

Figure 1

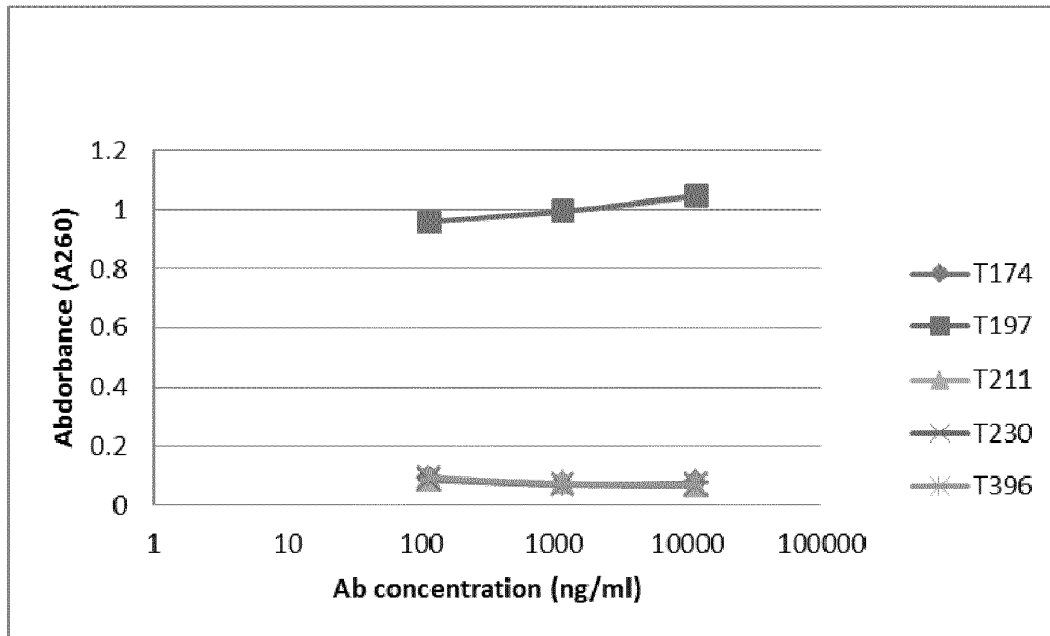


Figure 2

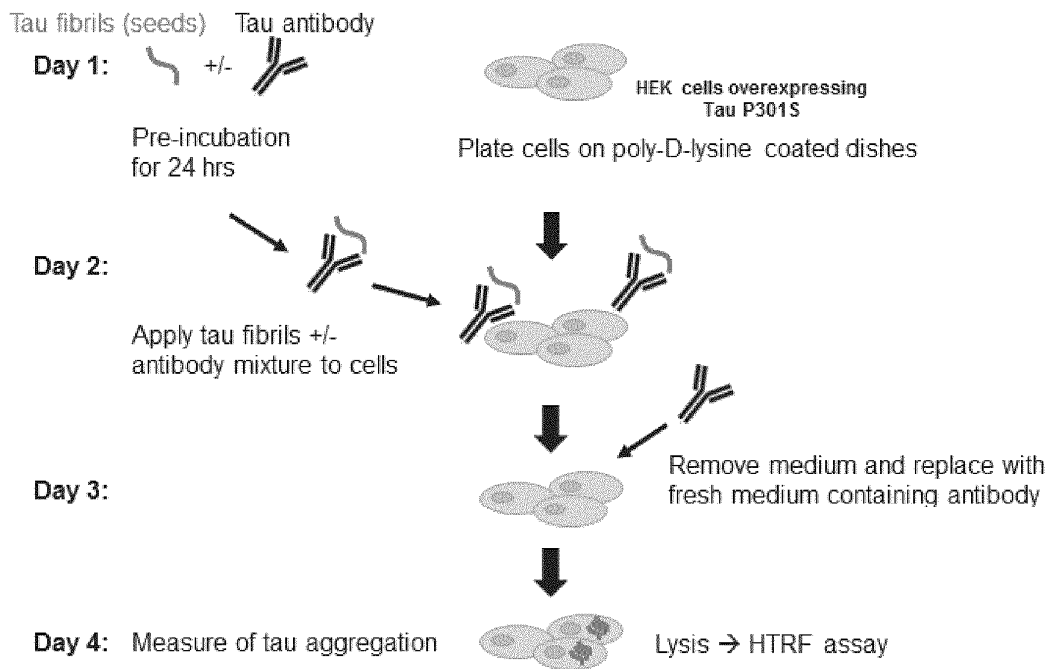
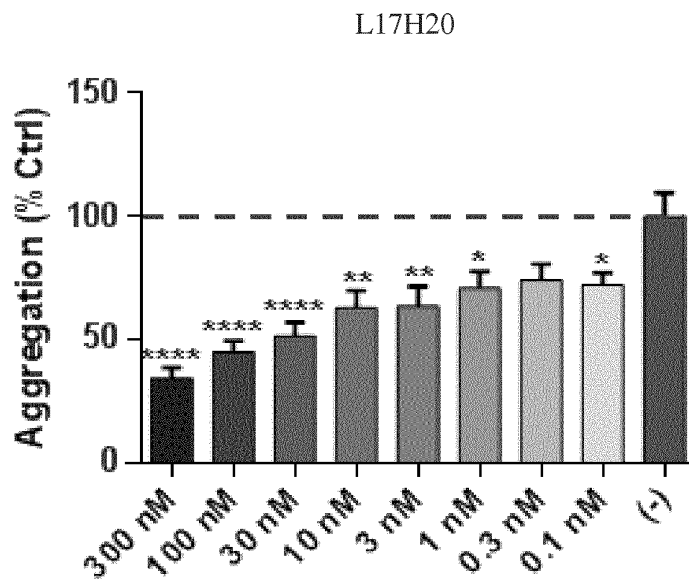
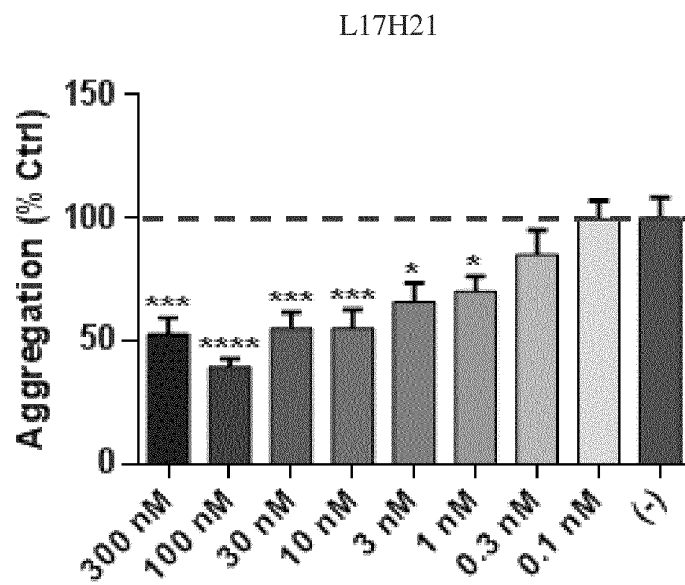


Figure 3

A)



B)



C)

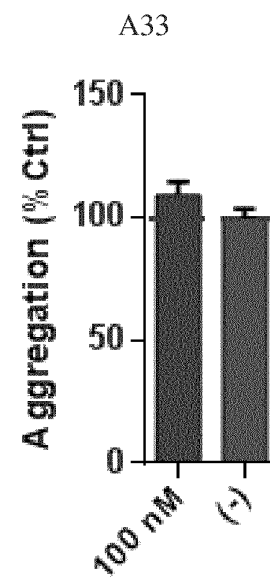


Figure 4

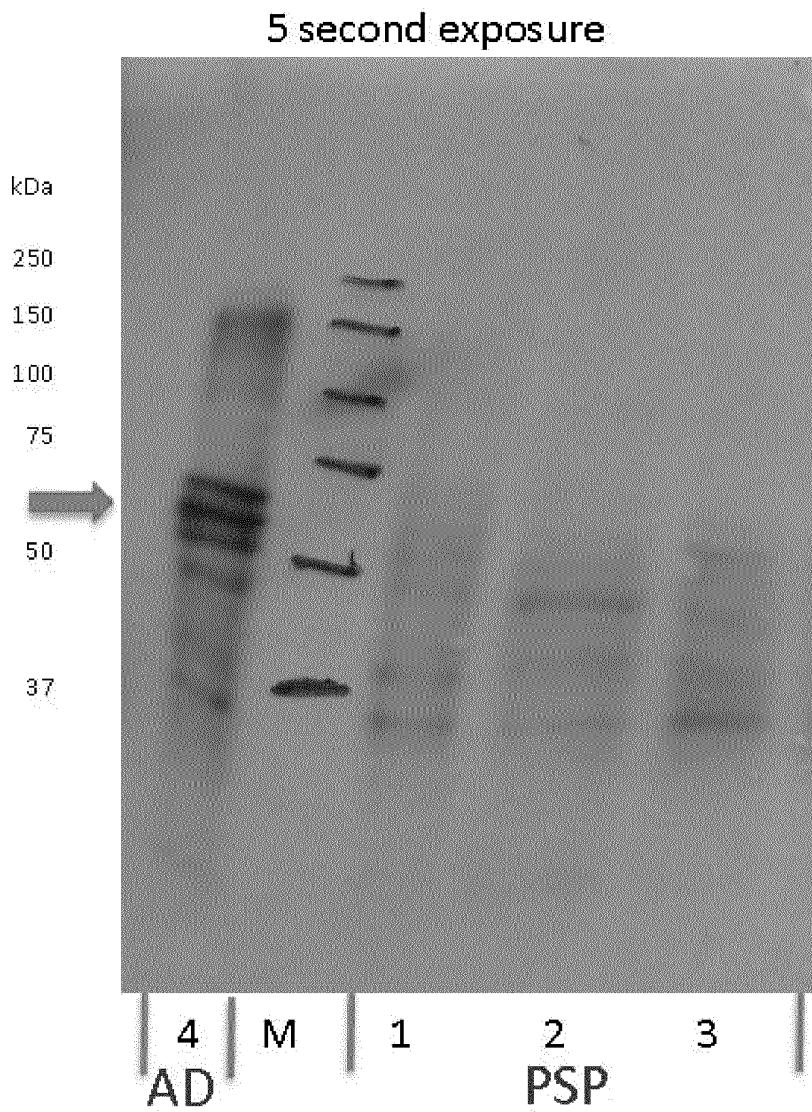


Figure 5

LIGHT CHAIN Graft AB1

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95abc 100 105

A) AB1_VL
DVMTQIPASVEAAVGGTVTIKQASQSVSSYLAWYQQKPGKPKLLIYAASYLASGVPSRFSGSGSGTEFLTIISDLQADAAATYYCQQGYTRTDIDNTEGGGIKVWVE

B) IGKV1-39
DIQMTQSPSSLSASVGDRVTITCRASQISISSYLNWYQQKPGKPKLLIYAASSLQSGVPSRFSGSGSGTEFLTIISLQPEDFATYYCQQSYST---PLTTEGGIKRVEIK

C) gVL4_AB1
DIQMTQSPSSLSASVGDRVTITCQASQSVSSYLAWYQQKPGKPKLLIYAASYLASGVPSRFSGSGSGTEFLTIISLQPEDFATYYCQQGYTRTDIDNTEGGGIKRVEIK

D) gVL9_AB1
DIQMTQSPSSLSASVGDRVTITCQASQSVSSYLAWYQQKPGKPKLLIYAASYLASGVPSRFSGSGSGTEFLTIISLQPEDFATYYCQQGYTRTDIDNTEGGGIKRVEIK

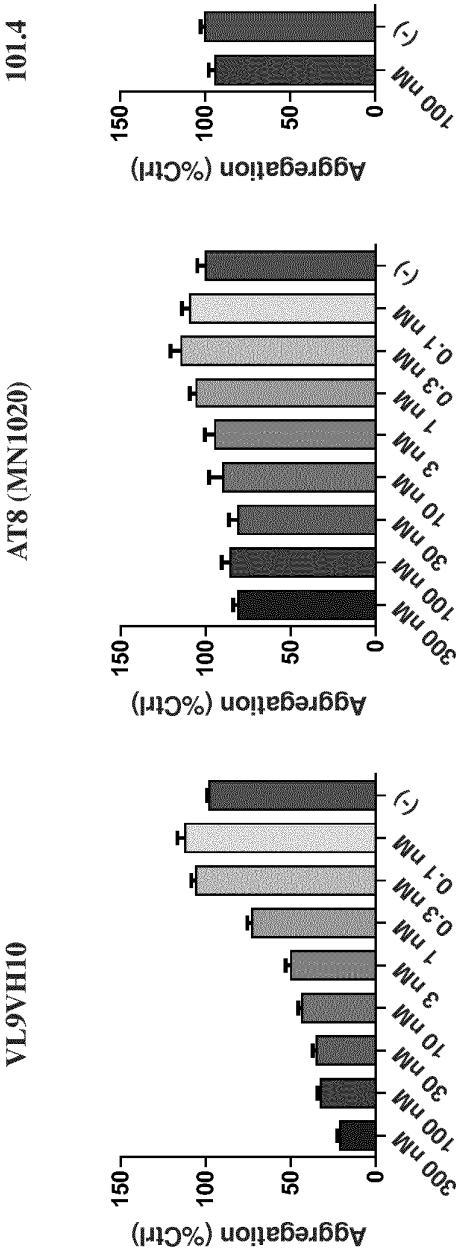
Figure 6

HEAVY CHAIN Graft AB1

1	5	10	15	20	25	30	ab	35	40	45	50	55	60	65	70	75	80	abc	85	90	95	100	abcd	105	110	
A) VH_AB1																										
-QSLTEESGRLVTPGTPLTILCTVSGIDLST--WRMNWVRQAPGKGLEWIG <u>IIGTGGR</u> TYANWAKGRFTISKTSI--TVDLKVTSPPTIEDTATYFCAR <u>LGANNNGYPIDL</u> WGQGTILVTSS																										
B) IGHV4-39																										
QLQLQESGGLVKPSETILSLTCTVSGGSISSSYWGWIRQPPGKGLEWIG <u>SIYSGSTVYNP</u> SILKSRVTVISVDTSKNQFSLKLSVTAADTAVYYCAR-----YFDYWGQGTILVTSS																										
C)																										
gVH4L_AB1																										
<u>ELQIQESGGLVKPSETILSLTCTVSGIDLST--WRMNW</u> IRQPPGKGLEWIG <u>IIGTGGR</u> TYANWAKGRVTISKTSKNQVSLKLSVTAADTAVYYCAR <u>LGANNNGYPIDL</u> WGQGTILVTSS																										
D) gVH49_AB1																										
<u>ELQIQESGGLVKPSETILSLTCTVSGIDLST--WRMNW</u> IRQPPGKGLEWIG <u>IIGTGGR</u> TYANWAKGRVTISKTSKNQVSLKLSVTAADTAVYYCAR <u>LGANNAGYPIDL</u> WGQGTILVTSS																										

The N-terminal Glutamine residue is replaced with Glutamic acid, and is shown in bold and highlighted: E1.

Figure 7



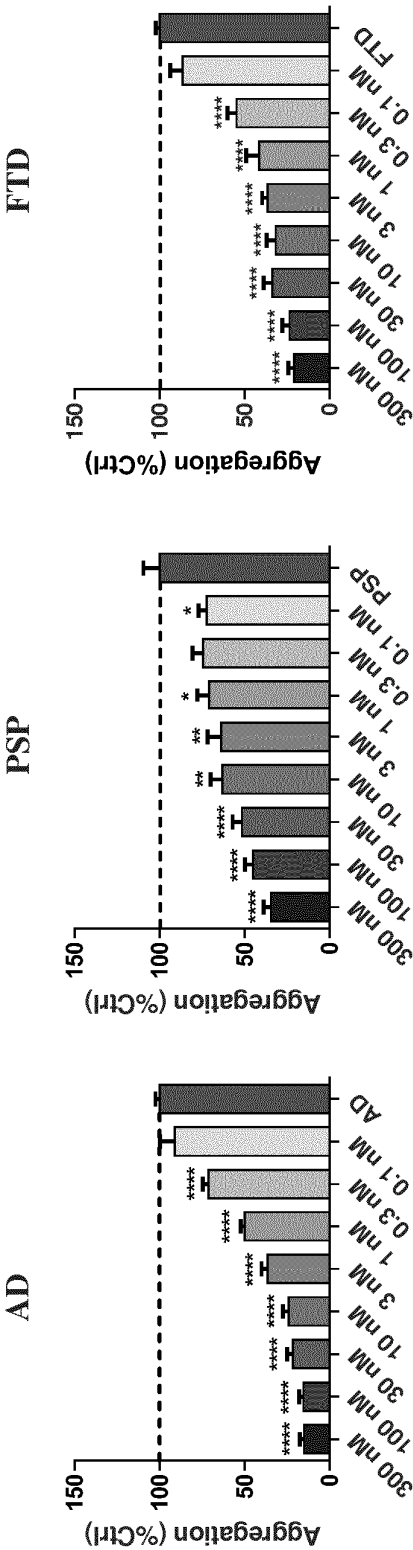


Figure 8