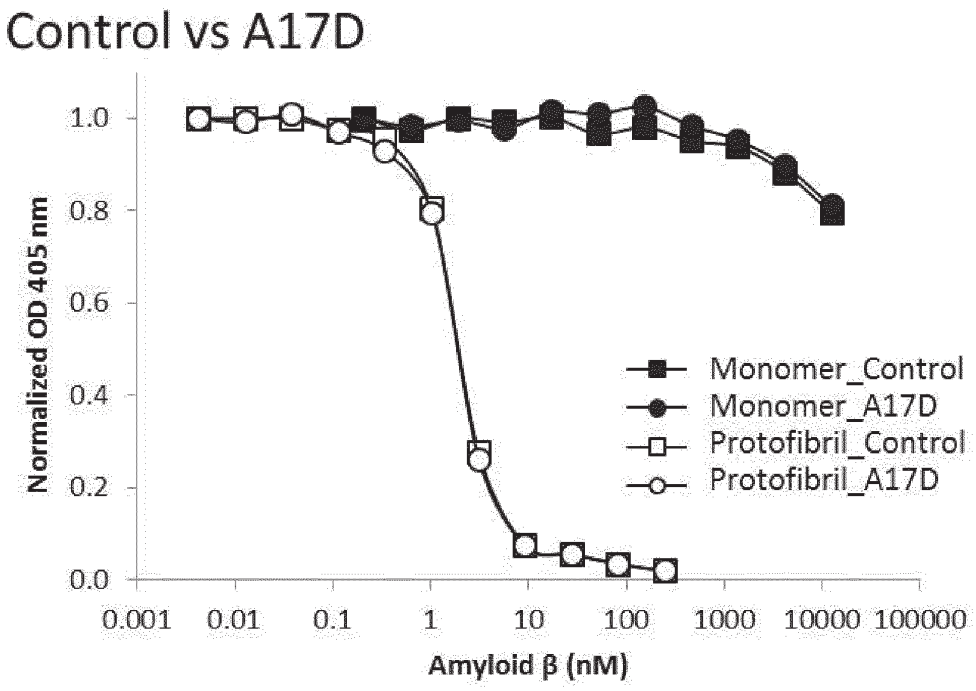
Figure 1


Control vs A17D
Normalized OD 405 nm
1.0
0.8
0.6
0.4
0.2
0.0
0.001
0.01
0.1
1
10
100
1000
10000
100000
Amyloid β (nM)
Monomer_Control
Monomer_A17D
Protofibril_Control
Protofibril_A17D

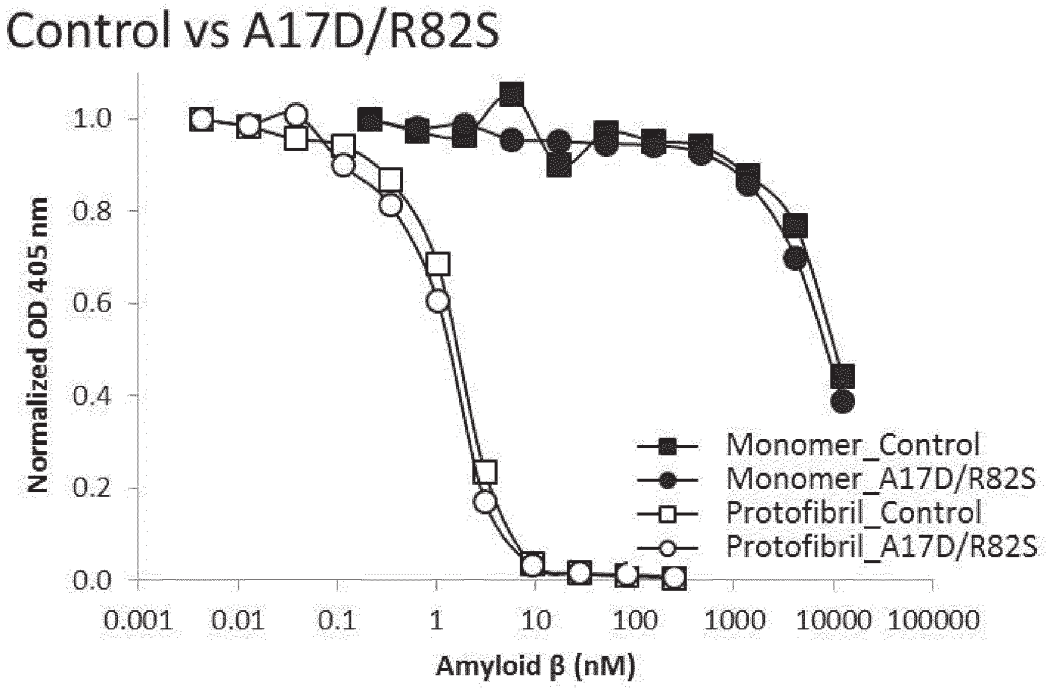

Control vs A17D/R82S
Normalized OD 405 nm
1.0
0.8
0.6
0.4
0.2
0.0
0.001
0.01
0.1
1
10
100
1000
10000
100000
Amyloid β (nM)
Monomer_Control
Monomer_A17D/R82S
Protofibril_Control
Protofibril_A17D/R82S

Figure 1 (continued)

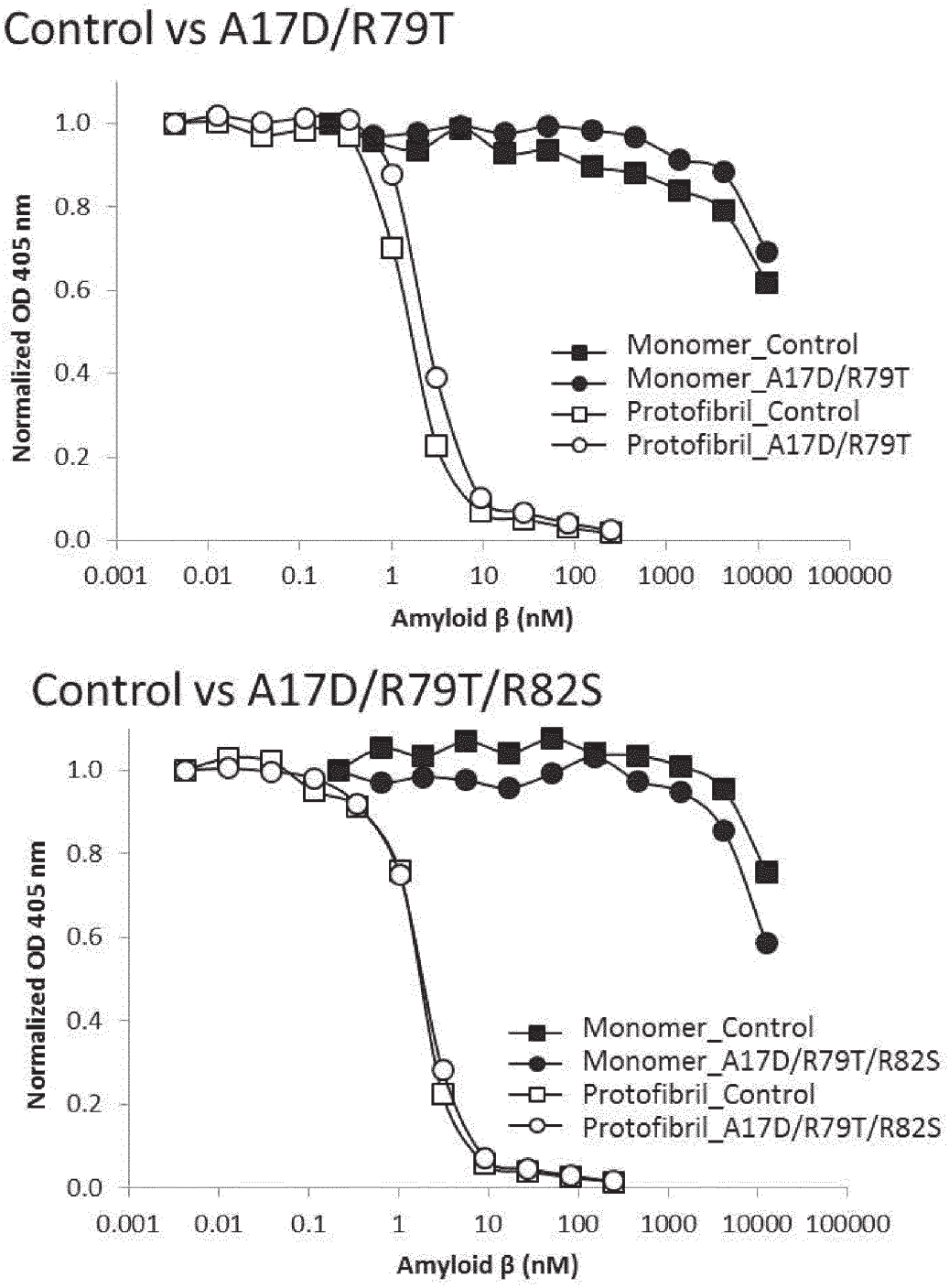


Figure 2

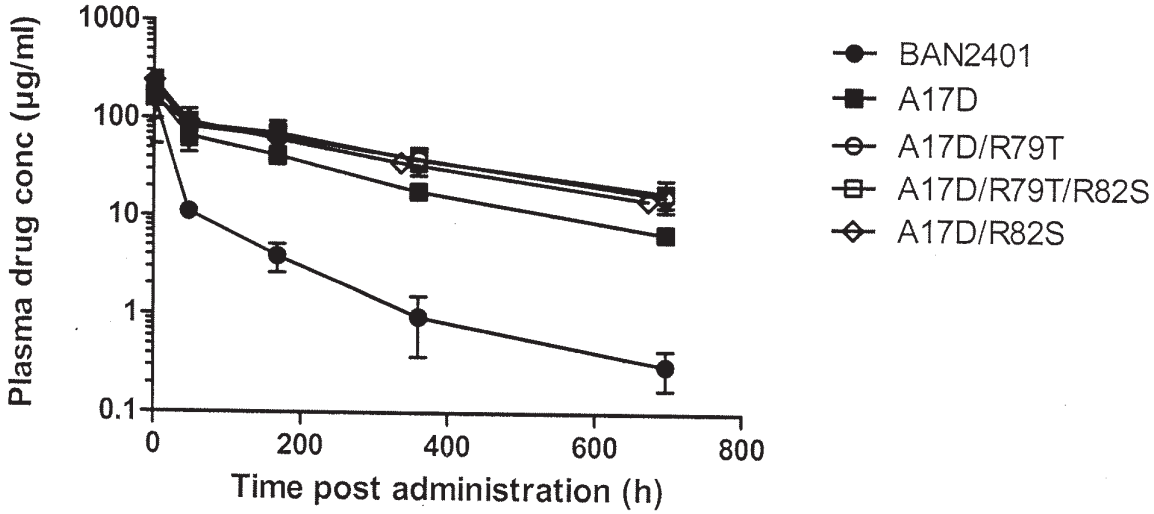


Figure 3

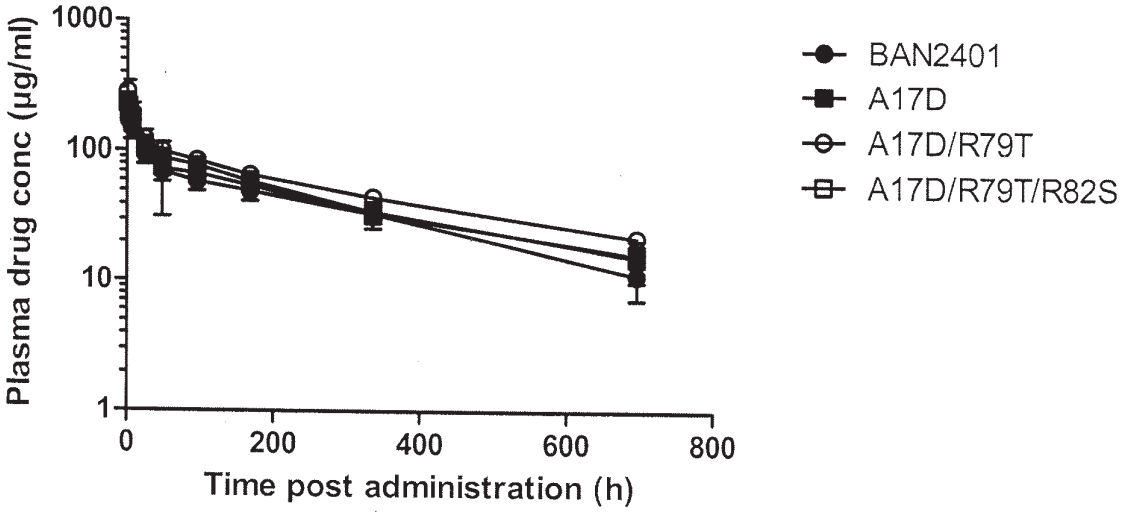


Figure 4

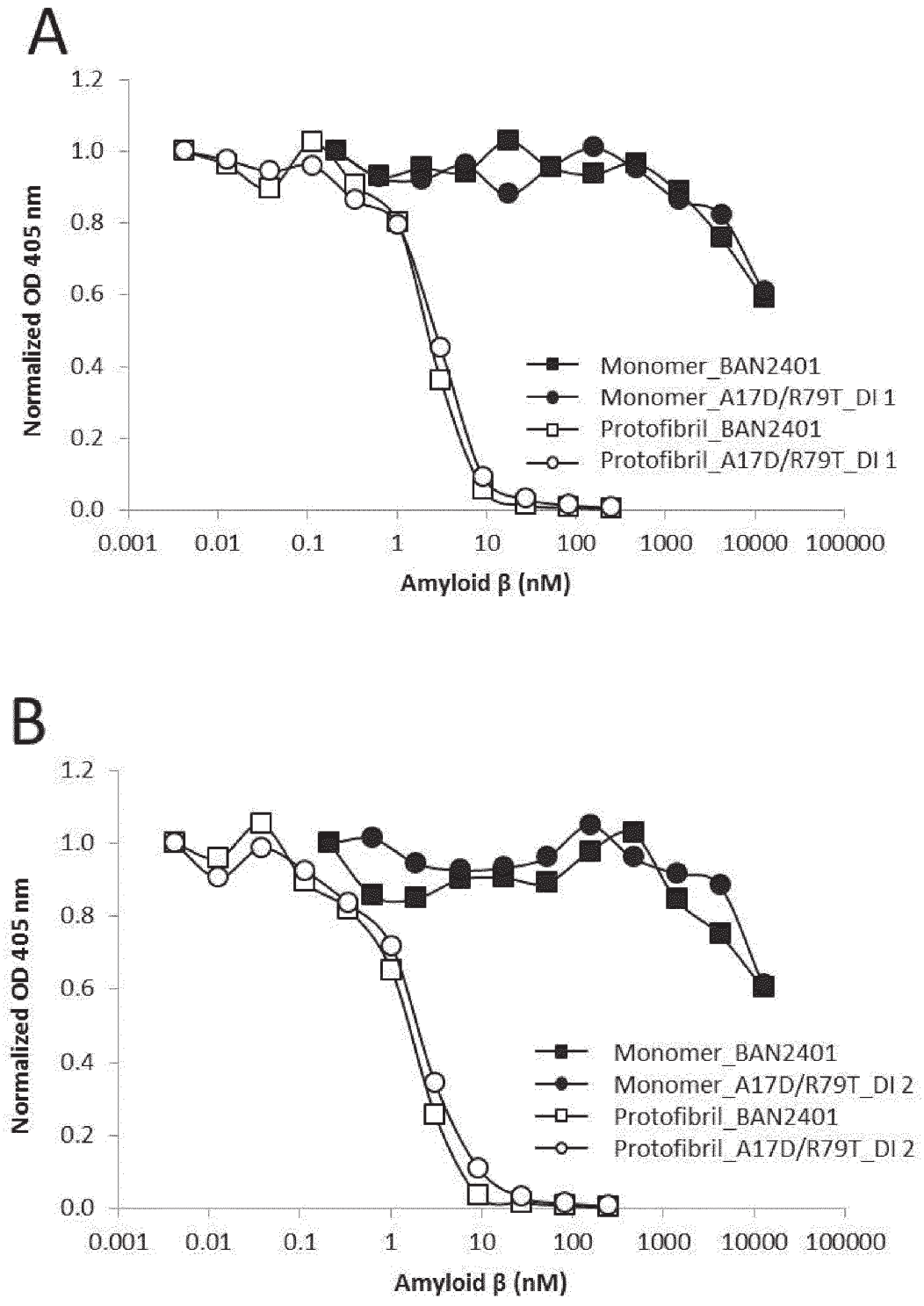
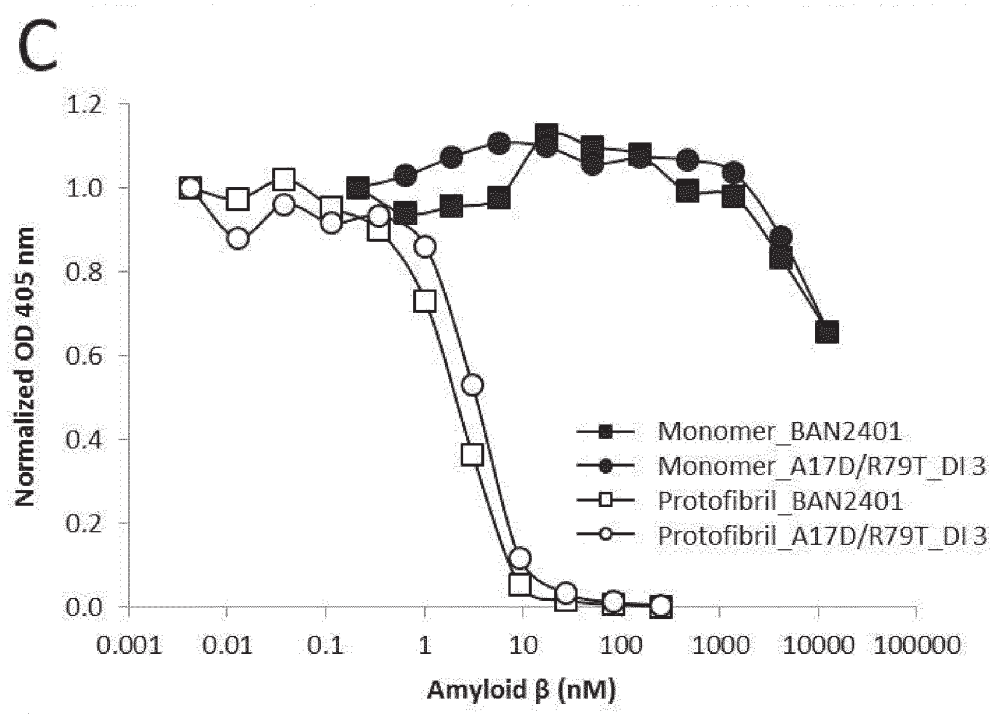

A
Normalized OD 405 nm
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.001
0.01
0.1
1
10
100
1000
10000
100000
Amyloid β (nM)
Monomer_BAN2401
Monomer_A17D/R79T_DI 1
Protofibril_BAN2401
Protofibril_A17D/R79T_DI 1
B
Normalized OD 405 nm
Amyloid β (nM)
Monomer_BAN2401
Monomer_A17D/R79T_DI 2
Protofibril_BAN2401
Protofibril_A17D/R79T_DI 2

Figure 4 (continued)



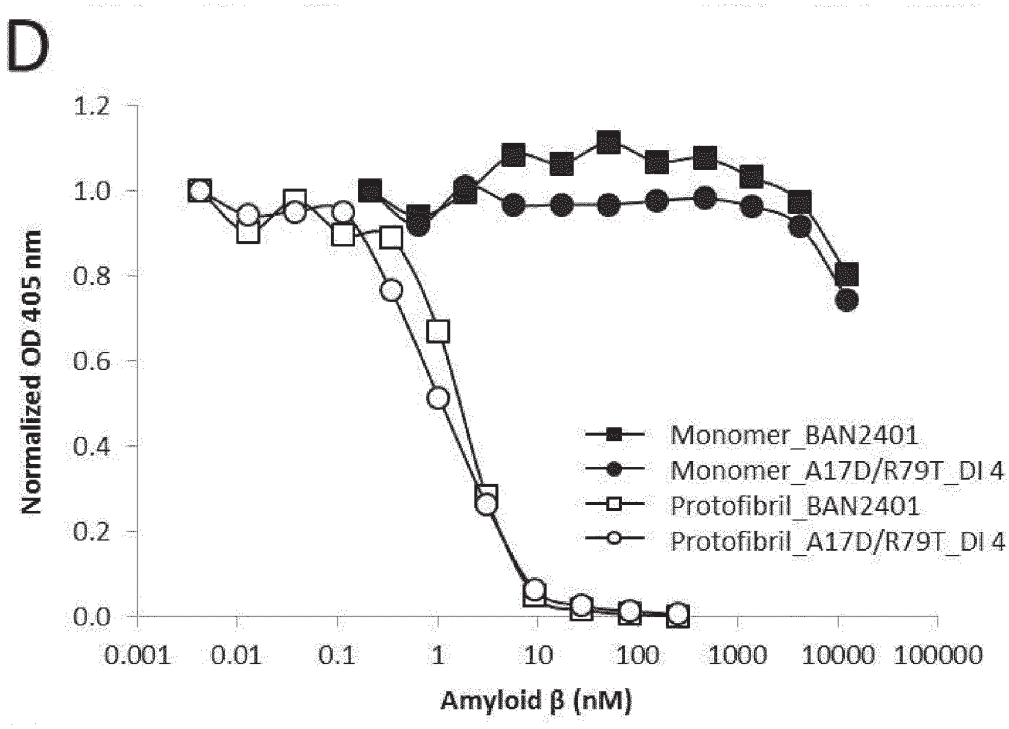
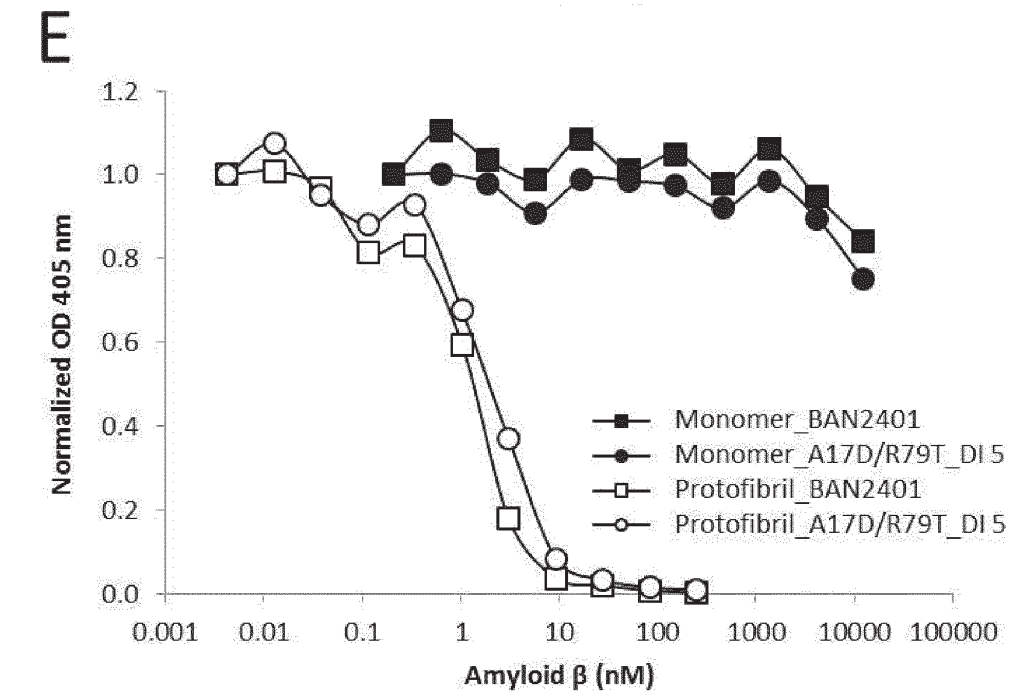


Figure 4 (continued)



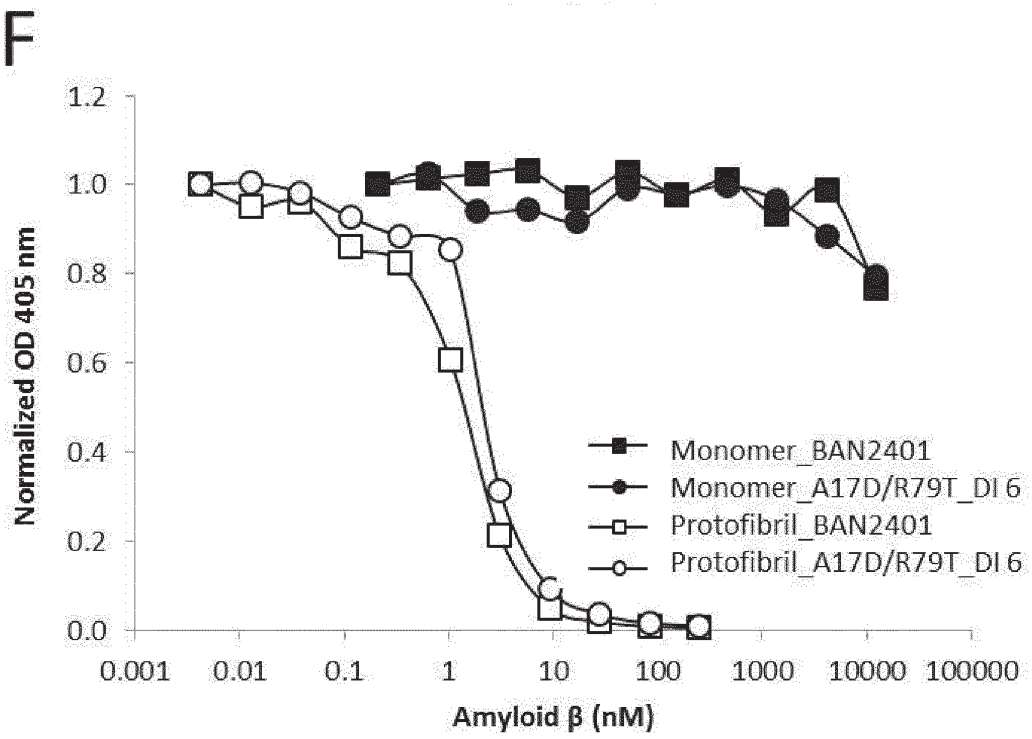
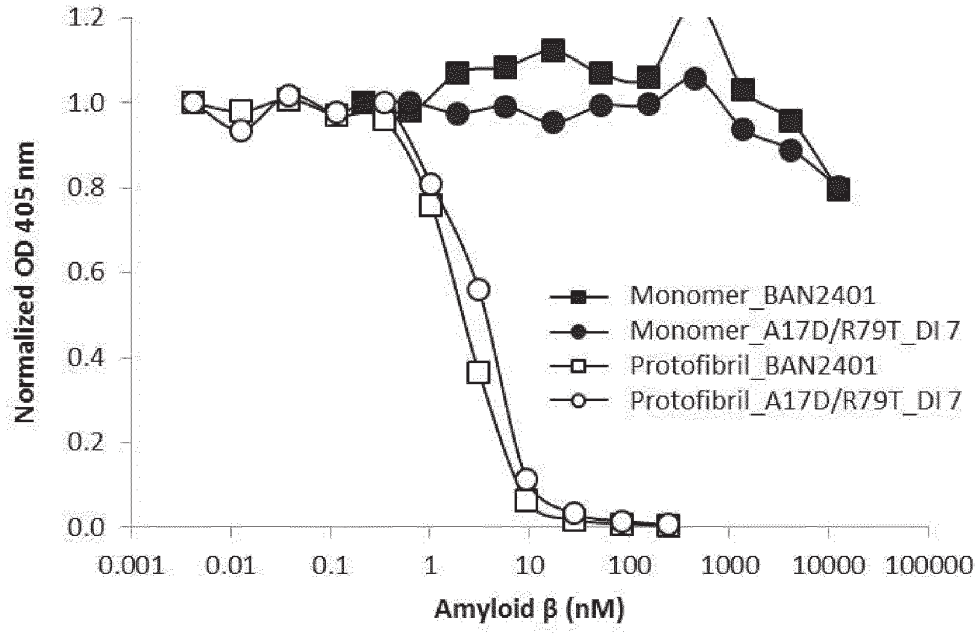


Figure 4 (continued)

G



H

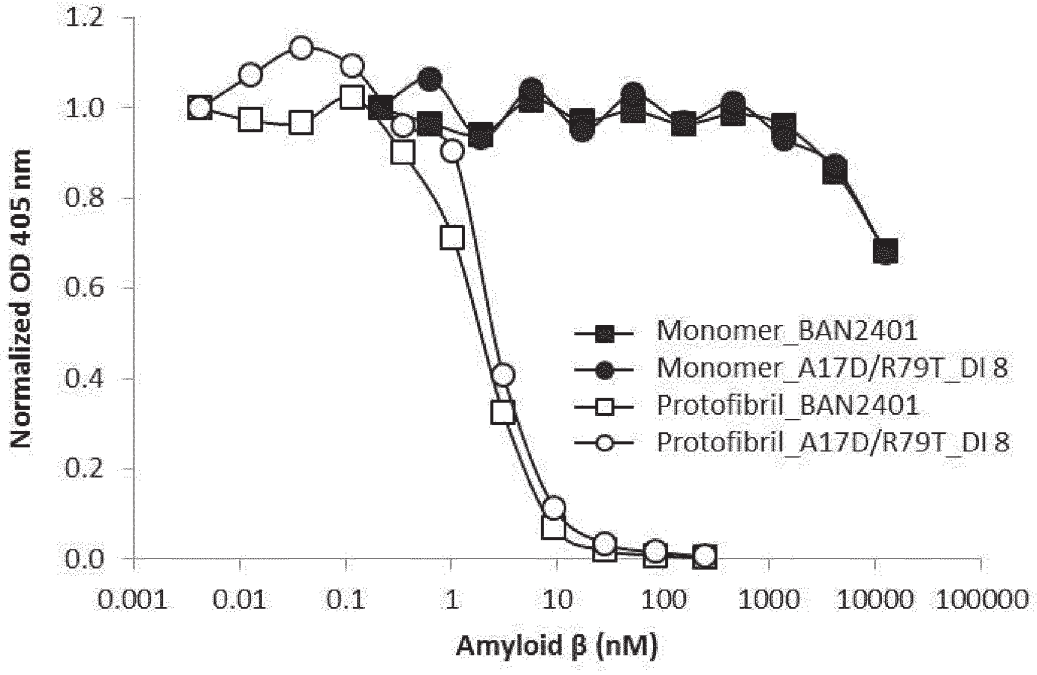


Figure 5

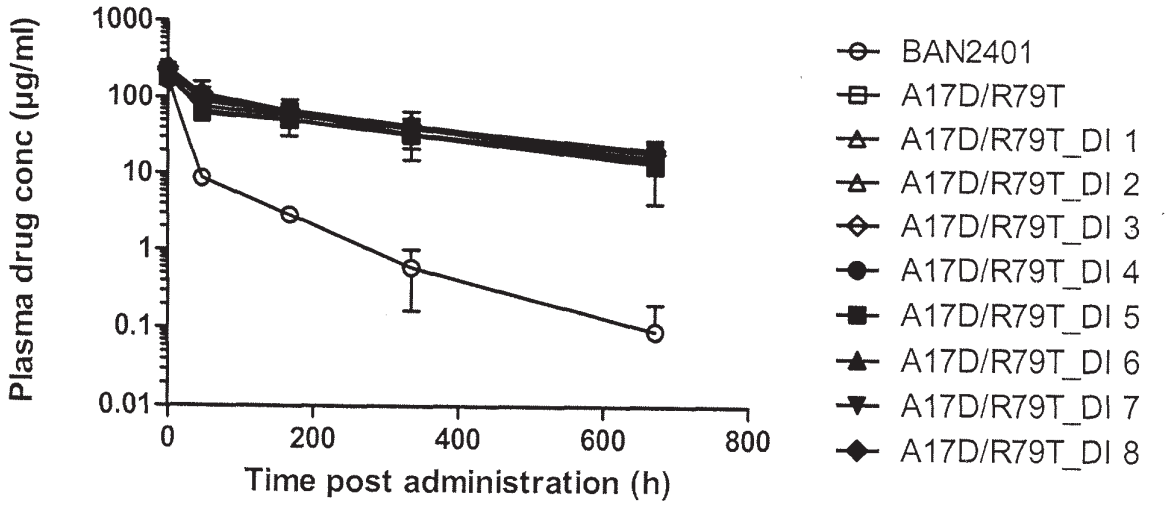
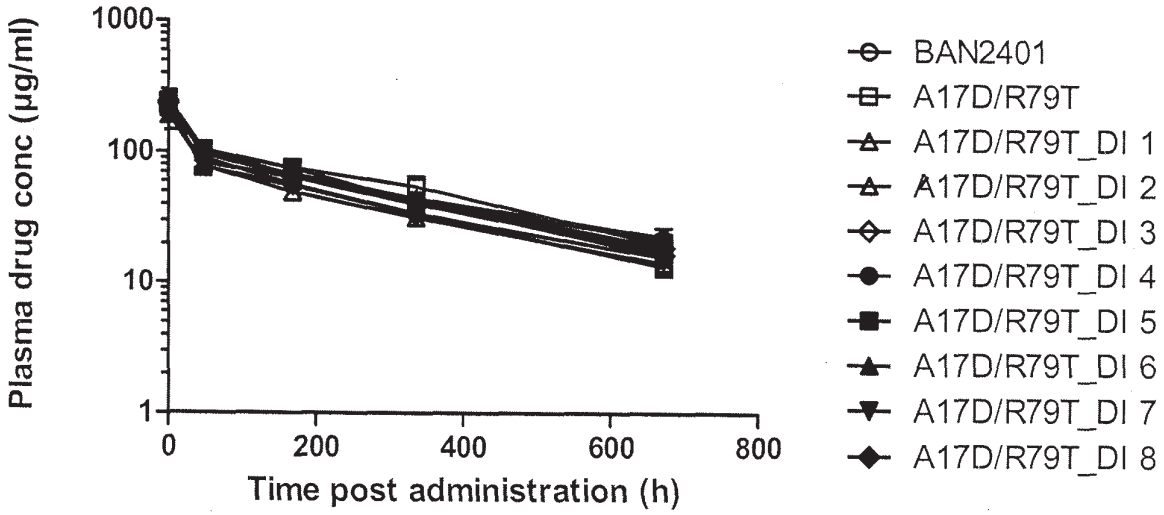


Figure 6



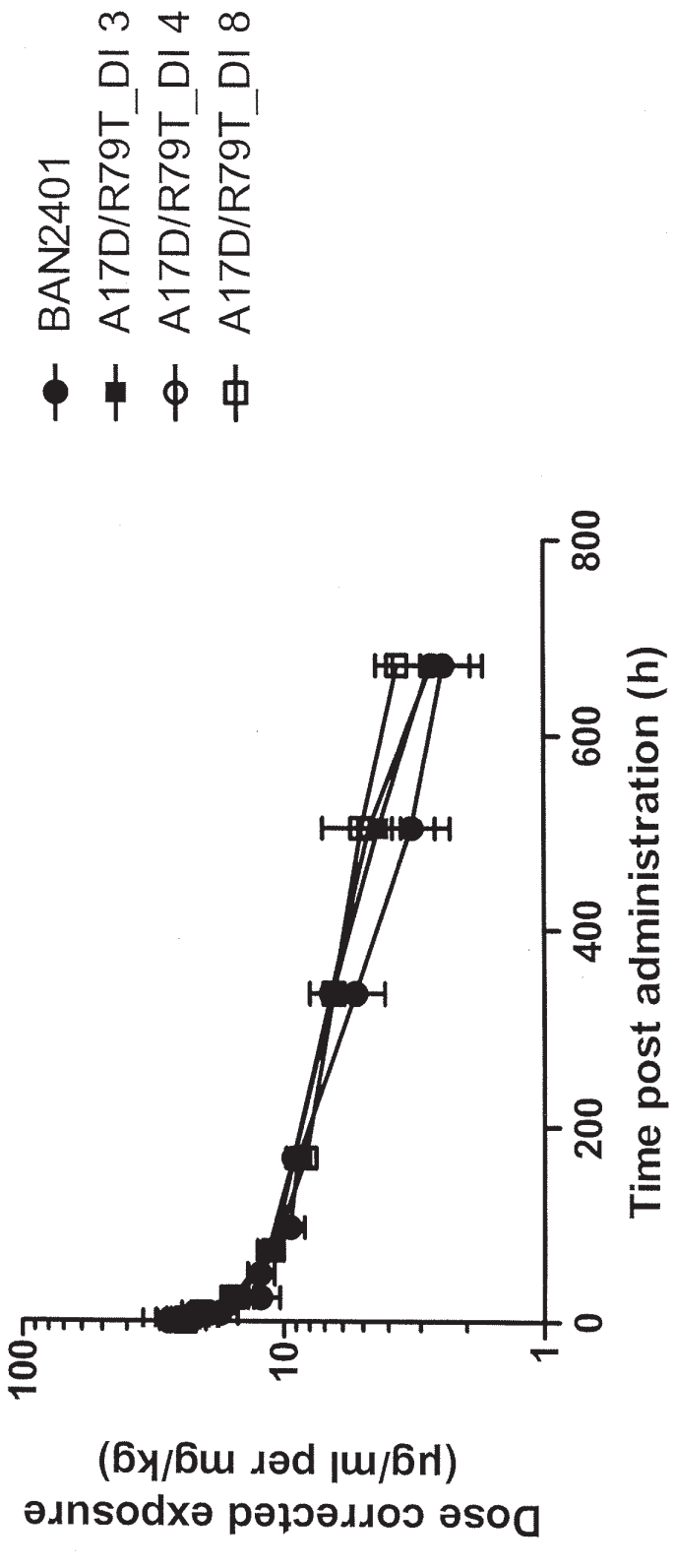

BAN2401
A17D/R79T_DI 3
A17D/R79T_DI 4
A17D/R79T_DI 8
Dose corrected exposure (µg/ml per mg/kg)
100
10
1
0
200
400
600
800
Time post administration (h)

Figure 7

Figure 8

Amino acid sequences

SEQ ID NO 1: SFGMH
SEQ ID NO 2: YISSGSSTIY YGDTVKG
SEQ ID NO 3: EGGYYYGRSY YTMDY
SEQ ID NO 4: RSSQSIVHSN GNTYLE
SEQ ID NO 5: KVSNRFS
SEQ ID NO 6: FQGSHVPPT
SEQ ID NO 7: DVVMTQSPLS LPVTPGAPAS ISCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLRI SRVEAEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 8: DVVMTQSPLS LP**Y**$_1$TPG**X**$_1$PAS **Y**$_2$SCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTL**X**$_2$I **Y**$_3$**X**$_3$V**Y**$_4$AEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 9: DVVMTQSPLS LPVTPGDPAS VSCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLTI QRVEAEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 10: DVVMTQSPLS LPVTPGDPAS VSCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLTI SRVDAEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 11: DVVMTQSPLS LPATPGDPAS ISCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLTI QRVEAEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 12: DVVMTQSPLS LPATPGDPAS ISCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLTI SRVDAEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 13: EVQLVESGGG LVQPGGSLRL SCSASGFTFS SFGMHWVRQA PGKGLEWVAY ISSGSSTIYY GDTVKGRFTI SRDNAKNSLF LQMSSLRAED TAVYYCAREG GYYYGRSYYT MDYWGQGTTV TVSS
SEQ ID NO 14: EVQLVESGGG LVQPGGSLRL SCSASGFTFS SFGMHW**Z**$_1$**Z**$_2$Q**Z**$_3$ PGKGLEWVAY ISSGSSTIYY GDTVKGRFTI SRDNAKNSLF LQMSSLRAED TAVYYCAREG GYYYGRSYYT MDYWGQGTTV TVSS
SEQ ID NO 15: EVQLVESGGG LVQPGGSLRL SCSASGFTFS SFGMHWVRQN PGKGLEWVAY ISSGSSTIYY GDTVKGRFTI SRDNAKNSLF LQMSSLRAED TAVYYCAREG GYYYGRSYYT MDYWGQGTTV TVSS
SEQ ID NO 16: EVQLVESGGG LVQPGGSLRL SCSASGFTFS SFGMHWVRQT PGKGLEWVAY ISSGSSTIYY GDTVKGRFTI SRDNAKNSLF LQMSSLRAED TAVYYCAREG GYYYGRSYYT MDYWGQGTTV TVSS
SEQ ID NO 17: EVQLVESGGG LVQPGGSLRL SCSASGFTFS SFGMHWVQQA PGKGLEWVAY ISSGSSTIYY GDTVKGRFTI SRDNAKNSLF LQMSSLRAED TAVYYCAREG GYYYGRSYYT MDYWGQGTTV TVSS
SEQ ID NO 18: EVQLVESGGG LVQPGGSLRL SCSASGFTFS SFGMHWIRQA PGKGLEWVAY ISSGSSTIYY GDTVKGRFTI SRDNAKNSLF LQMSSLRAED TAVYYCAREG GYYYGRSYYT MDYWGQGTTV TVSS
SEQ ID NO 19: DVVMTQSPLS LPVTPGDPAS ISCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLRI SRVEAEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 20: DVVMTQSPLS LPVTPGDPAS ISCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLTI SRVEAEDVGI YYCFQGSHVP PTFGPGTKLE IK

Figure 8 continued

SEQ ID NO 21: DVVMTQSPLS LPVTPGDPAS ISCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLTI SSVEAEDVGI YYCFQGSHVP PTFGPGTKLE IK
SEQ ID NO 22: DVVMTQSPLS LPVTPGDPAS ISCRSSQSIV HSNGNTYLEW YLQKPGQSPK LLIYKVSNRF SGVPDRFSGS GSGTDFTLRI SSVEAEDVGI YYCFQGSHVP PTFGPGTKLE IK

SEQ ID NO 23: ASTKGPSVFP LAPSSKSTSG GTAALGCLVK DYFPEPVTVS WNSGALTSGV HTFPAVLQSS GLYSLSSVVT VPSSSLGTQT YICNVNHKPS NTKVDKRVEP
KSCDKTHTCP PCPAPELLGG PSVFLFPPKP KDTLMISRTP EVTCVVVDVS HEDPEVKFNW YVDGVEVHNA KTKPREEQYN STYRVVSVLT VLHQDWLNGK
EYKCKVSNKA LPAPIEKTIS KAKGQPREPQ VYTLPPSREE MTKNQVSLTC LVKGFYPSDI AVEWESNGQP ENNYKTTPPV LDSDGSFFLY SKLTVDKSRW
QQGNVFSCSV MHEALHNHYT QKSLSLSPGK

SEQ ID NO 24: RTVAAPSVFI FPPSDEQLKS GTASVVCLLN NFYPREAKVQ WKVDNALQSG NSQESVTEQD SKDSTYSLSS TLTLSKADYE KHKVYACEVT HQGLSSPVTK
SFNRGEC

Figure 9

Kabat										1										2															3										4										5				
number	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	A	B	C	D	E	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
N-terminal										1										2										3										4										5									
numbering	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
BAN2401	D	V	V	M	T	Q	S	P	L	S	L	P	V	T	P	G	A	P	A	S	I	S	C	R	S	S	Q	S	I	V	H	S	N	G	N	T	Y	L	E	W	Y	L	Q	K	P	G	Q	S	P	K	L	L	I	Y	K	V	S	N	R
Abs according to the invention	D	V	V	M	T	Q	S	P	L	S	L	P	Y1	T	P	G	X1	P	A	S	Y2	S	C	R	S	S	Q	S	I	V	H	S	N	G	N	T	Y	L	E	W	Y	L	Q	K	P	G	Q	S	P	K	L	L	I	Y	K	V	S	N	R
i)	D	V	V	M	T	Q	S	P	L	S	L	P	V	T	P	G	D	P	A	S	V	S	C	R	S	S	Q	S	I	V	H	S	N	G	N	T	Y	L	E	W	Y	L	Q	K	P	G	Q	S	P	K	L	L	I	Y	K	V	S	N	R
ii)	D	V	V	M	T	Q	S	P	L	S	L	P	V	T	P	G	D	P	A	S	V	S	C	R	S	S	Q	S	I	V	H	S	N	G	N	T	Y	L	E	W	Y	L	Q	K	P	G	Q	S	P	K	L	L	I	Y	K	V	S	N	R
iii)	D	V	V	M	T	Q	S	P	L	S	L	P	A	T	P	G	D	P	A	S	I	S	C	R	S	S	Q	S	I	V	H	S	N	G	N	T	Y	L	E	W	Y	L	Q	K	P	G	Q	S	P	K	L	L	I	Y	K	V	S	N	R
iv)	D	V	V	M	T	Q	S	P	L	S	L	P	A	T	P	G	D	P	A	S	I	S	C	R	S	S	Q	S	I	V	H	S	N	G	N	T	Y	L	E	W	Y	L	Q	K	P	G	Q	S	P	K	L	L	I	Y	K	V	S	N	R

Figure 9 continued

Kabat						6										7									8									9									10							
number	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7
N-terminal	6										7										8									9									10									11			
numbering	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2
BAN2401	F	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	R	I	S	R	V	E	A	E	D	V	G	I	Y	Y	C	F	Q	G	S	H	V	P	P	T	F	G	P	G	T	K	L	E	I	K
Abs according to the invention	F	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	X2	I	Y3	X3	V	Y4	A	E	D	V	G	I	Y	Y	C	F	Q	G	S	H	V	P	P	T	F	G	P	G	T	K	L	E	I	K
i)	F	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	Q	R	V	E	A	E	D	V	G	I	Y	Y	C	F	Q	G	S	H	V	P	P	T	F	G	P	G	T	K	L	E	I	K
ii)	F	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	R	V	D	A	E	D	V	G	I	Y	Y	C	F	Q	G	S	H	V	P	P	T	F	G	P	G	T	K	L	E	I	K
iii)	F	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	Q	R	V	E	A	E	D	V	G	I	Y	Y	C	F	Q	G	S	H	V	P	P	T	F	G	P	G	T	K	L	E	I	K
iv)	F	S	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	R	V	D	A	E	D	V	G	I	Y	Y	C	F	Q	G	S	H	V	P	P	T	F	G	P	G	T	K	L	E	I	K

Figure 10

Kabat										1										2										3										4										5							
number	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	A	3	4	5	6	7	8
N-terminal										1										2										3										4										5							
numbering	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
BAN2401	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	S	A	S	G	F	T	F	S	S	F	G	M	H	W	V	R	Q	A	P	G	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y
Abs according to the invention	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	S	A	S	G	F	T	F	S	S	F	G	M	H	W	Z1	Z2	Q	Z3	P	G	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y
i)	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	S	A	S	G	F	T	F	S	S	F	G	M	H	W	V	R	Q	N	P	G	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y
ii)	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	S	A	S	G	F	T	F	S	S	F	G	M	H	W	V	R	Q	T	P	G	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y
iii)	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	S	A	S	G	F	T	F	S	S	F	G	M	H	W	V	Q	Q	A	P	G	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y
iv)	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	S	A	S	G	F	T	F	S	S	F	G	M	H	W	I	R	Q	A	P	G	K	G	L	E	W	V	A	Y	I	S	S	G	S	S	T	I	Y

Figure 10 continued

Kabat number	96	97	98	99	100	100A	100B	100C	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146
N-terminal numbering	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115
BAN2401	Y	G	D	T	V	K	G	R	F	T	I	S	R	D	N	A	K	N	S	L	F	L	Q	M	S	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R	E	G	G	Y	Y	Y	G	R	S	Y	Y	T	M	D	Y	W	G	Q
Abs according to the invention	Y	G	D	T	V	K	G	R	F	T	I	S	R	D	N	A	K	N	S	L	F	L	Q	M	S	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R	E	G	G	Y	Y	Y	G	R	S	Y	Y	T	M	D	Y	W	G	Q
i)	Y	G	D	T	V	K	G	R	F	T	I	S	R	D	N	A	K	N	S	L	F	L	Q	M	S	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R	E	G	G	Y	Y	Y	G	R	S	Y	Y	T	M	D	Y	W	G	Q
ii)	Y	G	D	T	V	K	G	R	F	T	I	S	R	D	N	A	K	N	S	L	F	L	Q	M	S	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R	E	G	G	Y	Y	Y	G	R	S	Y	Y	T	M	D	Y	W	G	Q
iii)	Y	G	D	T	V	K	G	R	F	T	I	S	R	D	N	A	K	N	S	L	F	L	Q	M	S	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R	E	G	G	Y	Y	Y	G	R	S	Y	Y	T	M	D	Y	W	G	Q
iv)	Y	G	D	T	V	K	G	R	F	T	I	S	R	D	N	A	K	N	S	L	F	L	Q	M	S	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R	E	G	G	Y	Y	Y	G	R	S	Y	Y	T	M	D	Y	W	G	Q

Kabat					11				
number	6	7	8	9	0	1	2	3	
N-terminal				12					
numbering	7	8	9	0	1	2	3	4	
BAN2401	G	T	T	V	T	V	S	S	
Abs according to the invention	G	T	T	V	T	V	S	S	
i)	G	T	T	V	T	V	S	S	
ii)	G	T	T	V	T	V	S	S	
iii)	G	T	T	V	T	V	S	S	
iv)	G	T	T	V	T	V	S	S	

Figure 10 continued

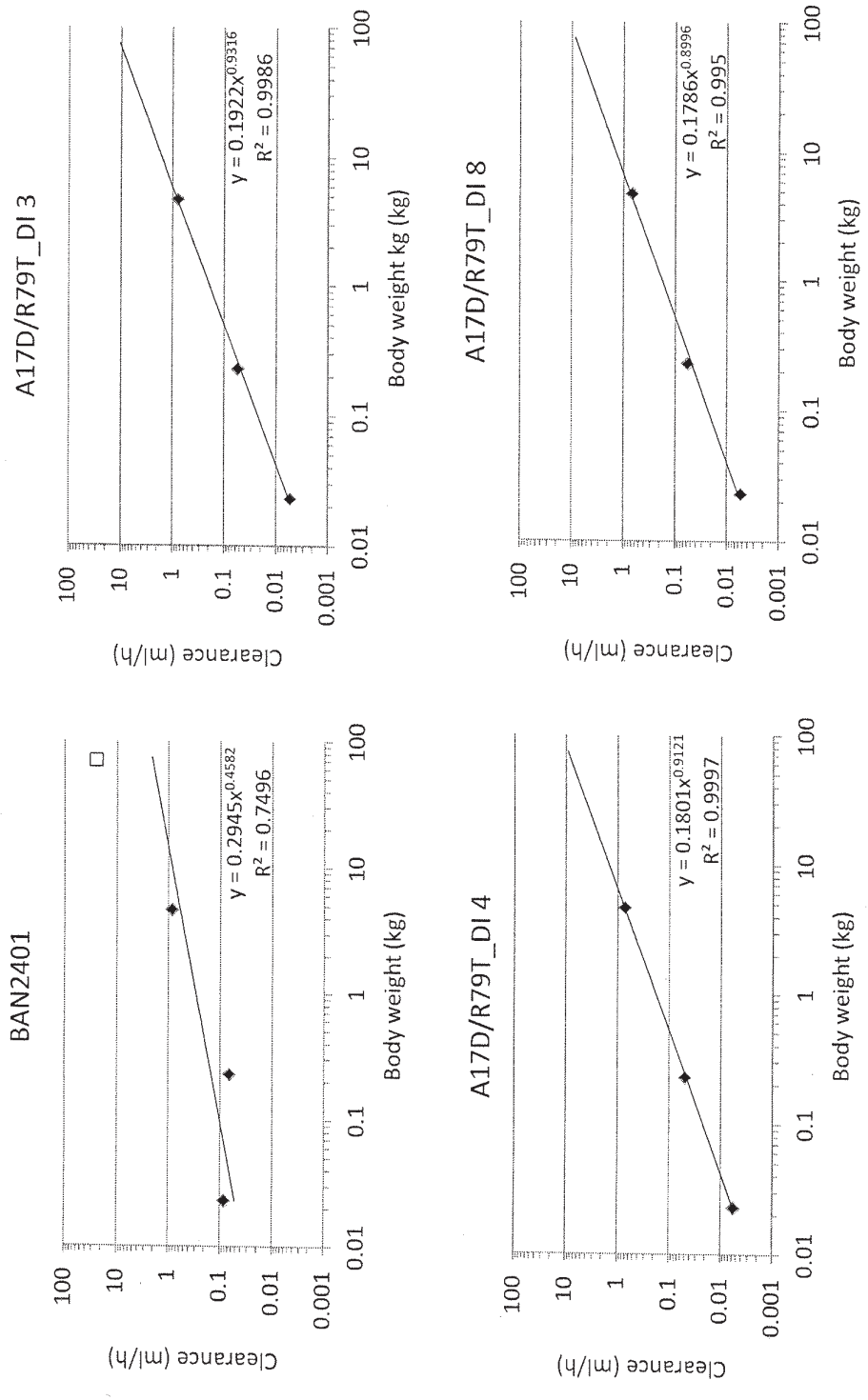

A17D/R79T_DI 3
y = 0.1922x^0.9316
R² = 0.9986
Clearance (ml/h)
Body weight kg (kg)
A17D/R79T_DI 8
y = 0.1786x^0.8996
R² = 0.995
Clearance (ml/h)
Body weight (kg)
BAN2401
y = 0.2945x^0.4582
R² = 0.7496
Clearance (ml/h)
Body weight (kg)
A17D/R79T_DI 4
y = 0.1801x^0.9121
R² = 0.9997
Clearance (ml/h)
Body weight (kg)

Figure 11