

Fig. 1C

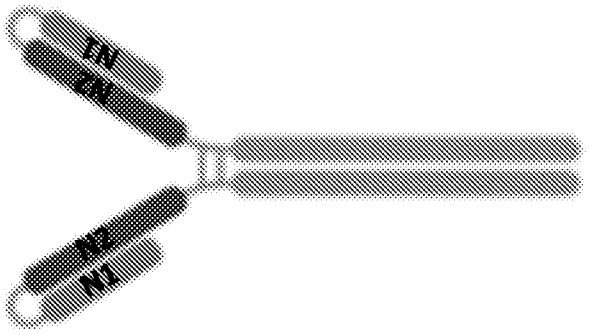
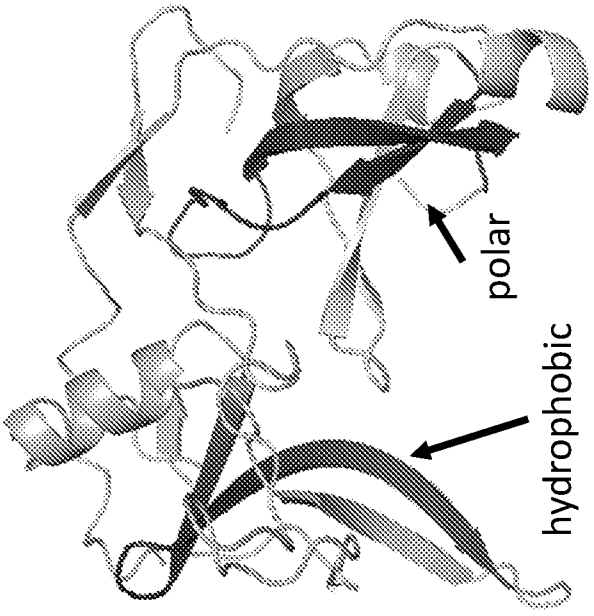


Fig. 1B



N1

N2

Fig. 1A

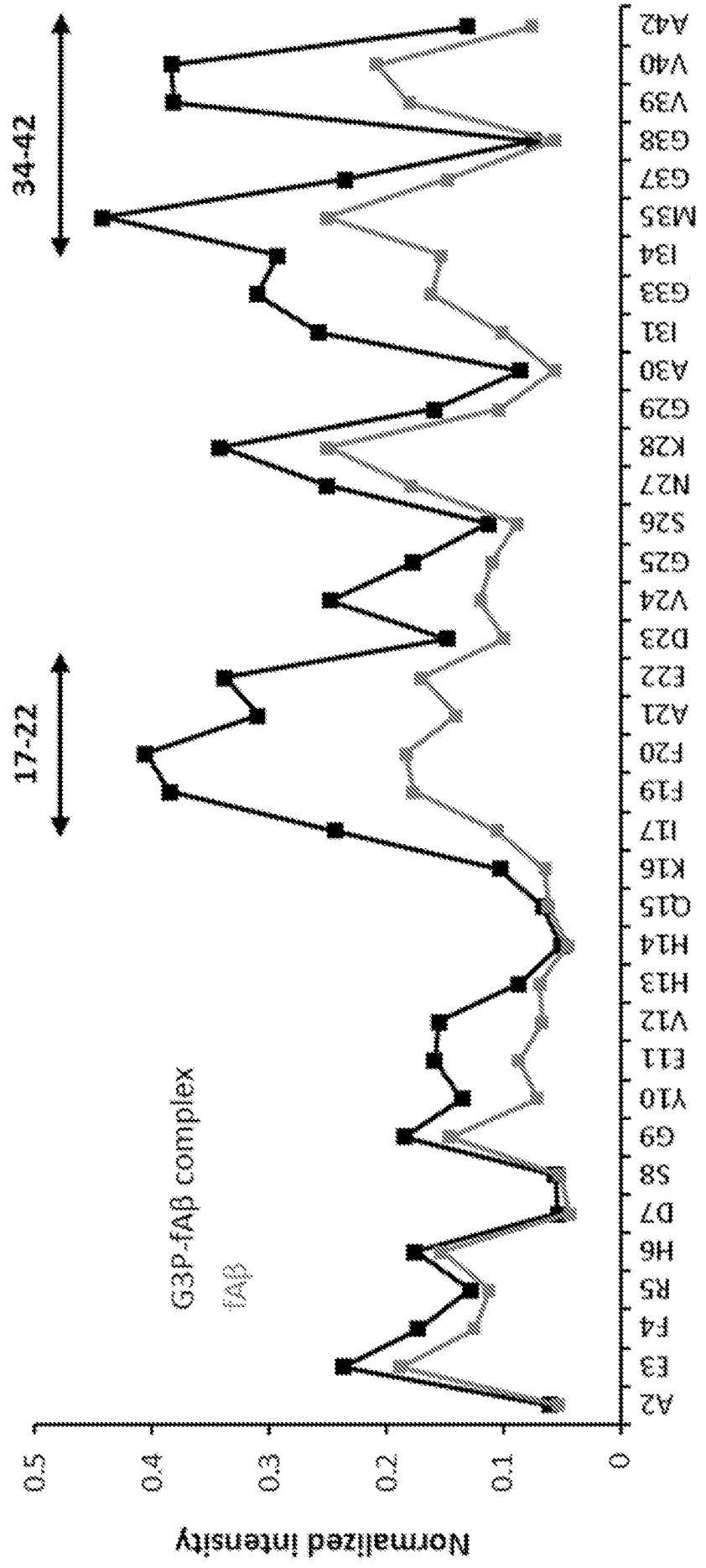

Normalized intensity
0.5
0.4
0.3
0.2
0.1
0
G3P-fAβ complex
fAβ
17-22
34-42
A2
E3
F4
R5
H6
D7
S8
G9
Y10
E11
V12
H13
H14
Q15
K16
I17
F19
F20
A21
E22
D23
V24
G25
S26
N27
K28
G29
A30
I31
G33
I34
M35
G37
G38
V39
V40
A42

Fig. 2

10
20
30
SEQ ID NO:1 AETVESCLAKPHTENSFTNVWKDDKTLDRYAN
SEQ ID NO:2 ATTDAECLSKPAFDGTLSNVWKEGDS--RYAN

Fig. 3A

Fig. 3B

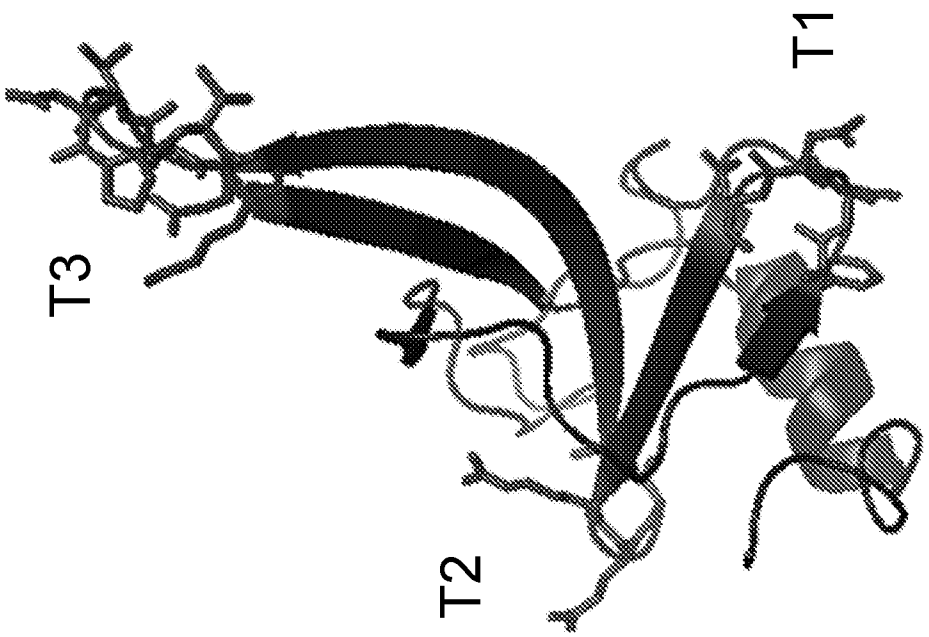


Fig. 3C

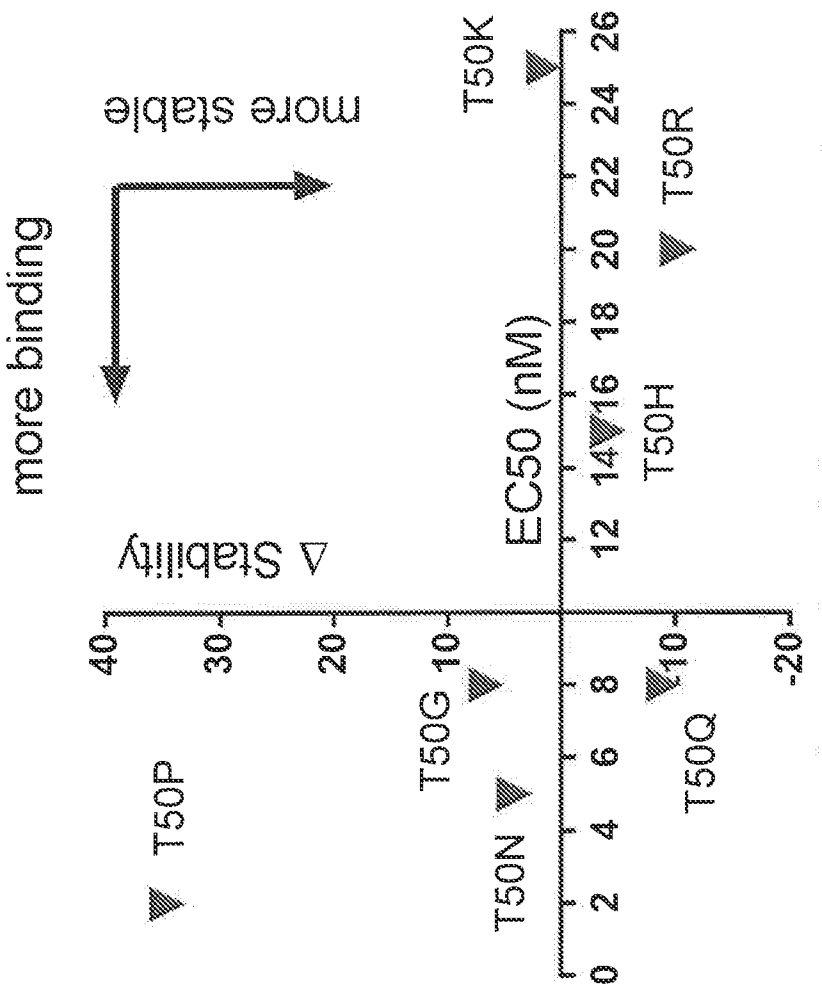

more binding
more stable
Δ Stability
EC50 (nM)
40
30
20
10
0
2
4
6
8
10
12
14
16
18
20
22
24
26
-20
T50P
T50G
T50N
T50Q
T50H
T50R
T50K

Fig. 3D

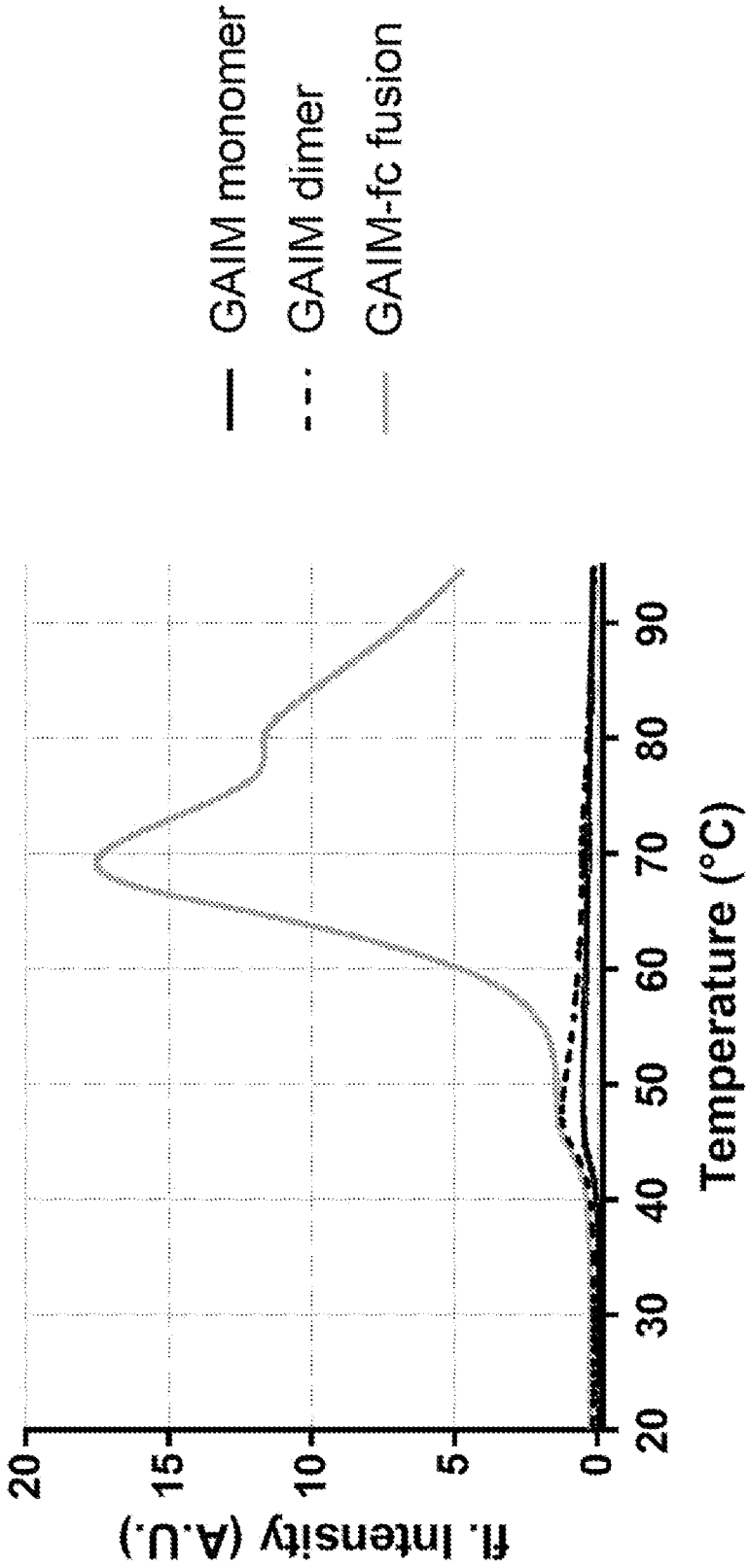
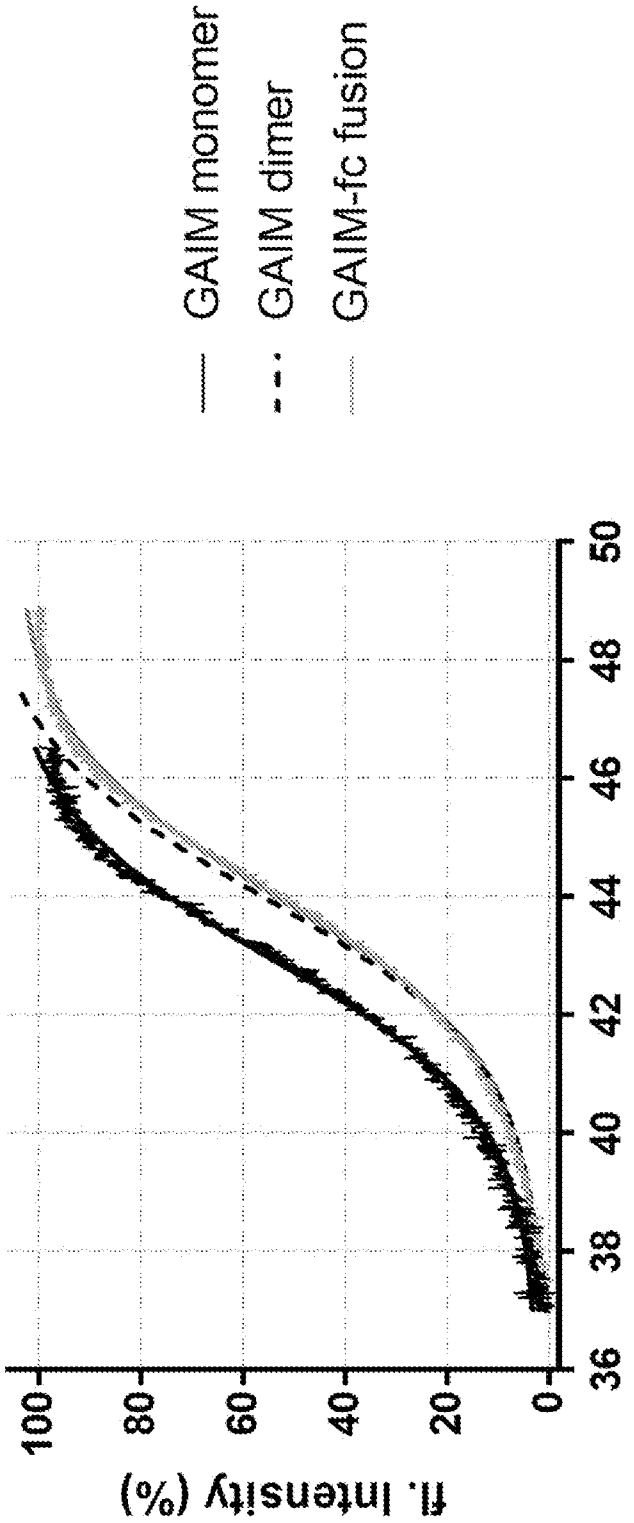

GAIM monomer
GAIM dimer
GAIM-fc fusion
fl. Intensity (A.U.)
20
15
10
5
0
20
30
40
50
60
70
80
90
Temperature (°C)

Fig. 4A



Sigmoidal, 4PL, Best-fit values			
	GAIM monomer	GAIM dimer	GAIM-fc fusion
T_m1 (°C)	42.95	44.02	43.98

Fig. 4B

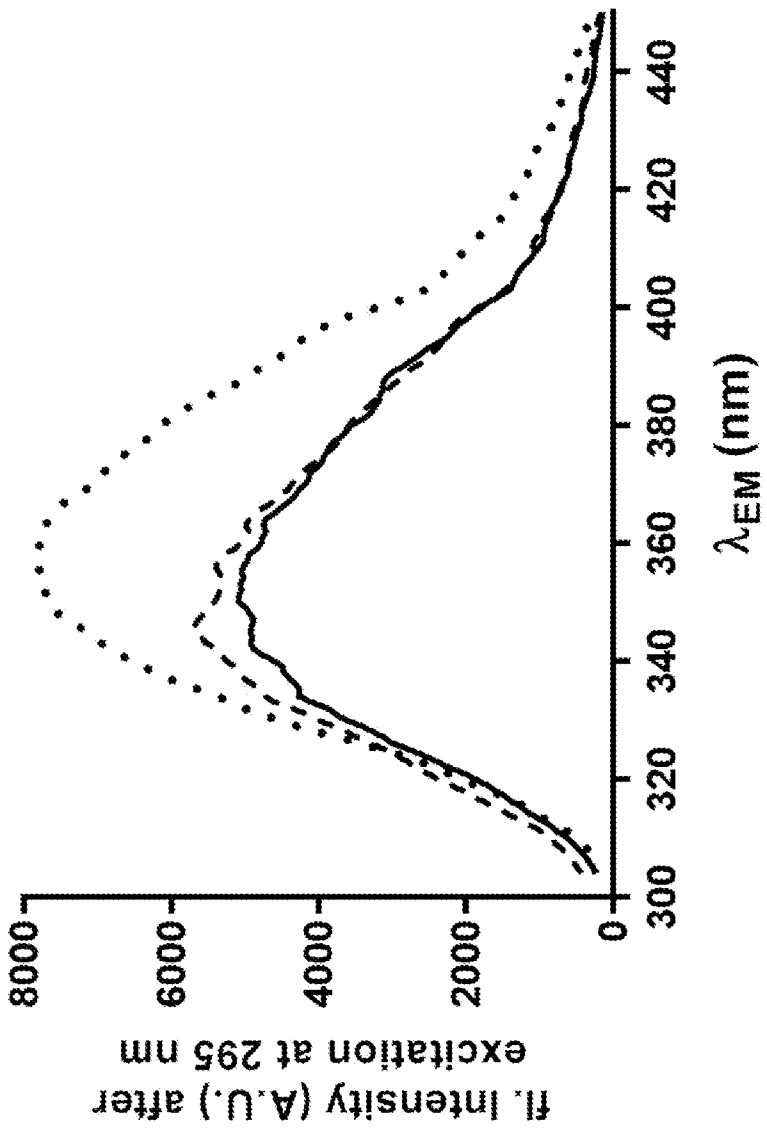

fl. Intensity (A.U.) after excitation at 295 nm
8000
6000
4000
2000
0
300
320
340
360
380
400
420
440
λEM (nm)

Fig. 5A

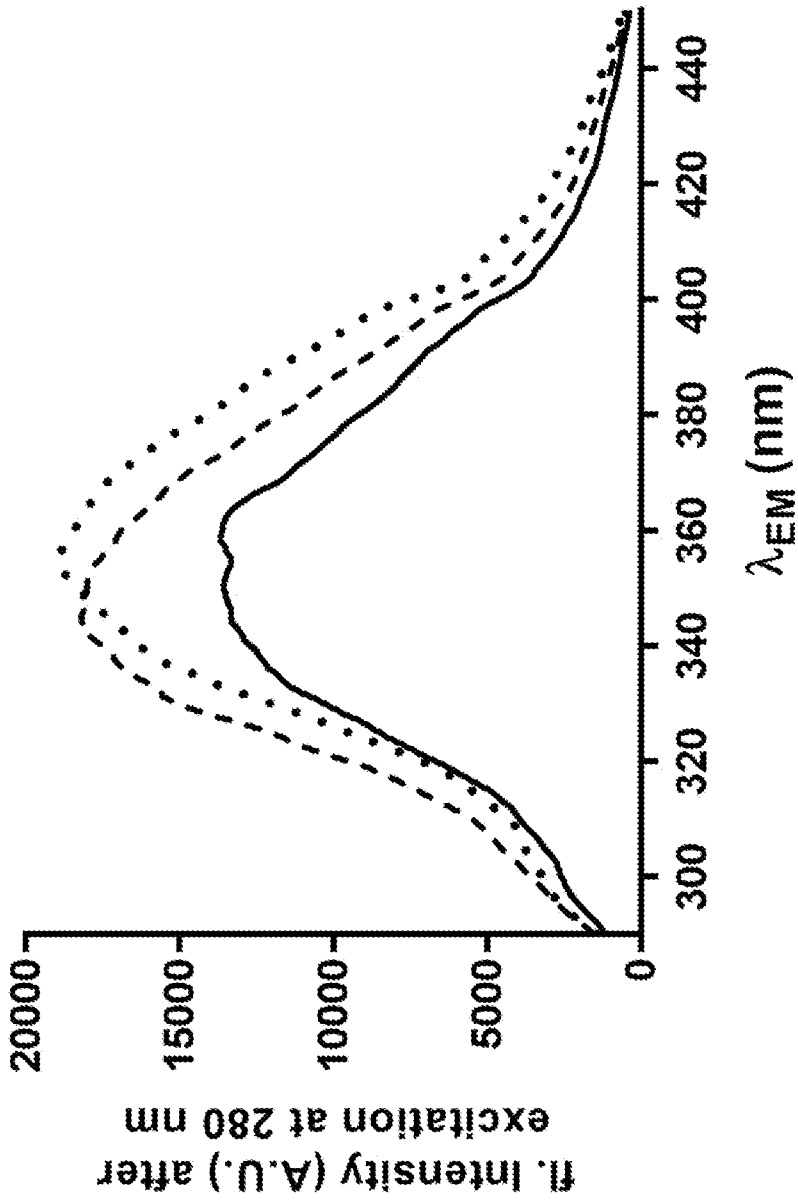

fl. Intensity (A.U.) after excitation at 280 nm
20000
15000
10000
5000
0
300
320
340
360
380
400
420
440
λEM (nm)

Fig. 5B

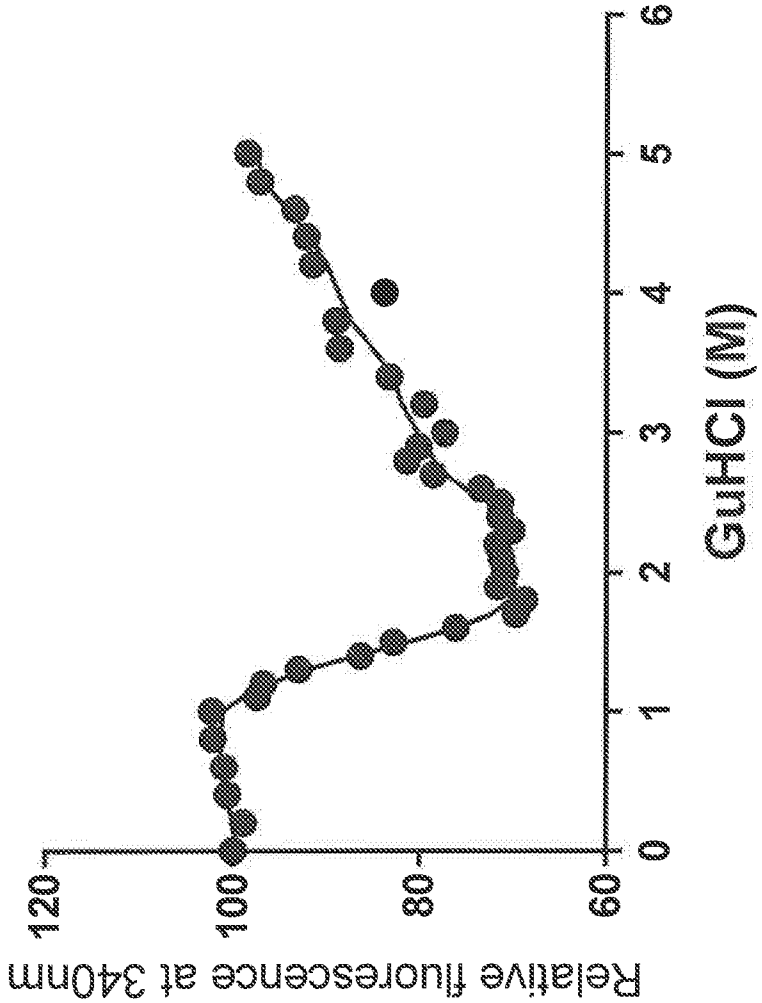

Excitation 280nm
Relative fluorescence at 340nm
120
100
80
60
0
1
2
3
4
5
6
GuHCl (M)

Fig. 5C

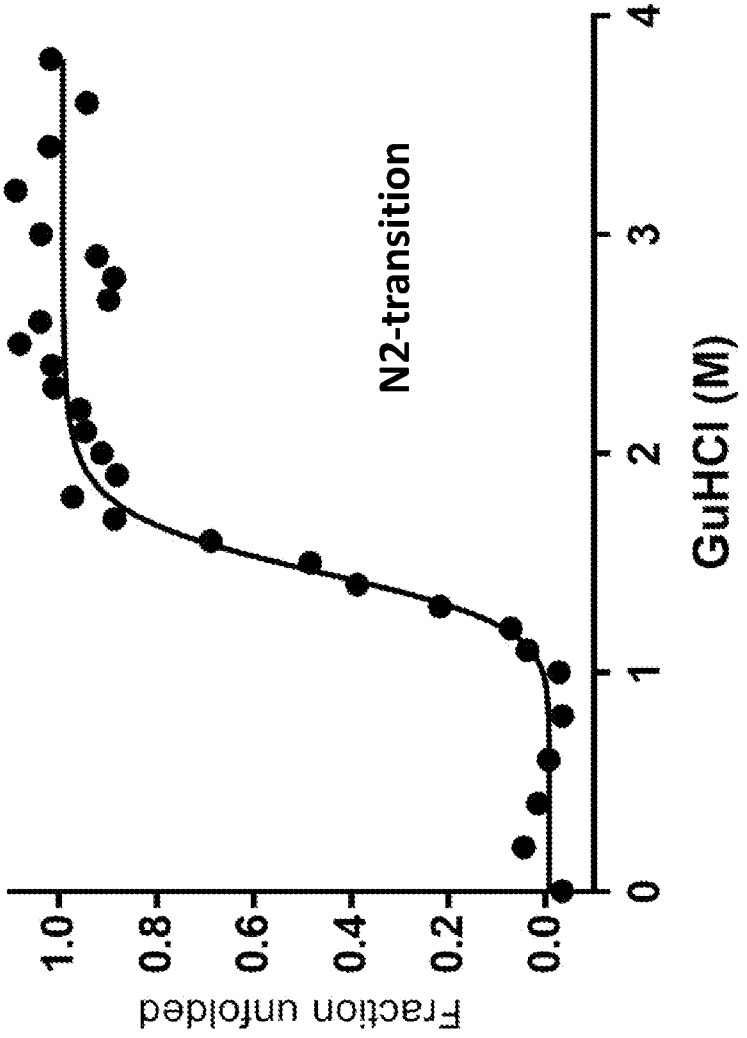

N2-transition
Fraction unfolded
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
GuHCl (M)

Fig. 5D

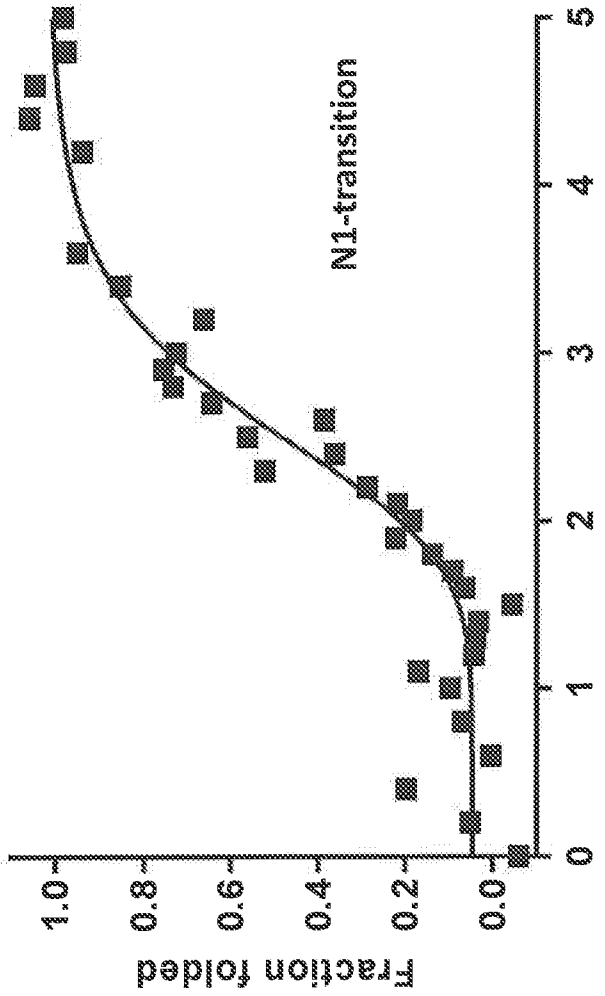

N1-transition
Fraction folded
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5
GuHCl (M)

Fig. 5E

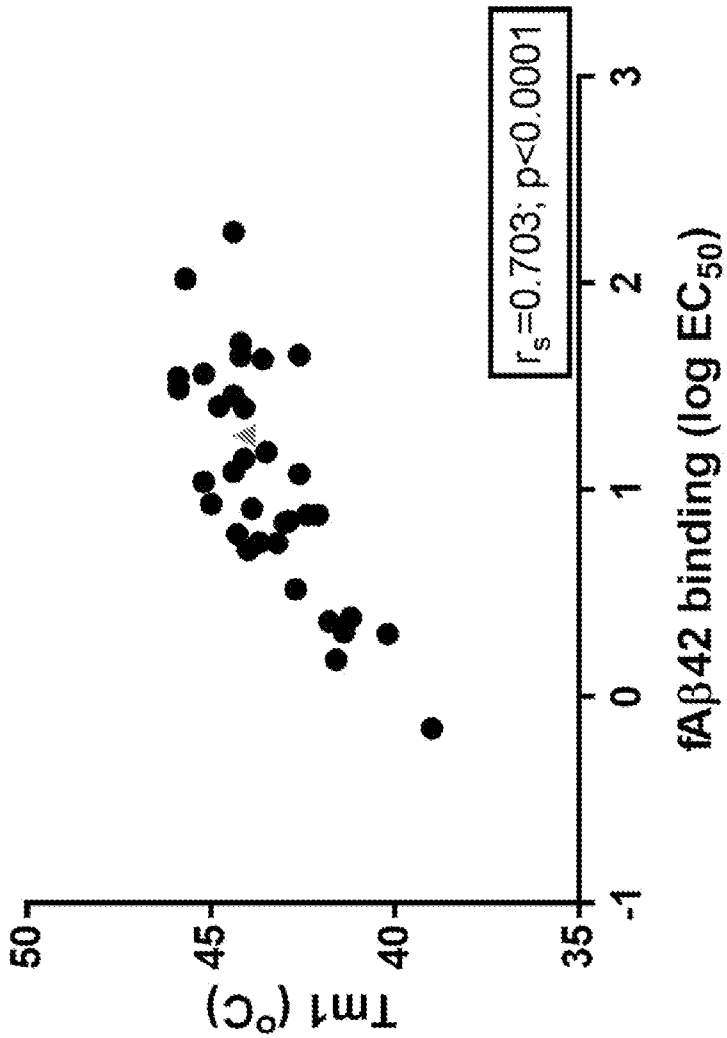


Fig. 6A

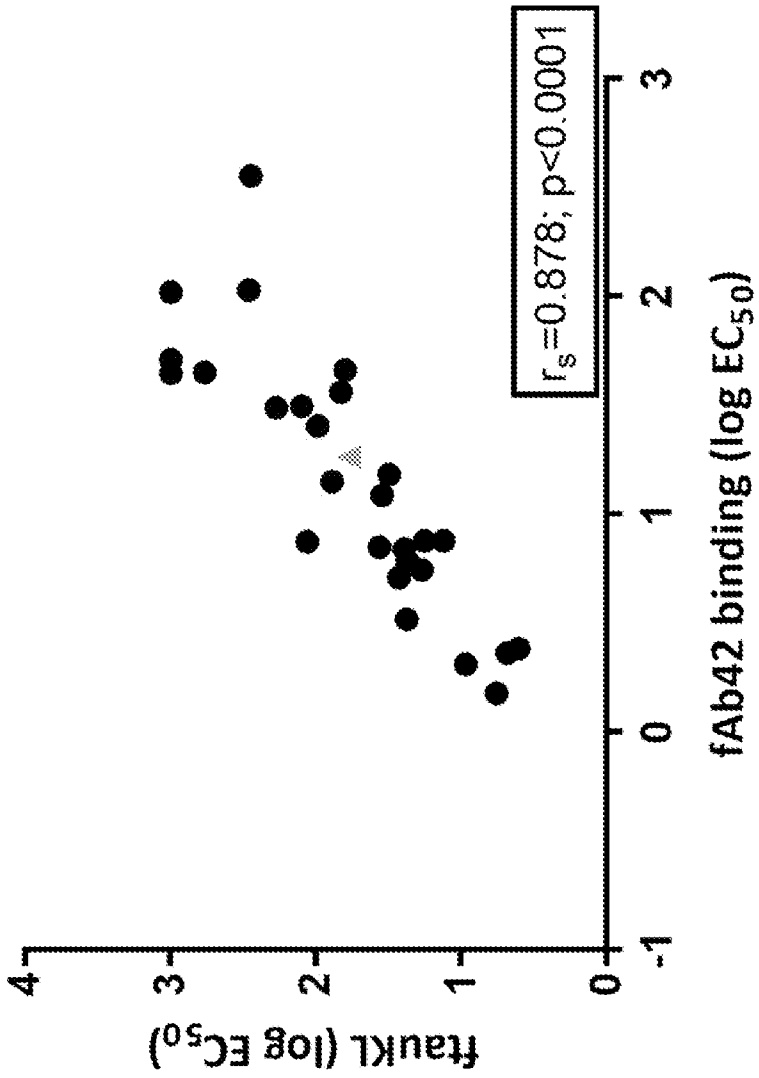

r_s=0.878; p<0.0001
fAb42 binding (log EC_{50})
ftauKL (log EC_{50})
-1
0
1
2
3
0
1
2
3
4

Fig. 6B

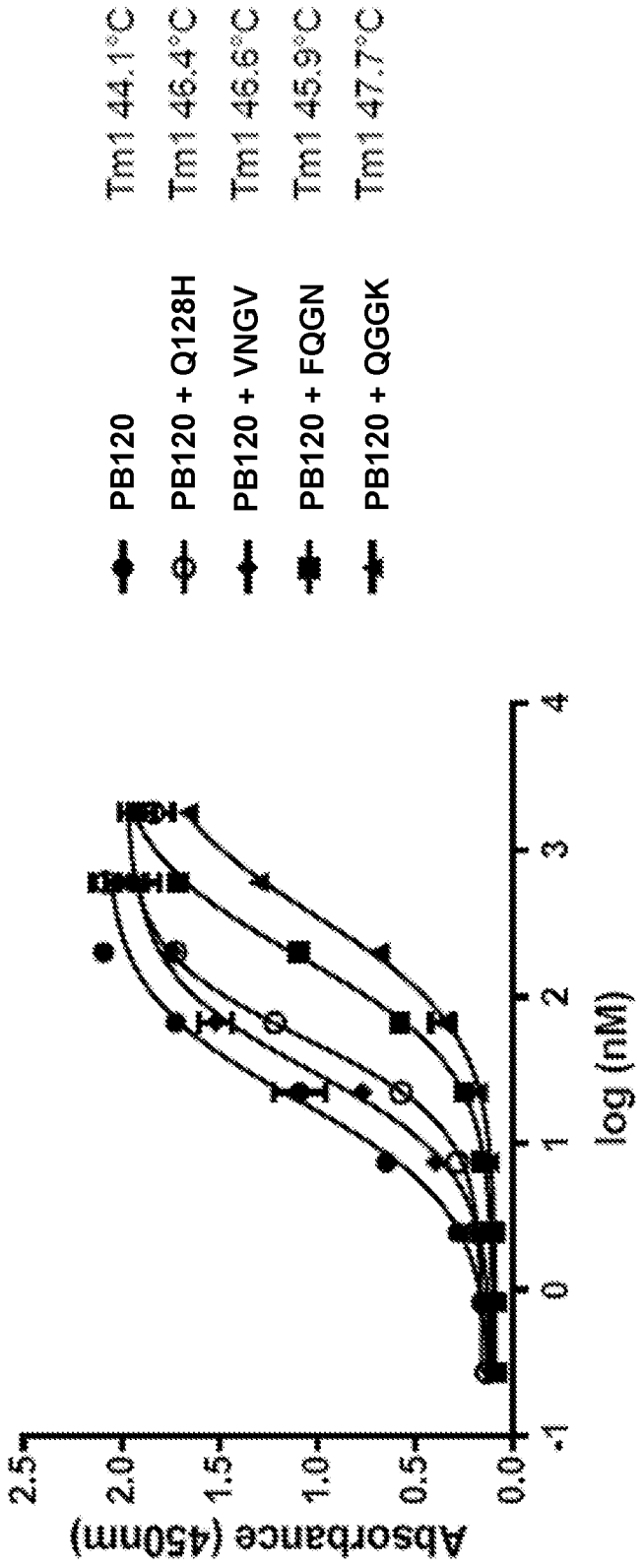

Tm1 44.1°C
Tm1 46.4°C
Tm1 46.6°C
Tm1 45.9°C
Tm1 47.7°C
PB120
PB120 + Q128H
PB120 + VNGV
PB120 + FQGN
PB120 + QGGK
Absorbance (450nm)
2.5
2.0
1.5
1.0
0.5
0.0
-1
0
1
2
3
4
log (nM)

Fig. 7A

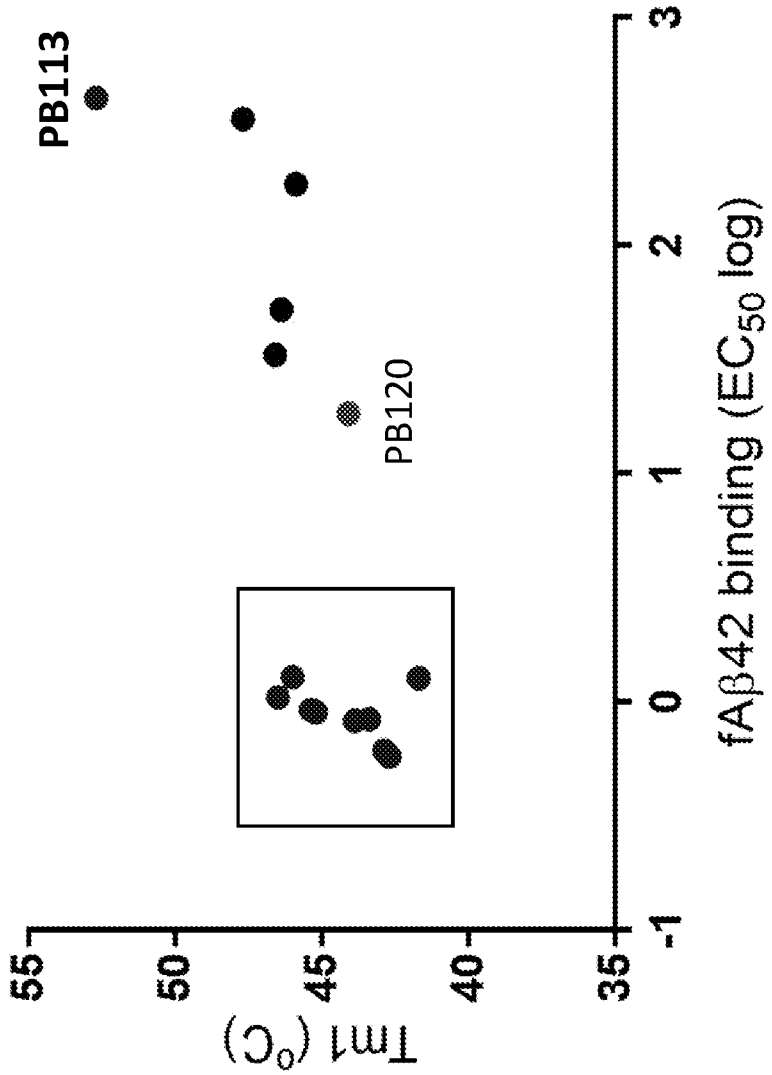


Fig. 7B

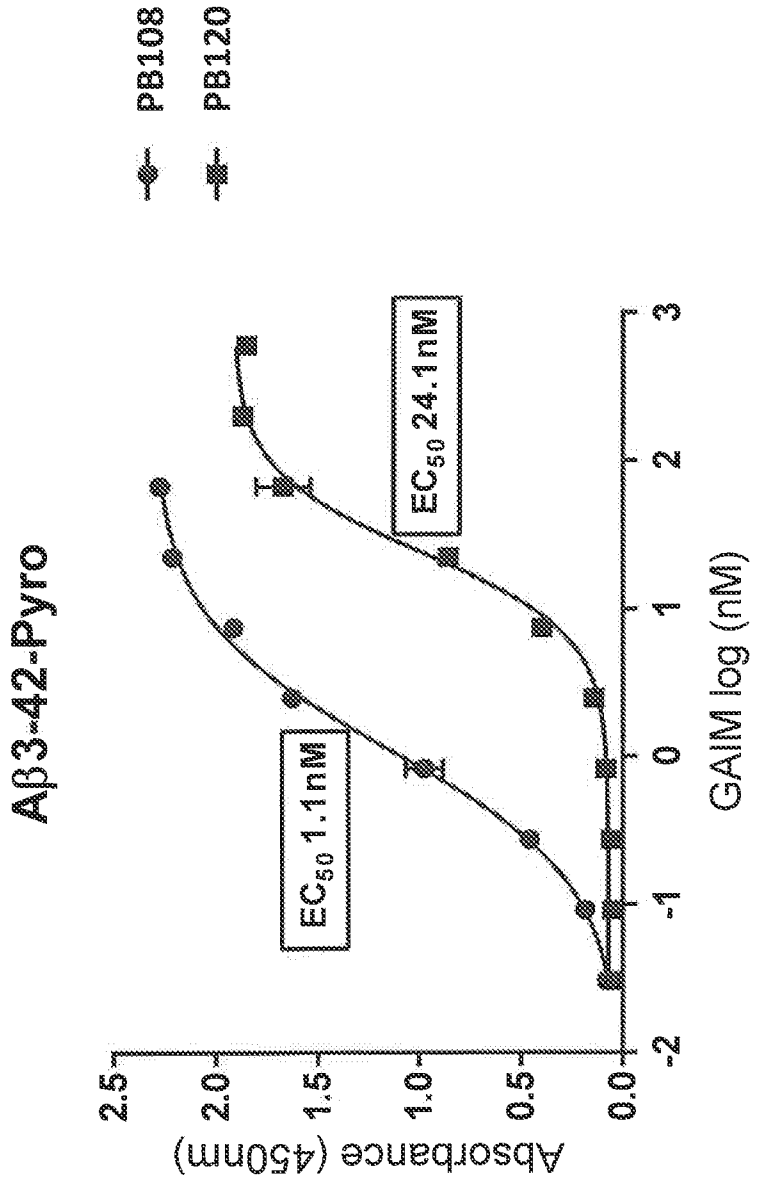

PB108
PB120
Aβ3-42-Pyro
EC50 1.1nM
EC50 24.1nM
Absorbance (450nm)
GAIM log (nM)
2.5
2.0
1.5
1.0
0.5
0.0
-2
-1
0
1
2
3

Fig. 8A

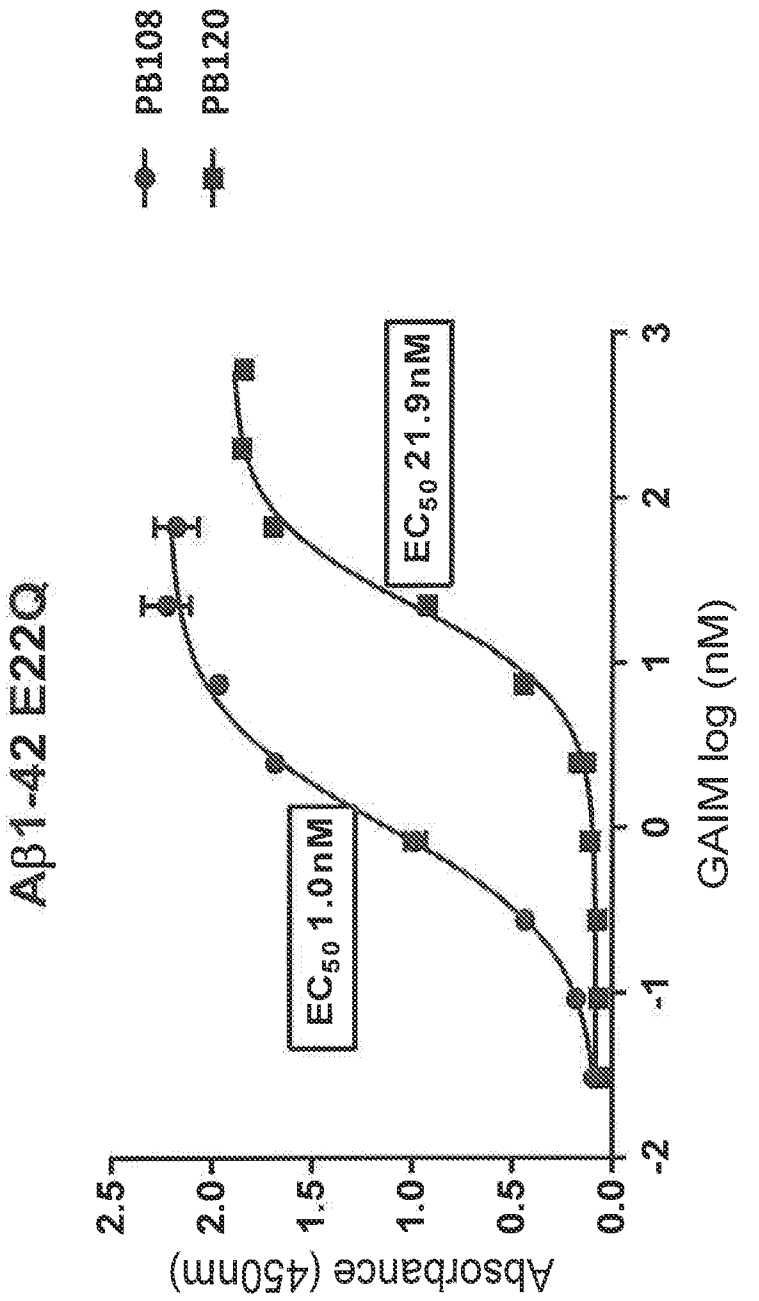

PB108
PB120
Aβ1-42 E22Q
EC50 1.0nM
EC50 21.9nM
Absorbance (450nm)
GAIM log (nM)
2.5
2.0
1.5
1.0
0.5
0.0
-2
-1
0
1
2
3

Fig. 8B

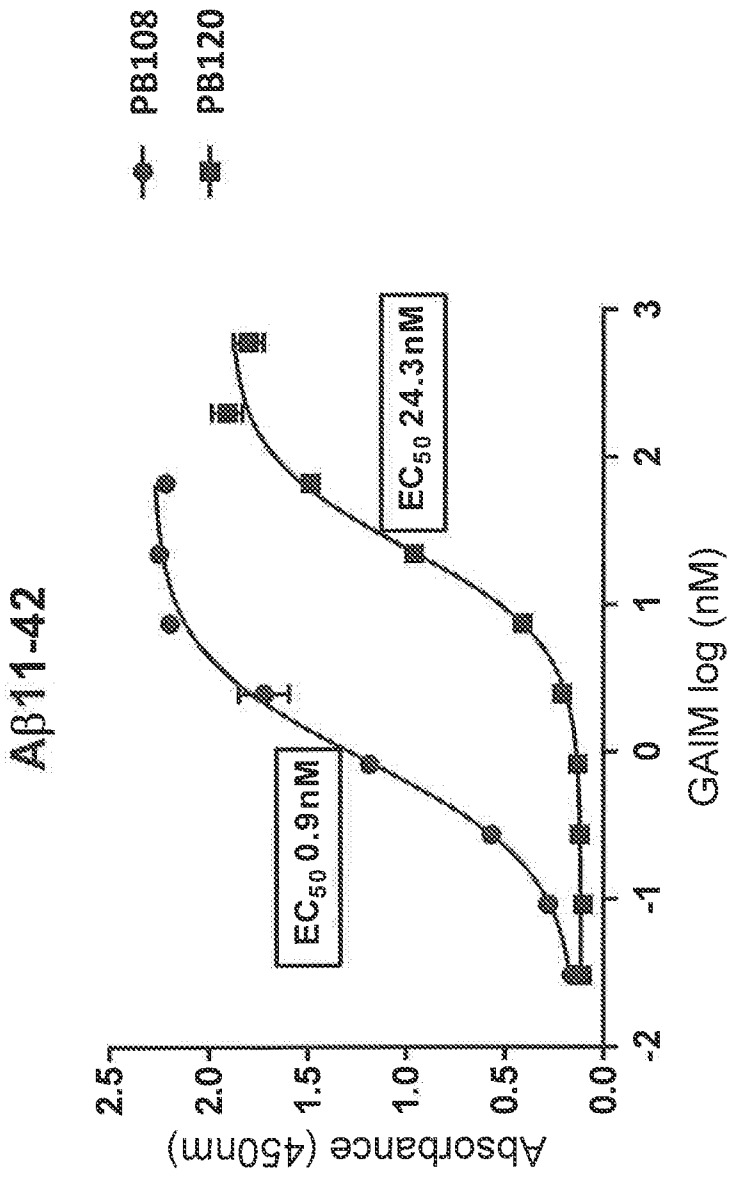

PB108
PB120
Aβ11-42
EC50 0.9nM
EC50 24.3nM
Absorbance (450nm)
GAIM log (nM)
2.5
2.0
1.5
1.0
0.5
0.0
-2
-1
0
1
2
3

Fig. 8C

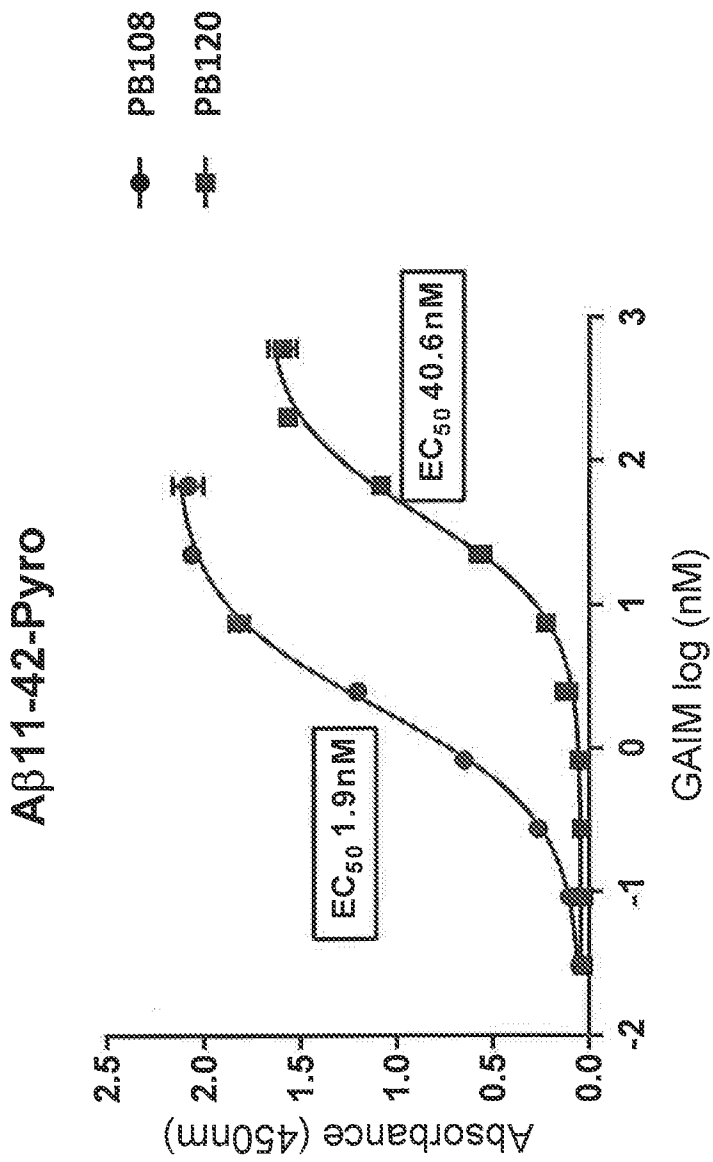

Aβ11-42-Pyro
PB108
PB120
EC50 1.9nM
EC50 40.6nM
Absorbance (450nm)
GAIM log (nM)
2.5
2.0
1.5
1.0
0.5
0.0
-2
-1
0
1
2
3

Fig. 8D

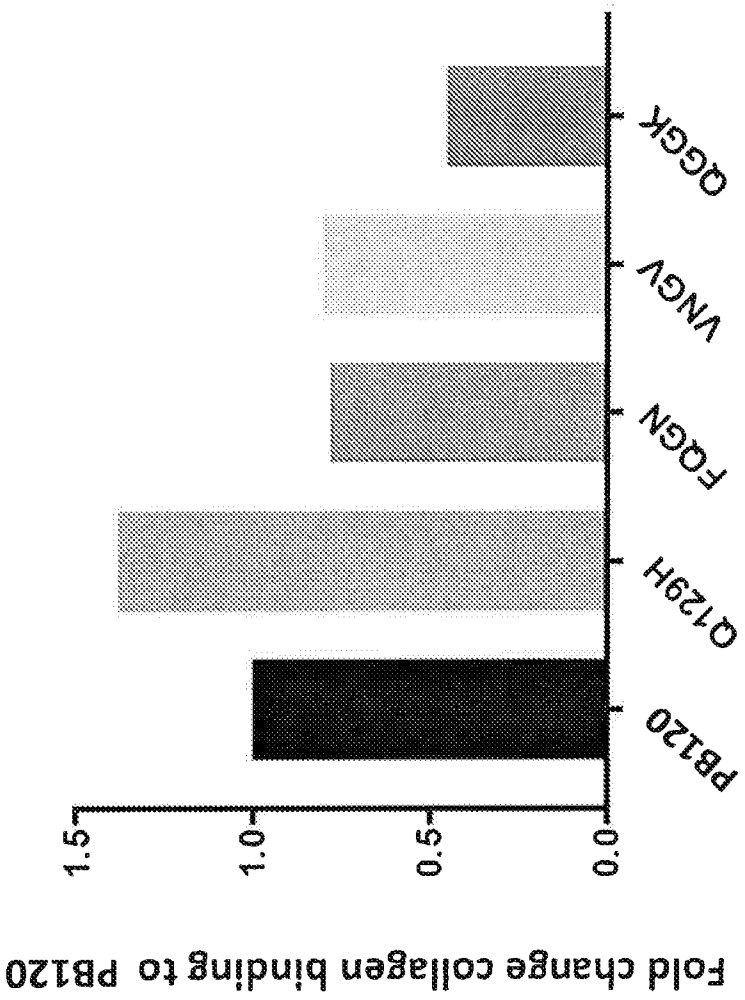

Fold change collagen binding to PB120
1.5
1.0
0.5
0.0
PB120
Q129H
FQGN
VNGV
QGGK

Fig. 9

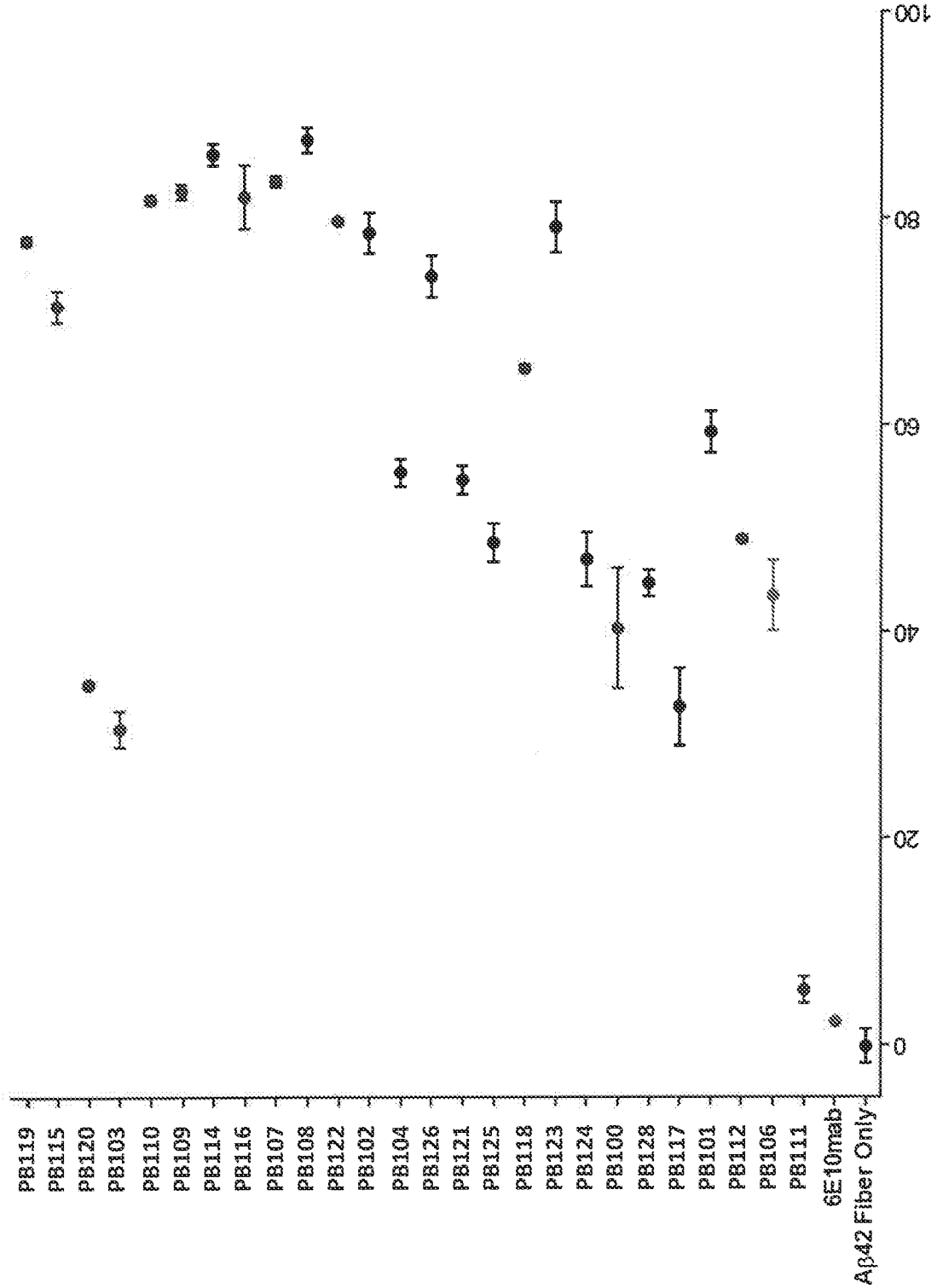

PB119
PB115
PB120
PB103
PB110
PB109
PB114
PB116
PB107
PB108
PB122
PB102
PB104
PB126
PB121
PB125
PB118
PB123
PB124
PB100
PB128
PB117
PB101
PB112
PB106
PB111
6E10mab
Aβ42 Fiber Only
0
20
40
60
80
100
% Remodeling

Fig. 10A

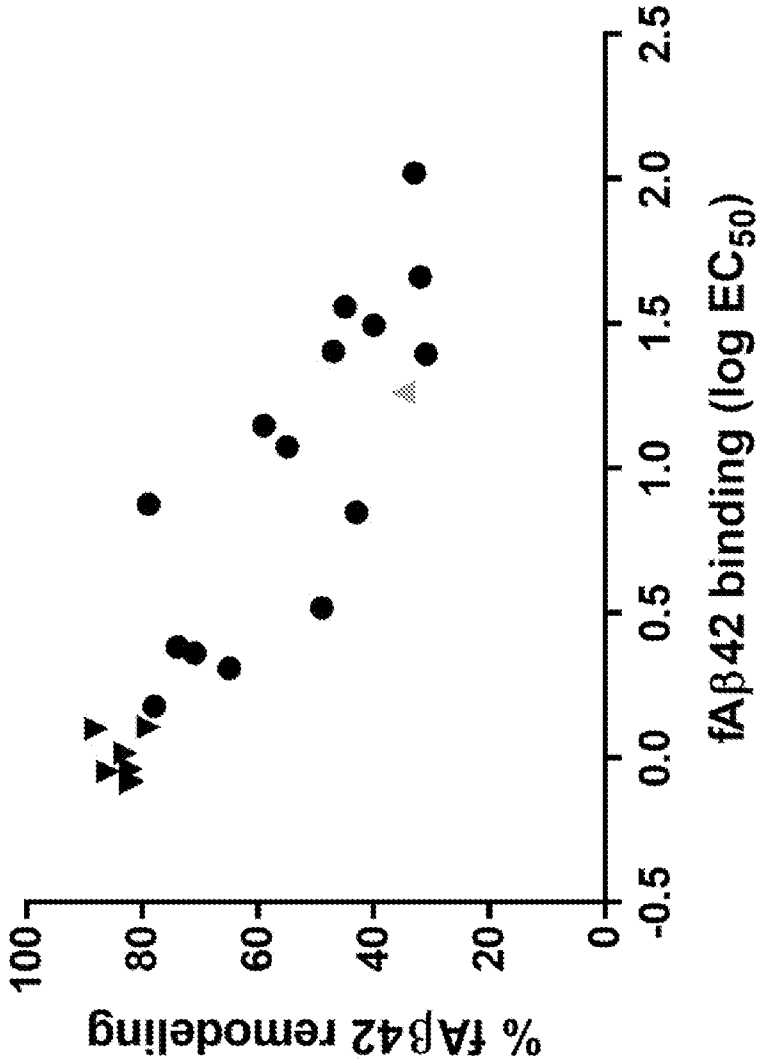

% fAβ42 remodeling
100
80
60
40
20
0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
fAβ42 binding (log EC50)

Fig. 10B

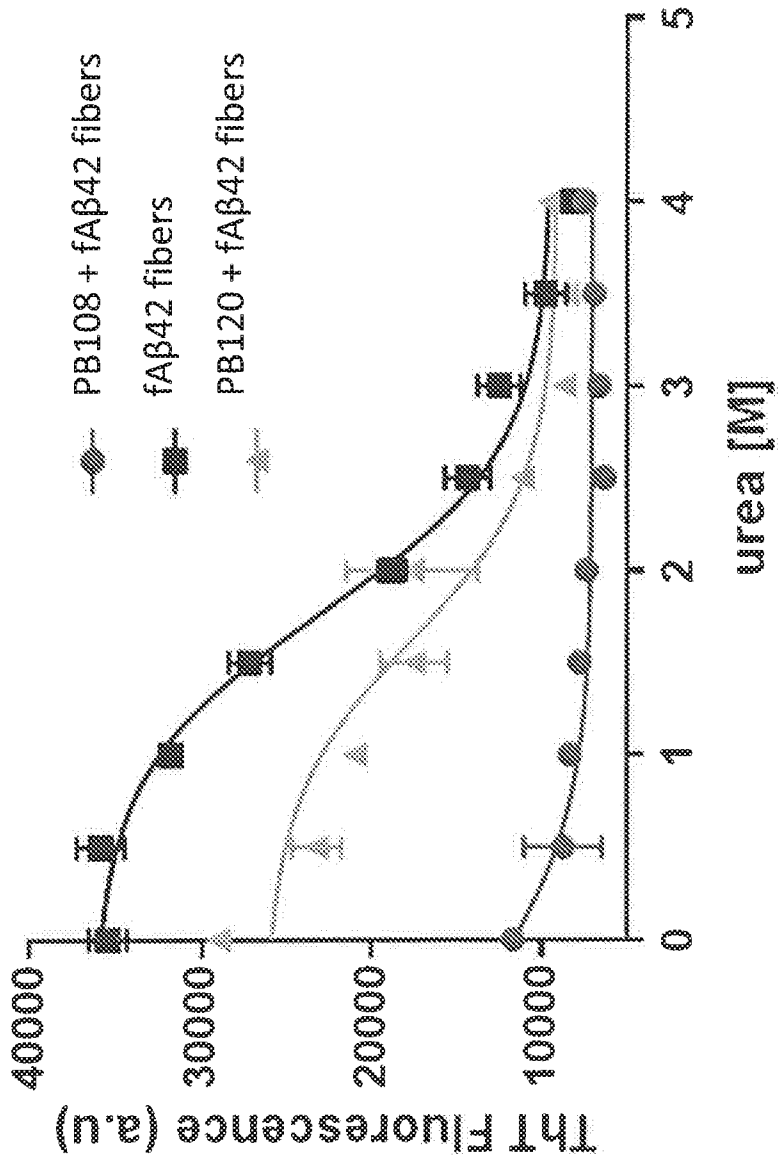

PB108 + fAβ42 fibers
fAβ42 fibers
PB120 + fAβ42 fibers
ThT fluorescence (a.u)
40000
30000
20000
10000
0
1
2
3
4
5
urea [M]

Fig. 10C

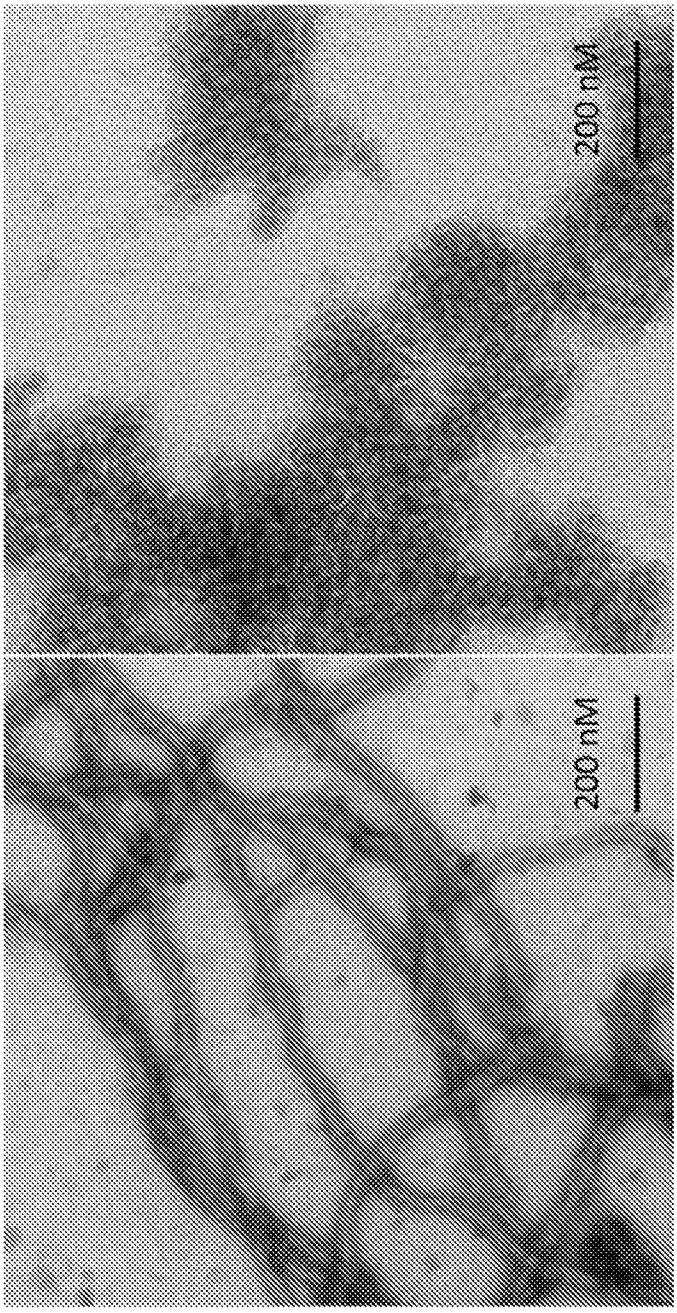


Fig. 10D

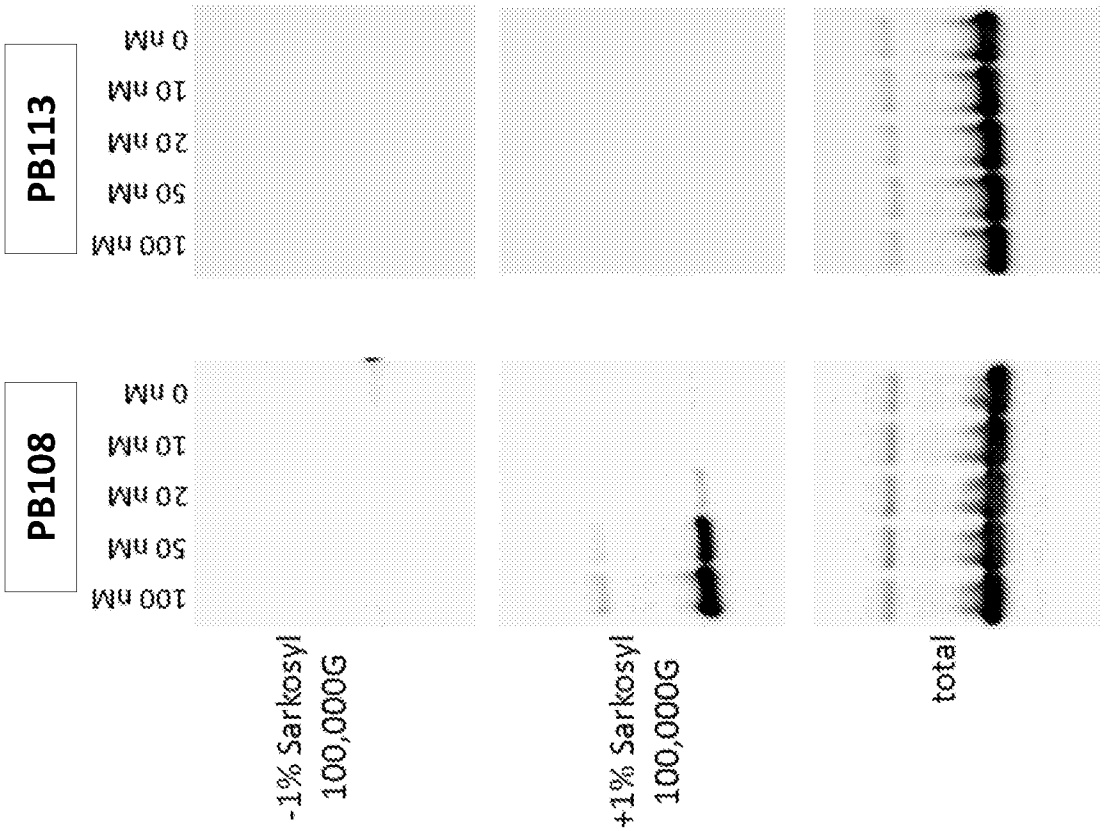

PB113
PB108
0 nM
10 nM
20 nM
50 nM
100 nM
-1% Sarkosyl
100,000G
+1% Sarkosyl
100,000G
total

Fig. 11A

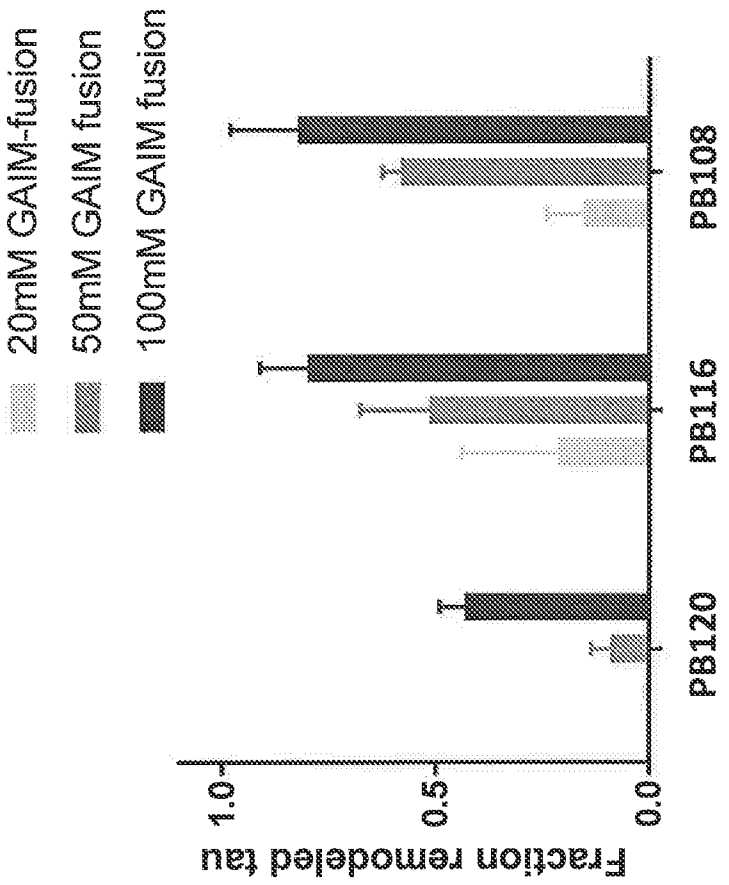

20mM GAIM-fusion
50mM GAIM fusion
100mM GAIM fusion
Fraction remodeled tau
1.0
0.5
0.0
PB120
PB116
PB108

Fig. 11B

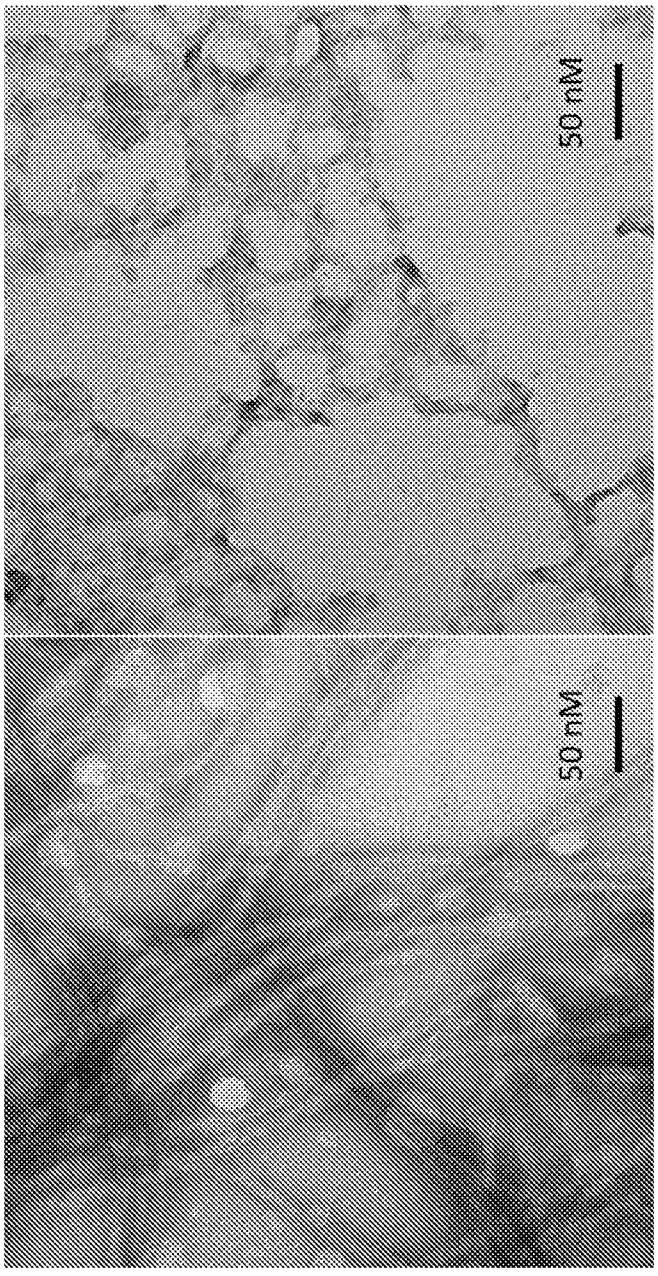


Fig. 11C

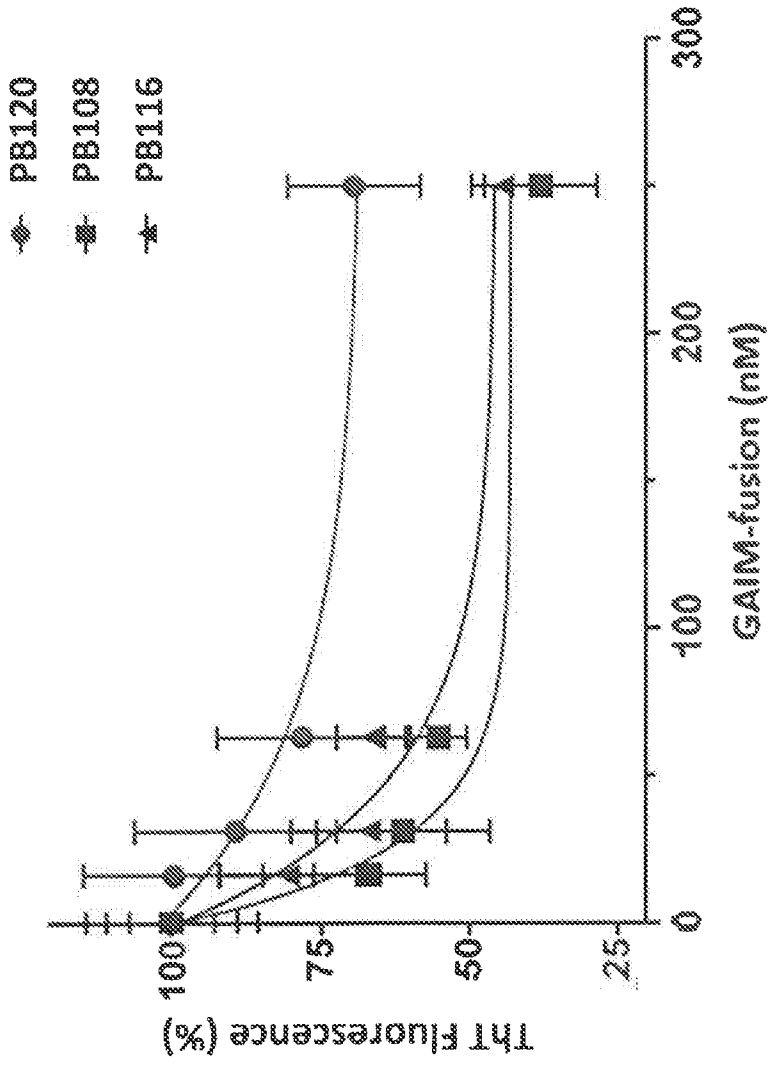

PB120
PB108
PB116
ThT fluorescence (%)
100
75
50
25
0
100
200
300
GAIM-fusion (nM)

Fig. 12A

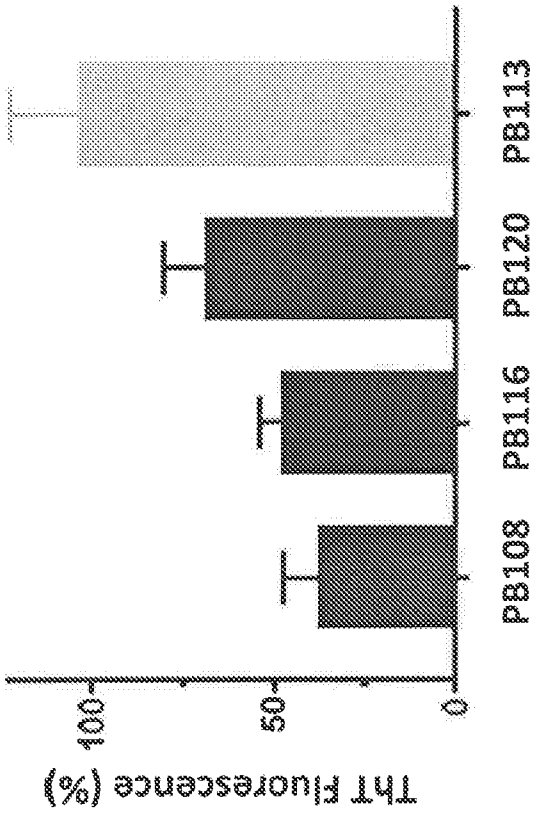


Fig. 12B

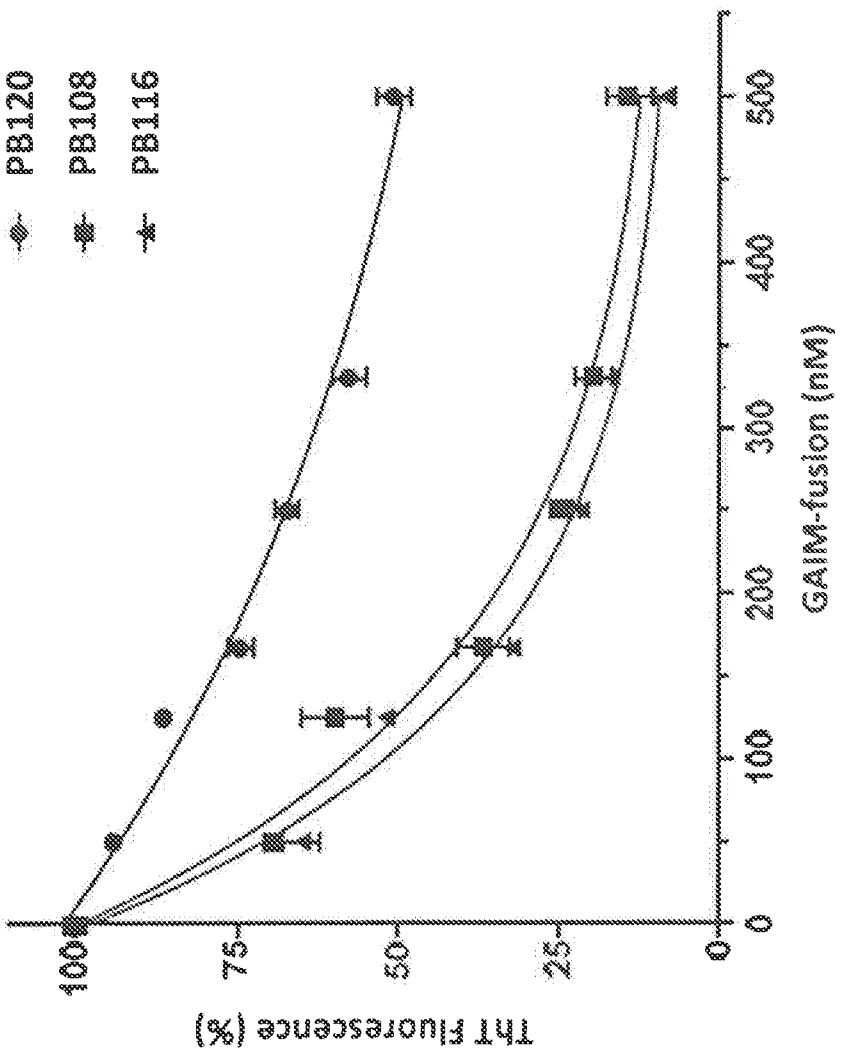

PB120
PB108
PB116
100
75
50
25
0
0
100
200
300
400
500
GAIM-fusion (nM)
TMT fluorescence (%)

Fig. 12C

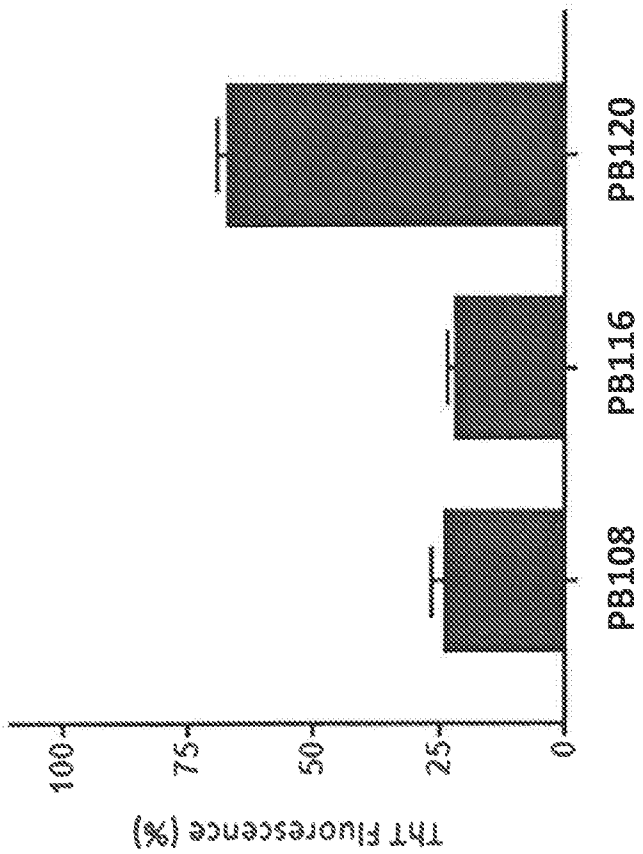


Fig. 12D