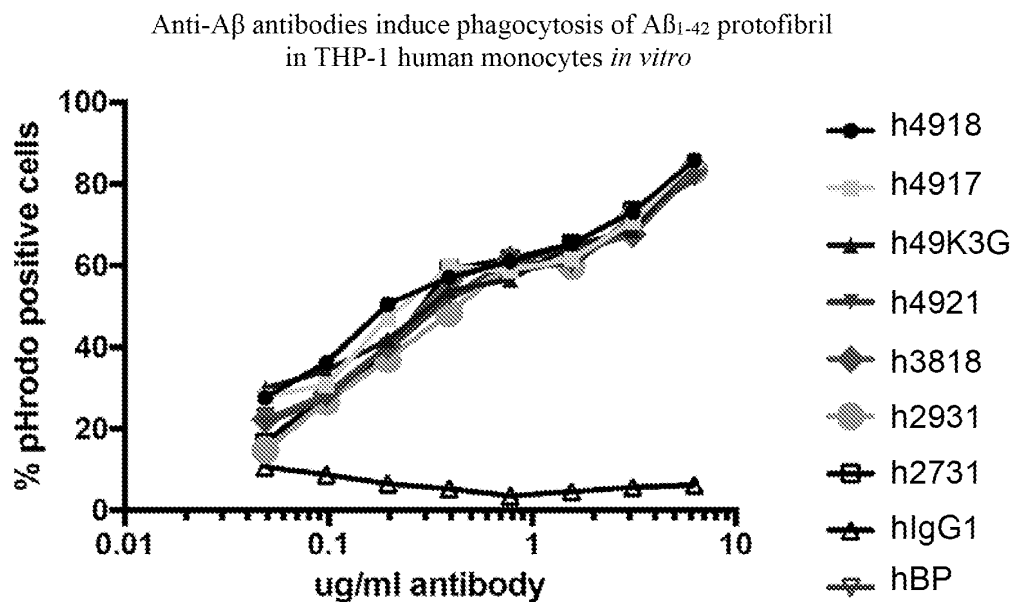


FIG. 28A

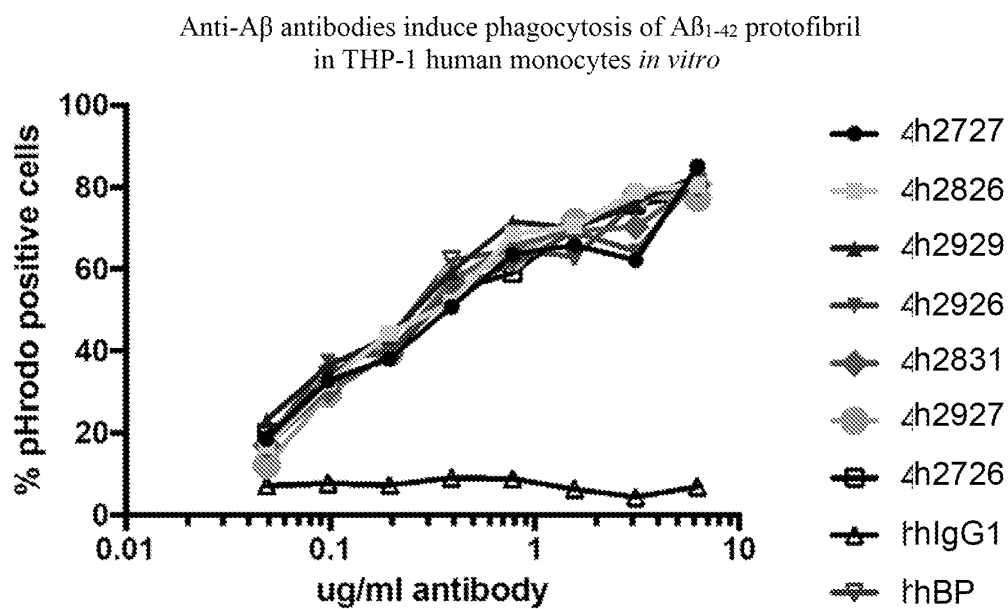


FIG. 28B

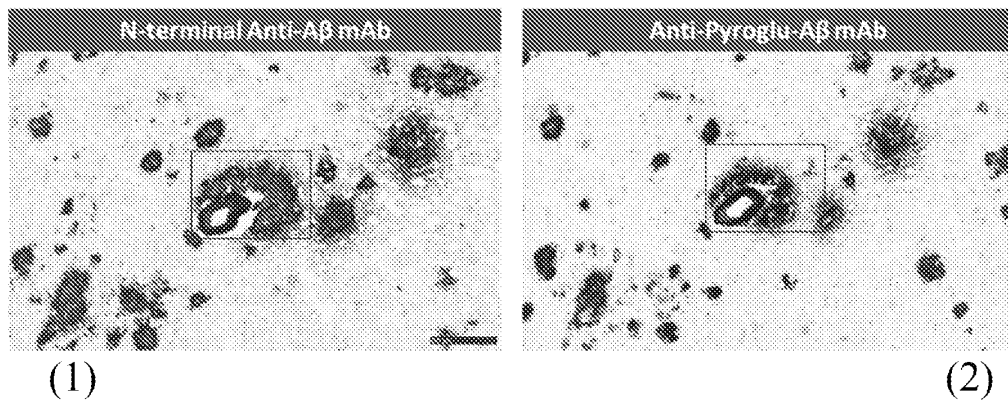


FIG. 29A

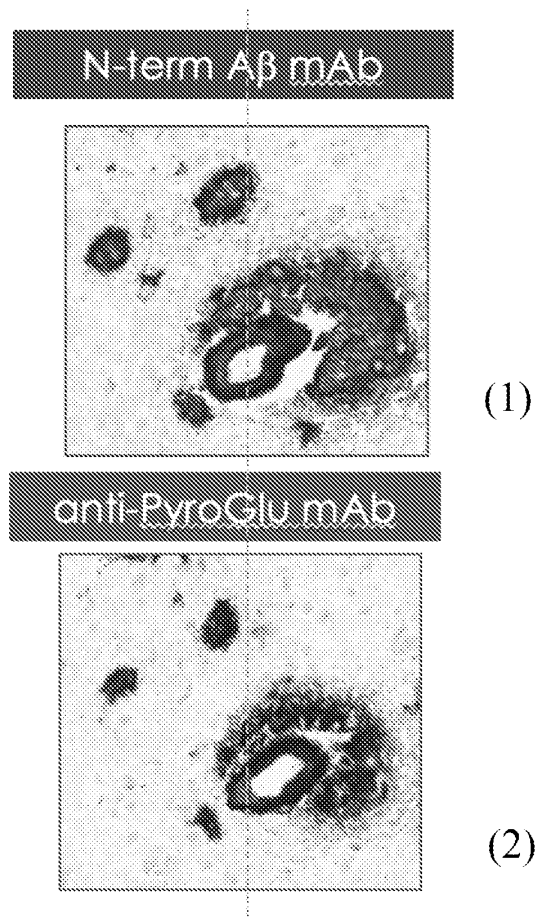


FIG. 29B

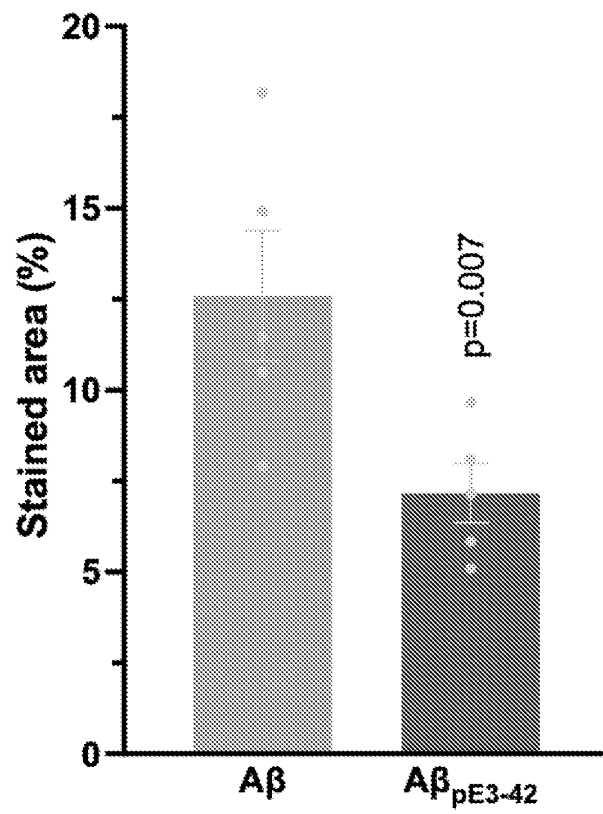


FIG. 29C

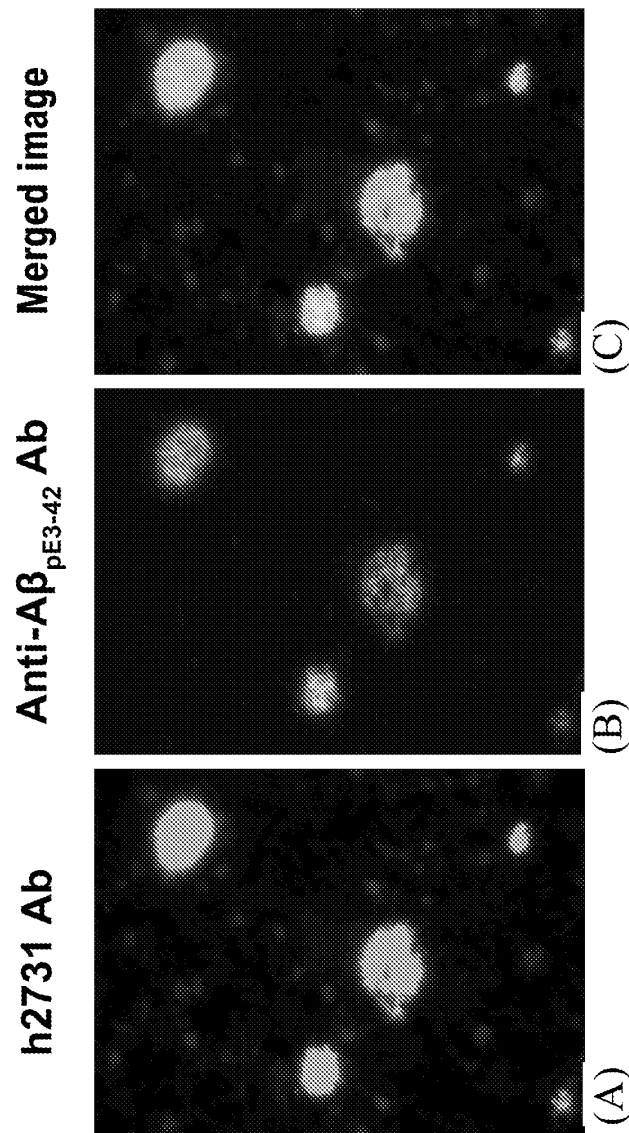


FIG 30

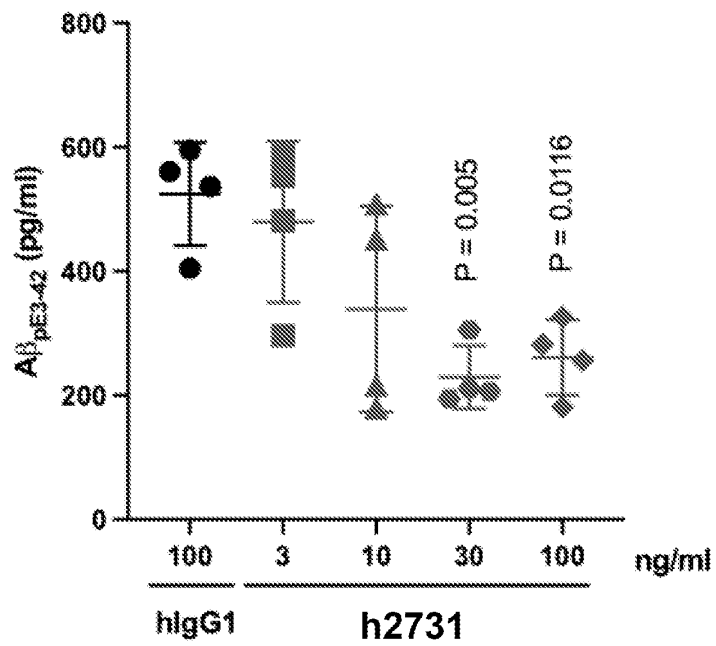


FIG. 31A

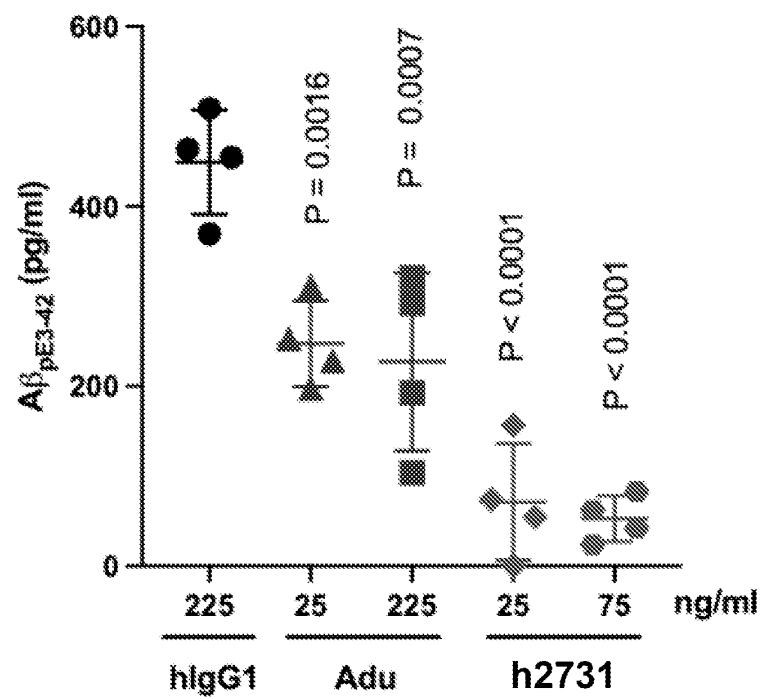


FIG. 31B

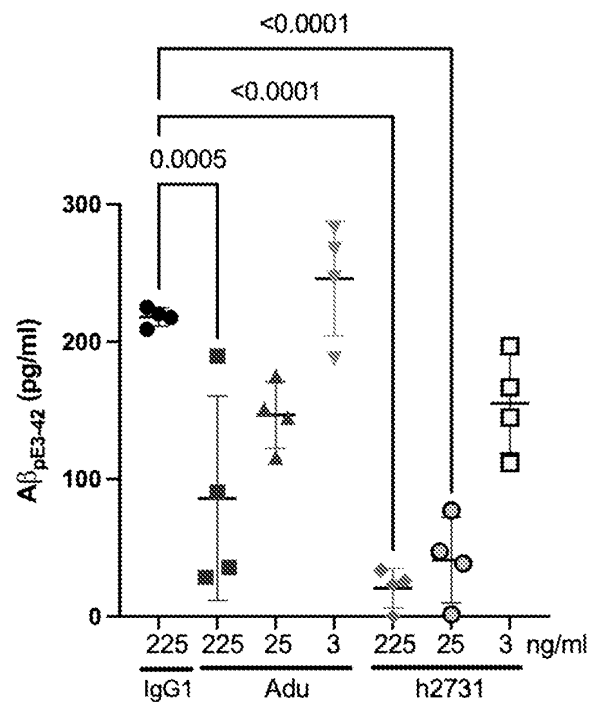


FIG. 32A

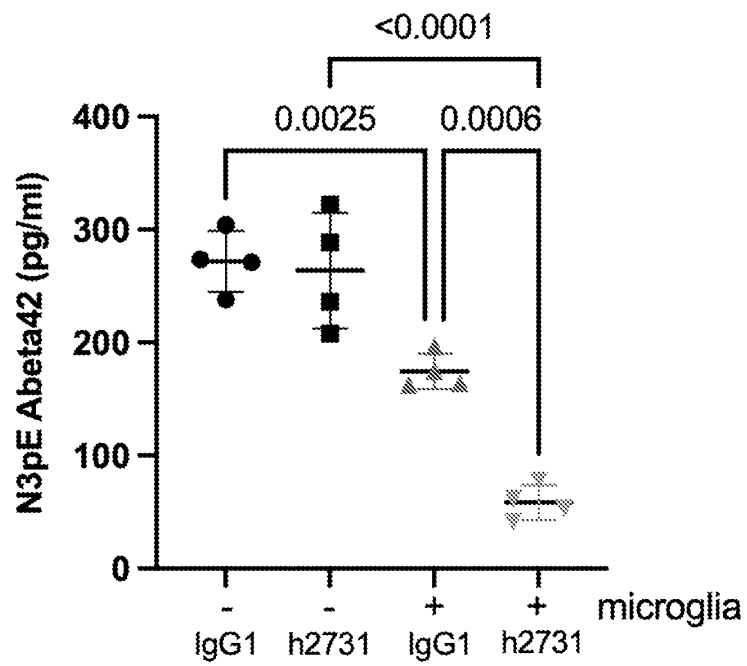


FIG. 32B

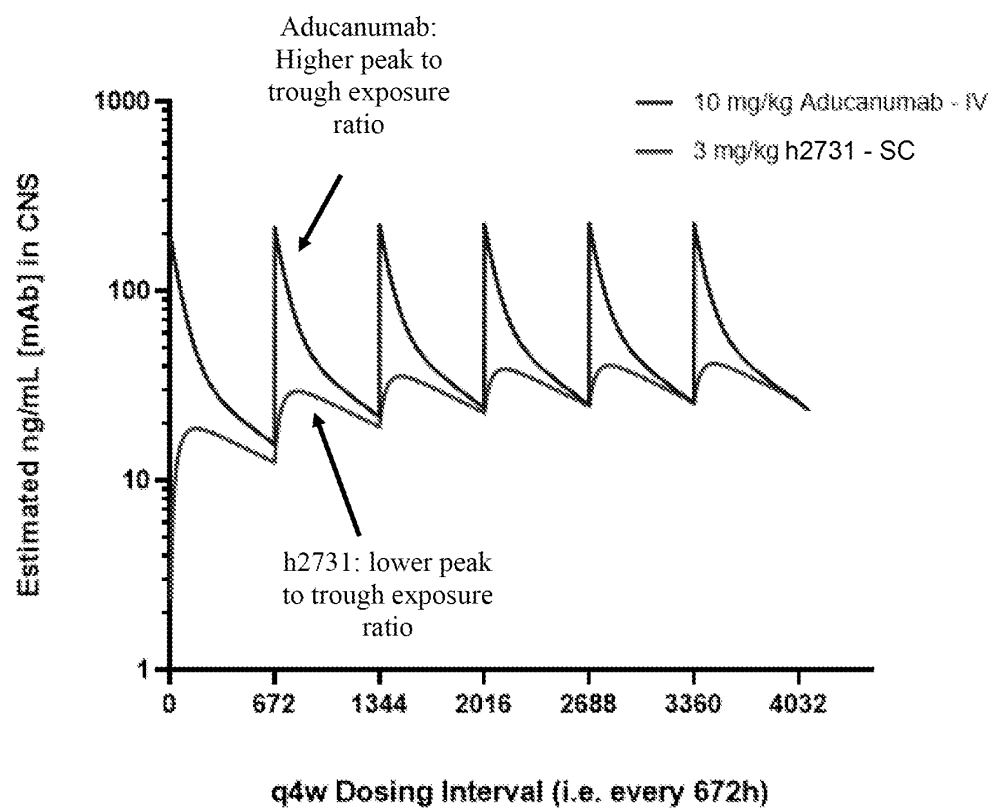


FIG. 33

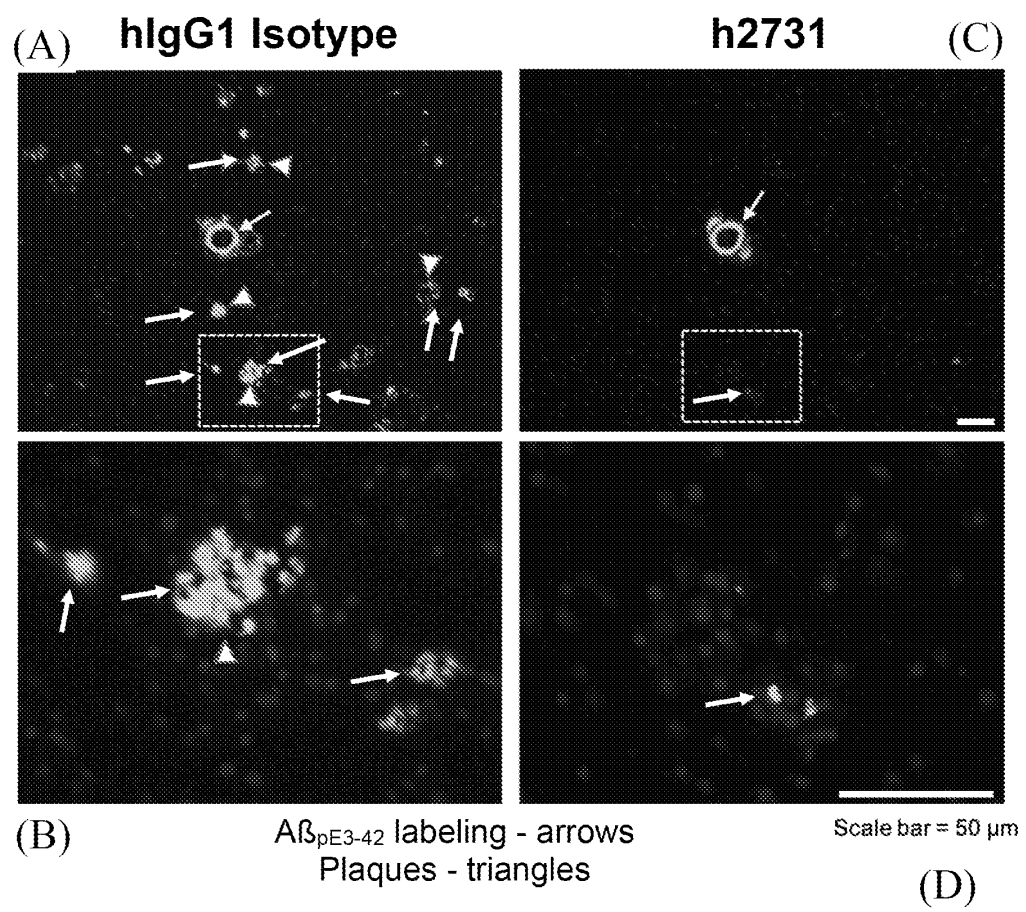


FIG. 34