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 imcomplete Freunds adjuvant	HCo17-Balb/c	
GM285	FL human alpha-synuclein monomer followed by fibrils or monomer	Complete Freunds adjuvant and imcomplete Freunds adjuvant	HCo12-Balb/c	

FIG 1

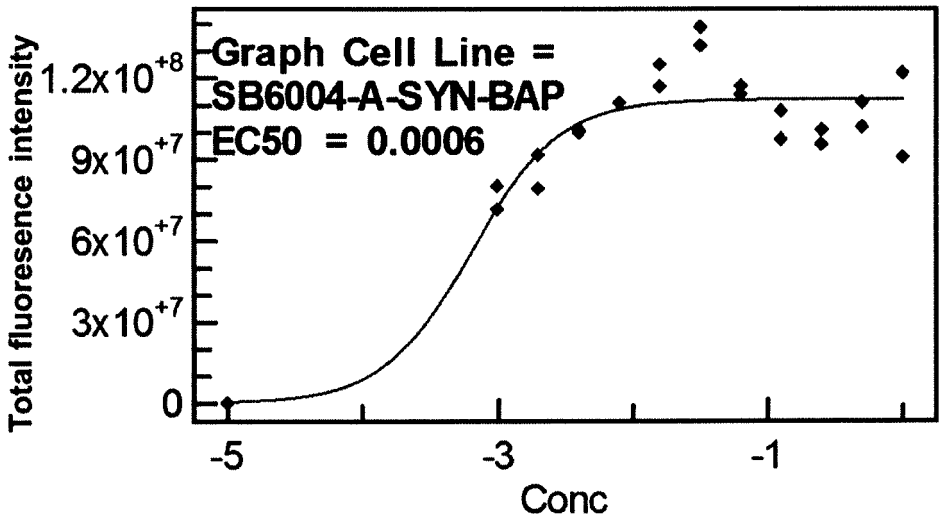
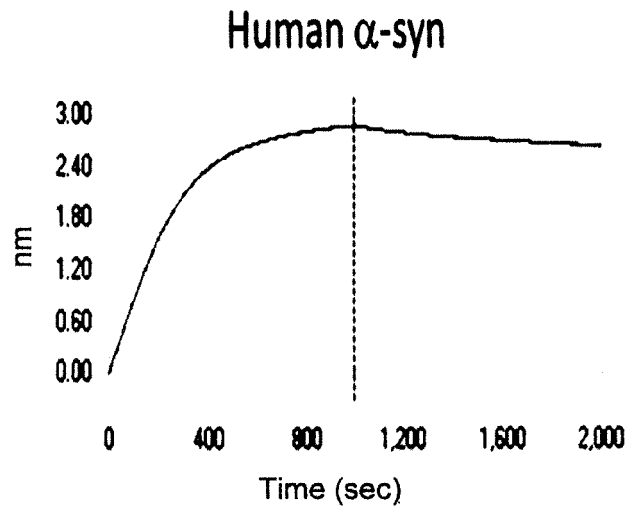

Graph Cell Line =
SB6004-A-SYN-BAP
EC50 = 0.0006
Total fluoresence intensity
1.2x10+8
9x10+7
6x10+7
3x10+7
0
-5
-3
-1
Conc

Fig 2A


Human α-syn
3.00
2.40
1.80
1.20
0.60
0.00
nm
0
400
800
1,200
1,600
2,000
Time (sec)

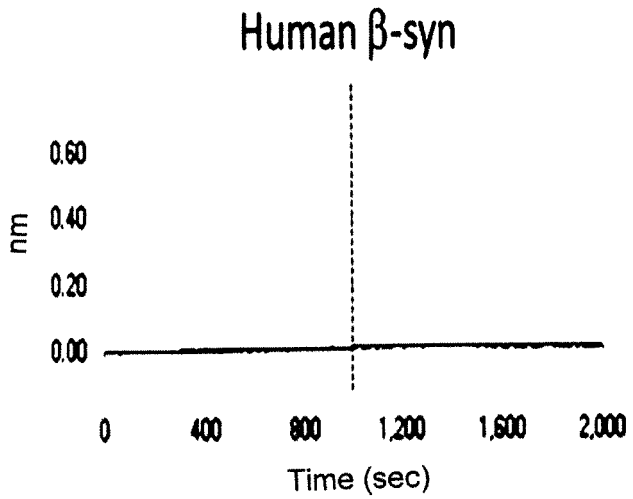

Human β-syn
0.60
0.40
0.20
0.00
nm
0
400
800
1,200
1,600
2,000
Time (sec)

Fig 2B

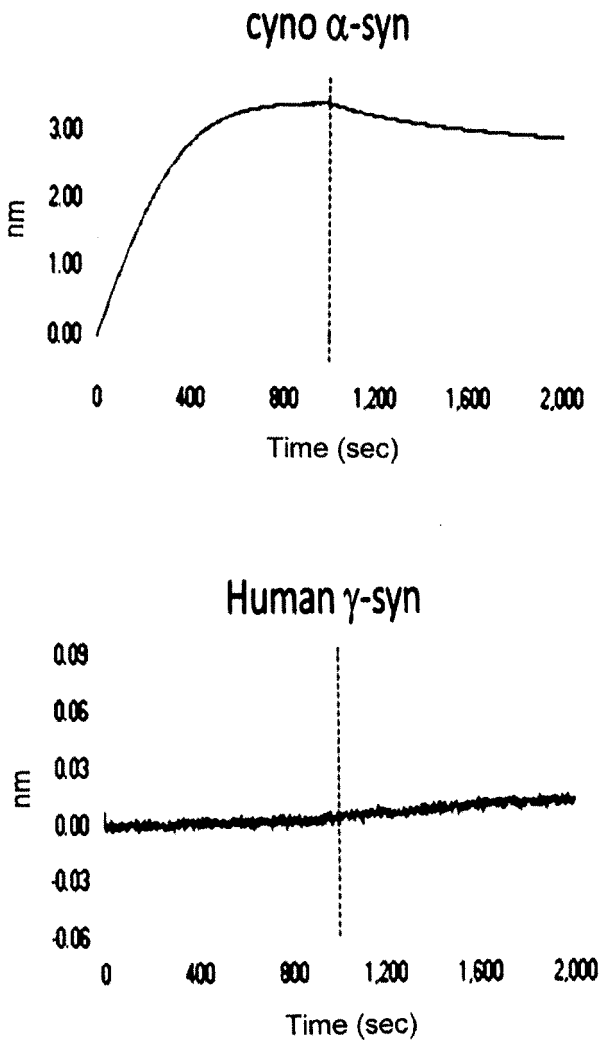


Fig 2B (continued)

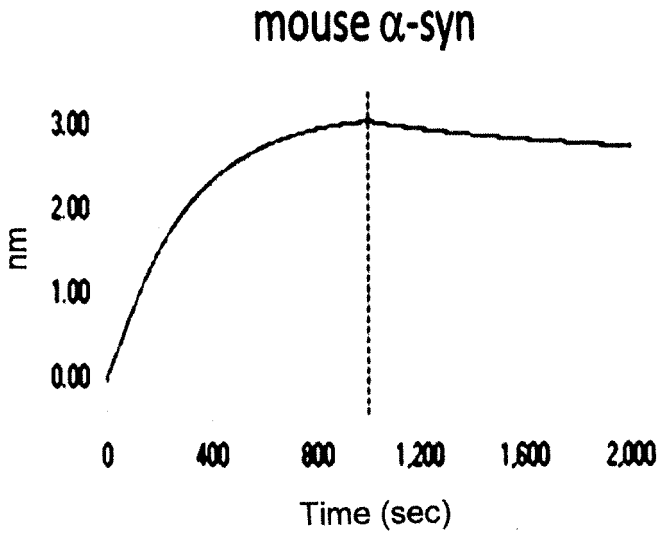


Fig 2B (continued)

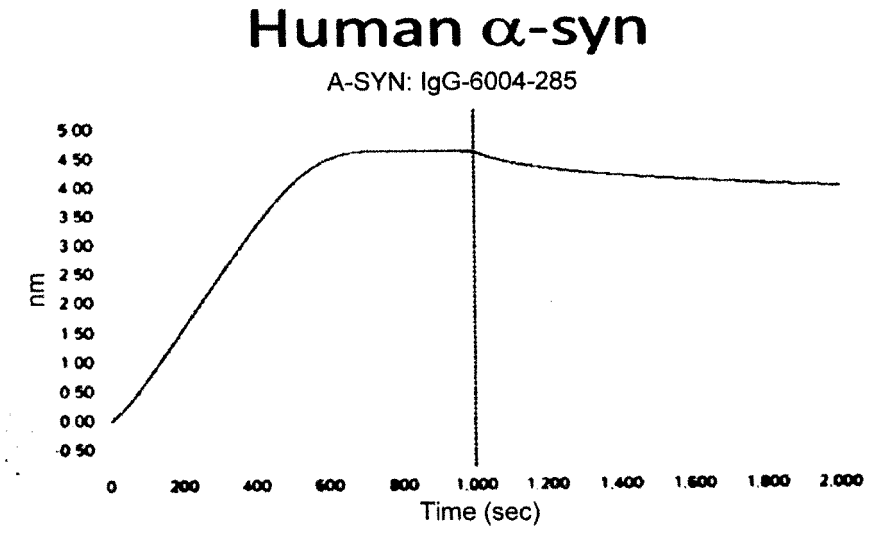

Human α-syn
A-SYN: IgG-6004-285
nm
5 00
4 50
4 00
3 50
3 00
2 50
2 00
1 50
1 00
0 50
0 00
-0 50
0
200
400
600
800
1.000
1 200
1.400
1.600
1.800
2.000
Time (sec)

Fig 2C

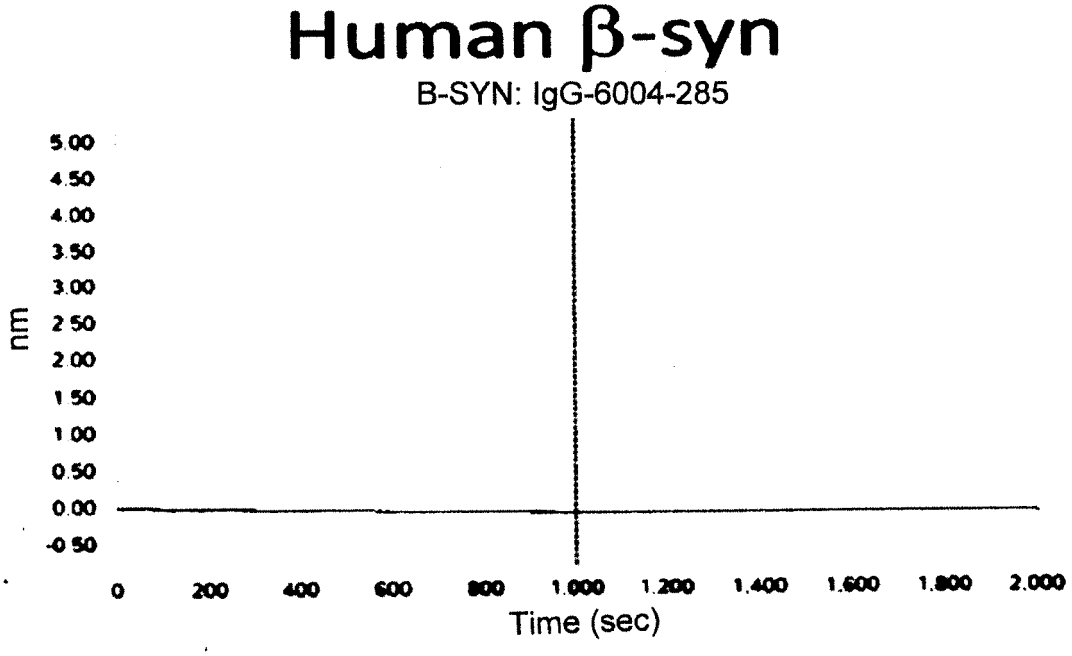


Fig 2C (continued)

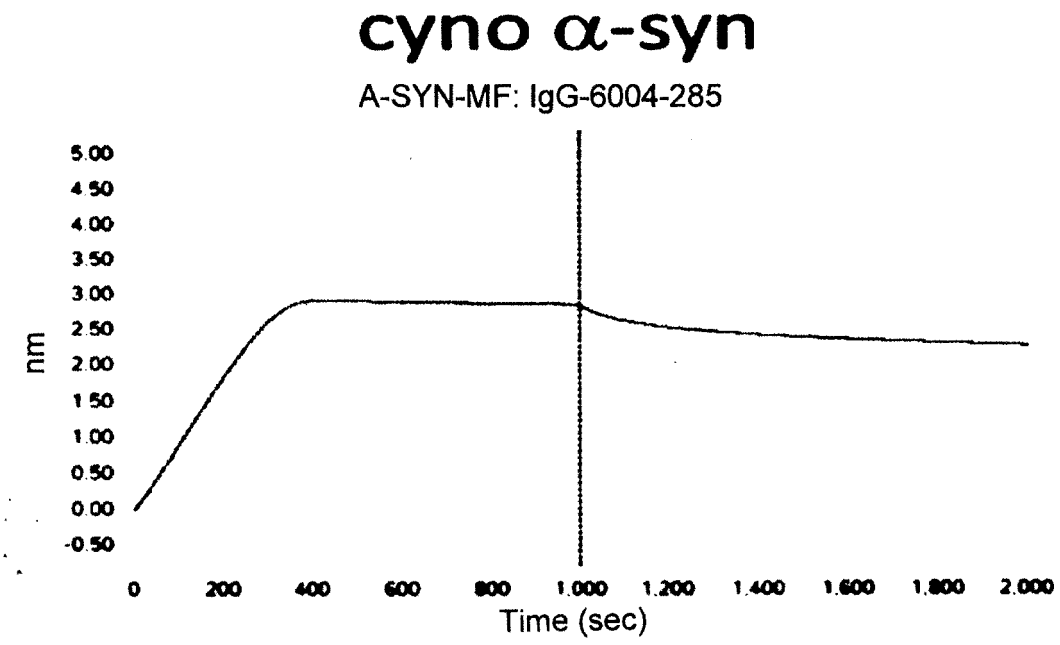


Fig 2C (continued)

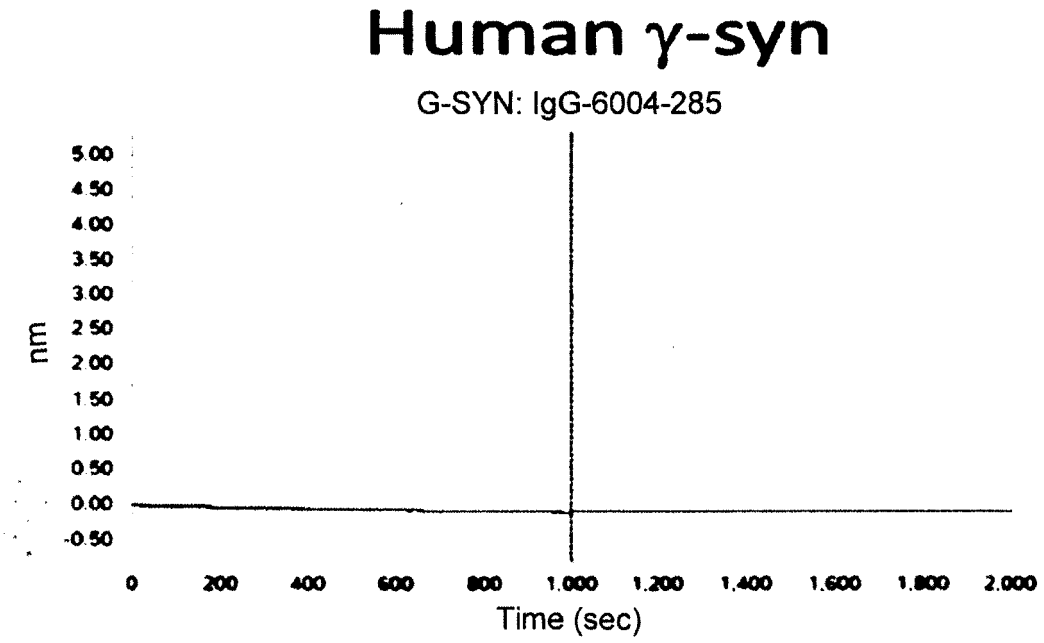


Fig 2C (continued)

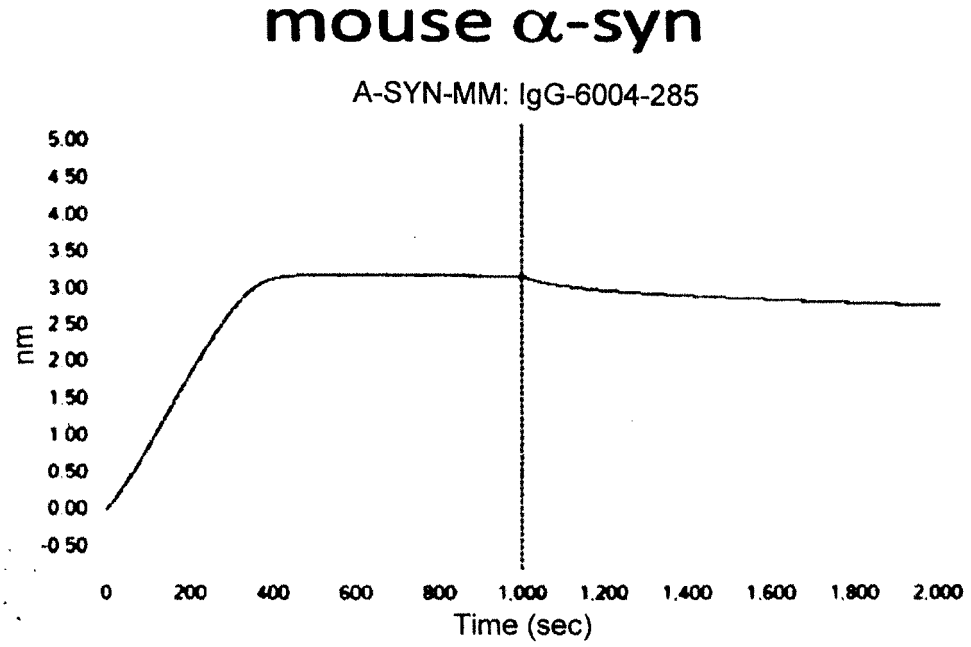


Fig 2C (continued)

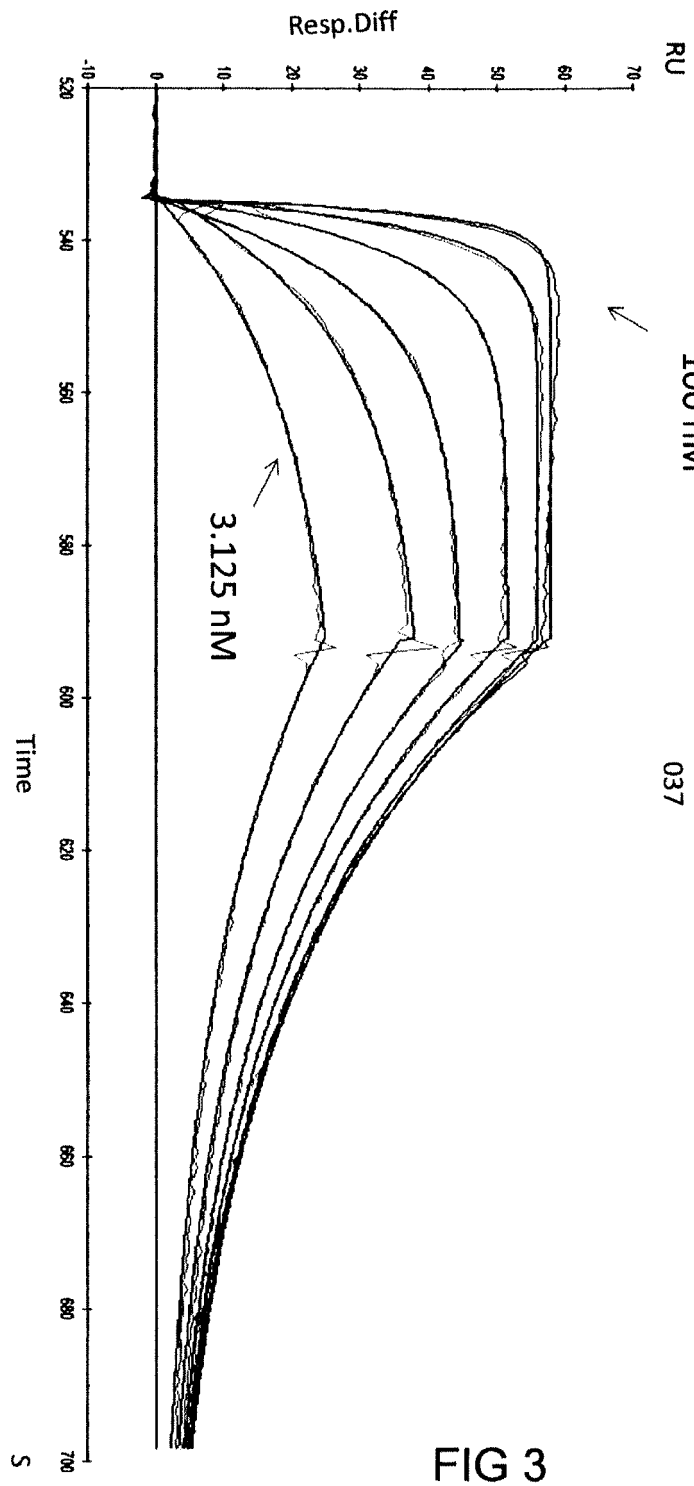
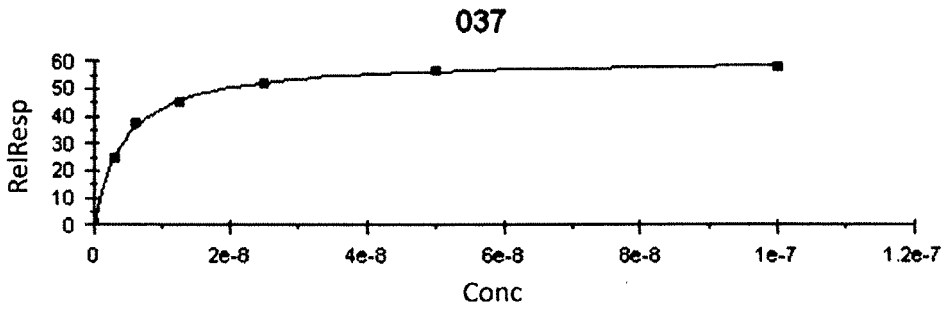

A
Resp.Diff
RU
-10
0
10
20
30
40
50
60
70
520
540
560
580
600
620
640
660
680
700
Time
S
100 nM
3.125 nM
037

FIG 3

B



C

Name	KA(1/M)	KD(nM)	Rmax	Chi2
hIgG1-6004-037 C106S	2.33E+08	4.29	61.1	0.96

Fig 3 (continued)

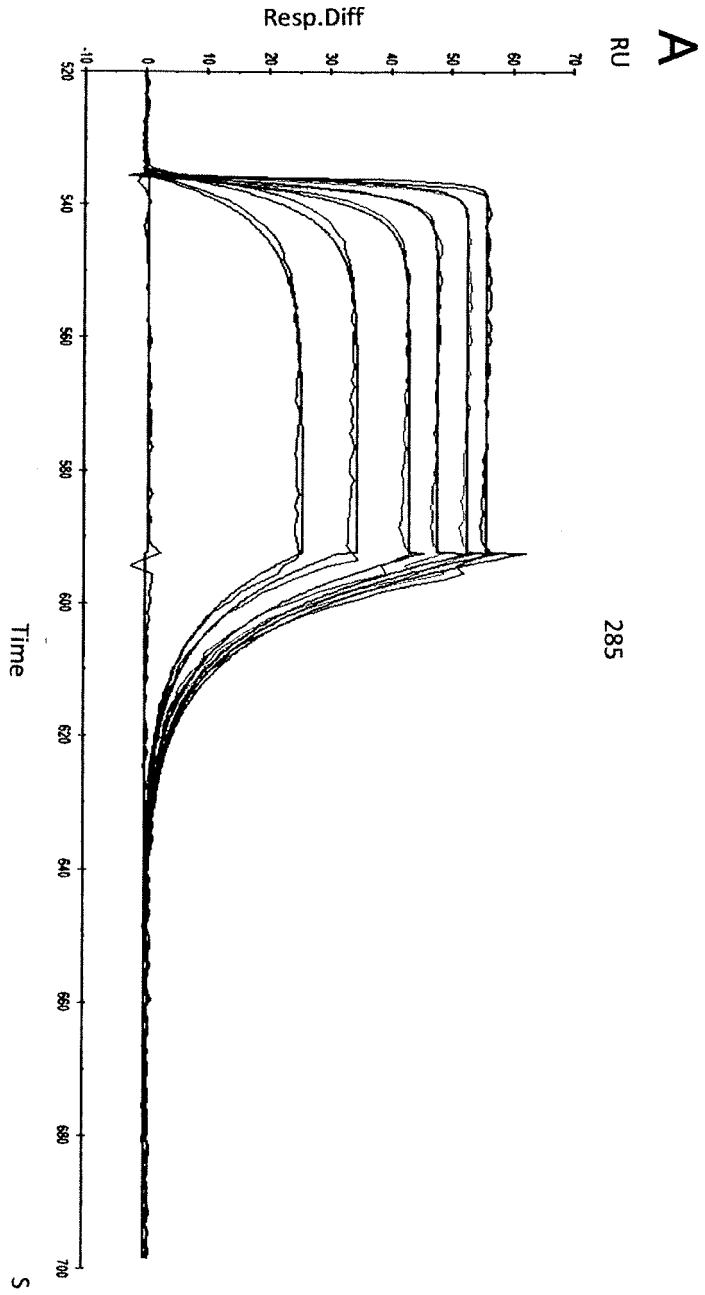
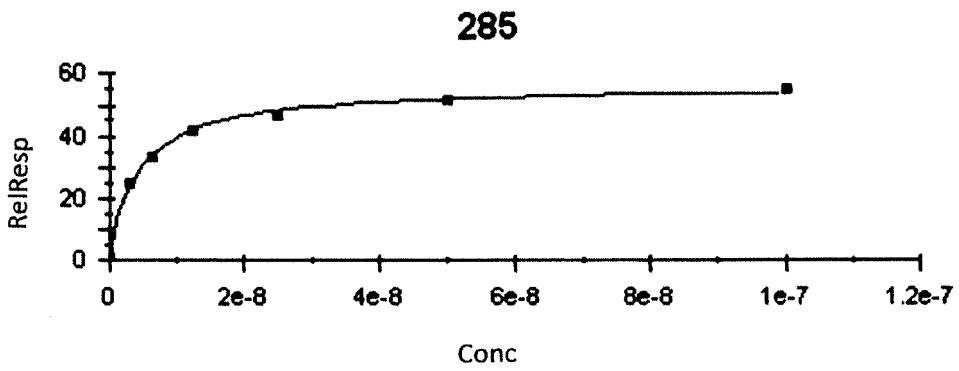

A
Resp.Diff
RU
285
Time
S
-10
0
10
20
30
40
50
60
70
520
540
560
580
600
620
640
660
680
700

FIG 4

B



C

Name	KA(1/M)	KD(nM)	Rmax	Chi2
hIgG1-6004-085	2.33E+08	4.30	56.3	0.77

Fig 4 (continued)

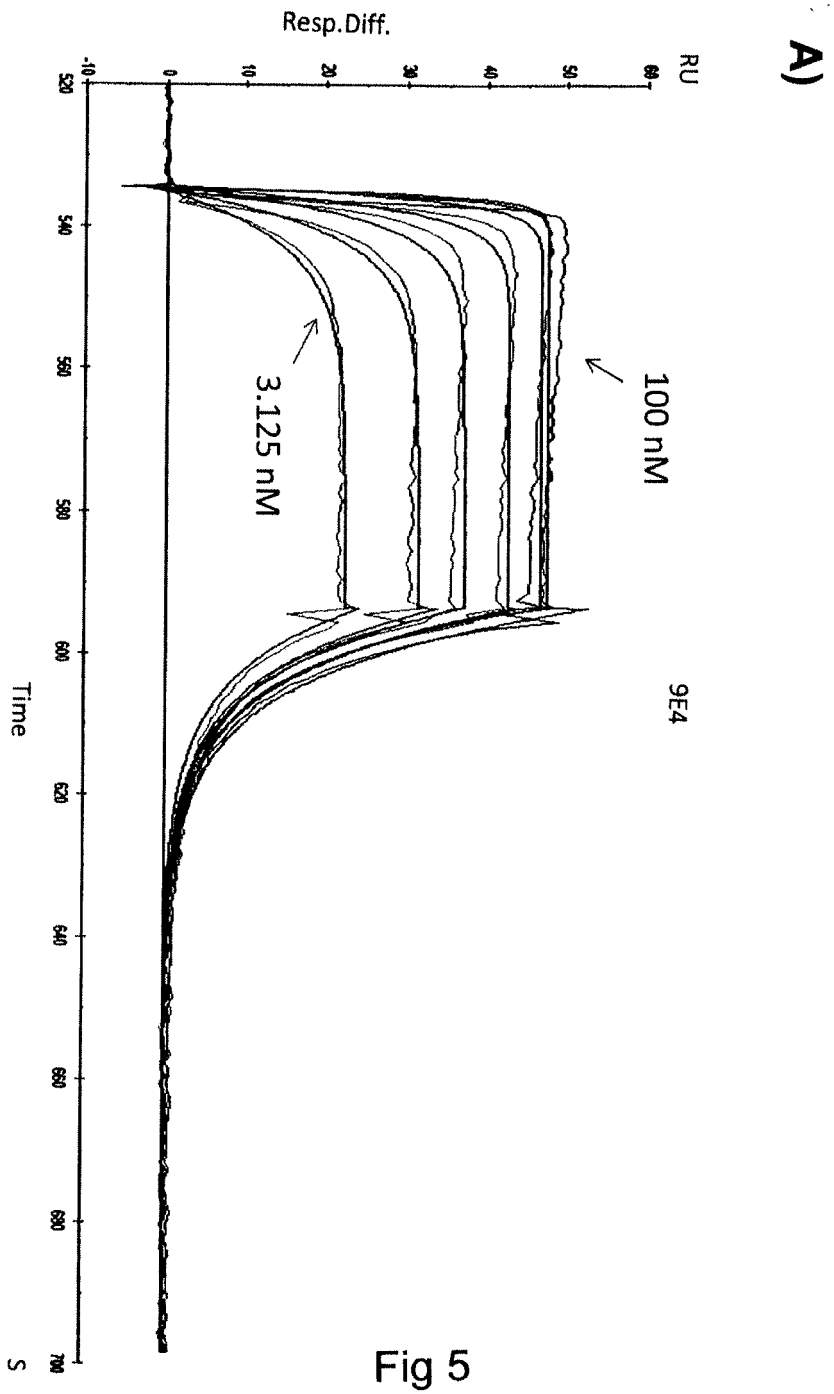
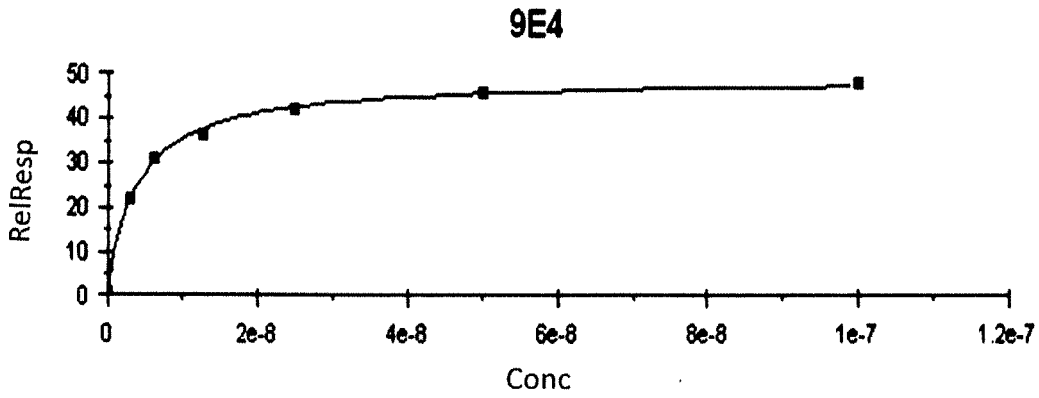

A)
Resp.Diff.
RU
-10
0
10
20
30
40
50
60
520
540
560
580
600
620
640
660
680
700
Time
S
3.125 nM
100 nM
9E4

Fig 5

B)

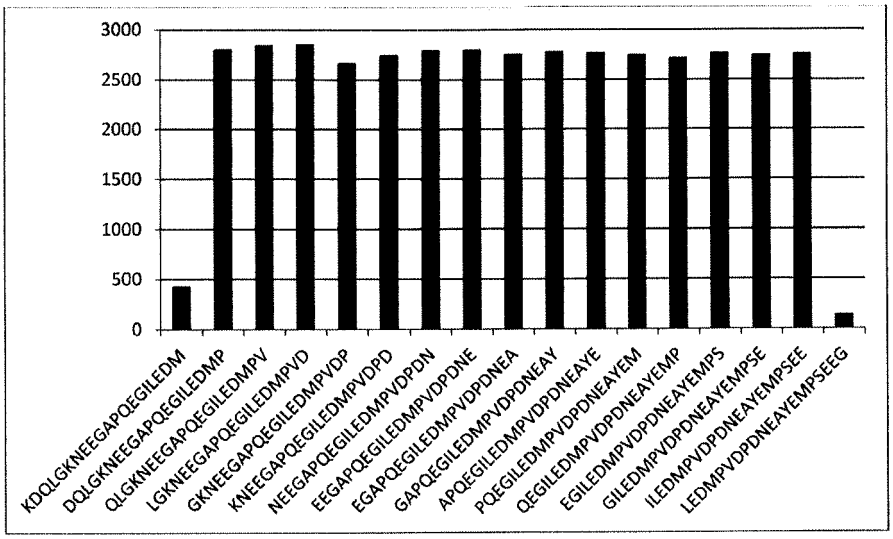


C)

Name	KA(1/M)	KD(nM)	Rmax	Chi2
hIgG1-9E4	2.58E+08	3.88	49.2	0.61

Fig 5 (continued)

A


3000
2500
2000
1500
1000
500
0
KDQLGKNEEGAPQEGILEDM
DQLGKNEEGAPQEGILEDMP
QLGKNEEGAPQEGILEDMPV
LGKNEEGAPQEGILEDMPVD
GKNEEGAPQEGILEDMPVDP
KNEEGAPQEGILEDMPVDPD
NEEGAPQEGILEDMPVDPDN
EEGAPQEGILEDMPVDPDNE
EGAPQEGILEDMPVDPDNEA
GAPQEGILEDMPVDPDNEAY
APQEGILEDMPVDPDNEAYE
PQEGILEDMPVDPDNEAYEM
QEGILEDMPVDPDNEAYEMP
EGILEDMPVDPDNEAYEMPS
GILEDMPVDPDNEAYEMPSE
ILEDMPVDPDNEAYEMPSEE
LEDMPVDPDNEAYEMPSEEG

B

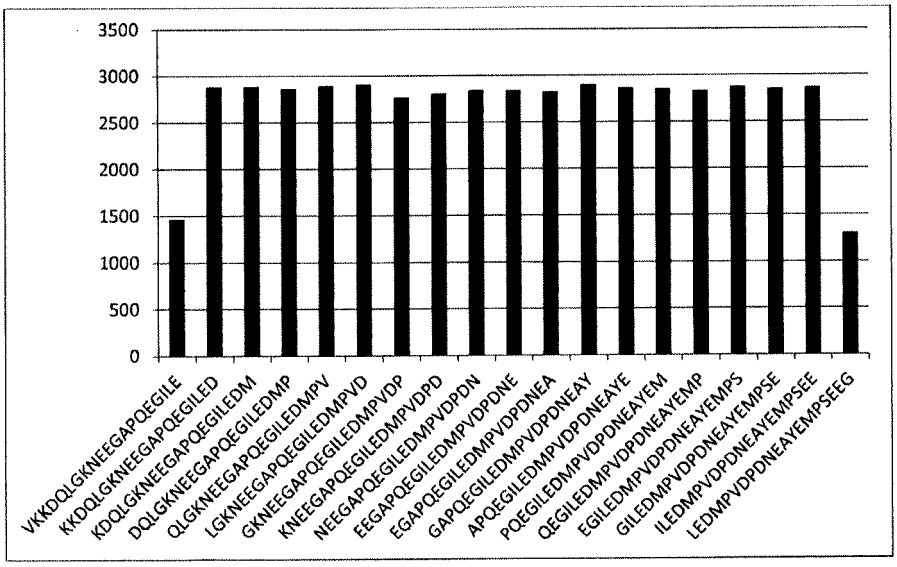
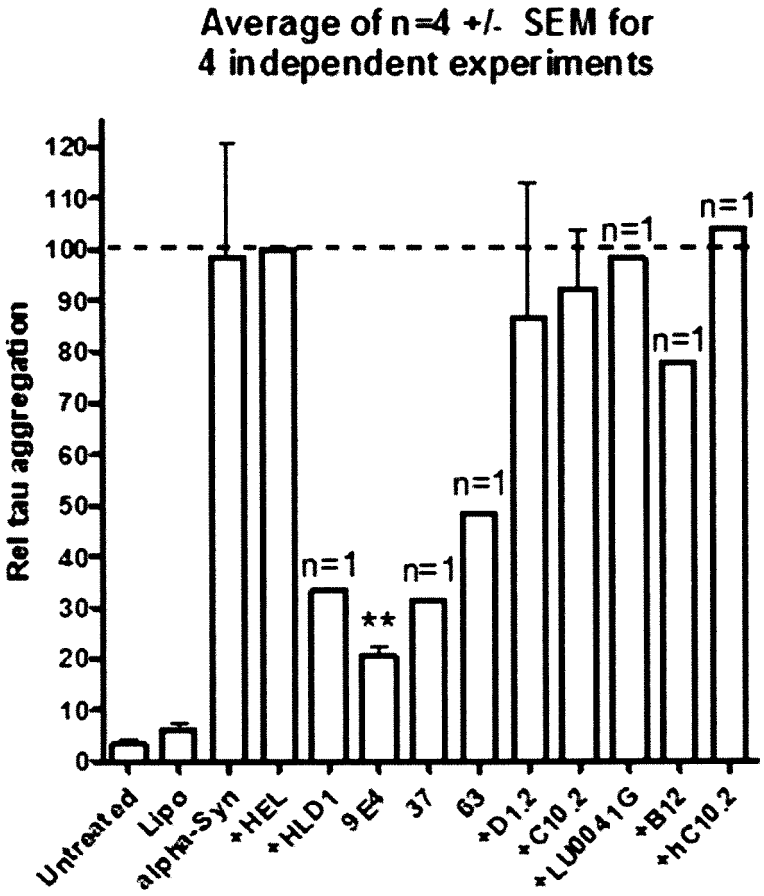

3500
3000
2500
2000
1500
1000
500
0
VKKDQLGKNEEGAPQEGILE
KKDQLGKNEEGAPQEGILED
KDQLGKNEEGAPQEGILEDM
DQLGKNEEGAPQEGILEDMP
QLGKNEEGAPQEGILEDMPV
LGKNEEGAPQEGILEDMPVD
GKNEEGAPQEGILEDMPVDP
KNEEGAPQEGILEDMPVDPD
NEEGAPQEGILEDMPVDPDN
EEGAPQEGILEDMPVDPDNE
EGAPQEGILEDMPVDPDNEA
GAPQEGILEDMPVDPDNEAY
APQEGILEDMPVDPDNEAYE
PQEGILEDMPVDPDNEAYEM
QEGILEDMPVDPDNEAYEMP
EGILEDMPVDPDNEAYEMPS
GILEDMPVDPDNEAYEMPSE
ILEDMPVDPDNEAYEMPSEE
LEDMPVDPDNEAYEMPSEEG

FIG 6

Sample	ka (1/Ms)	kd (1/s)	KD (nM)	Rmax (RU)	Chi² (RU²)	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 7



Tau seeding assay

Seeding material:
Fibrillated recombinant alpah-synuclein

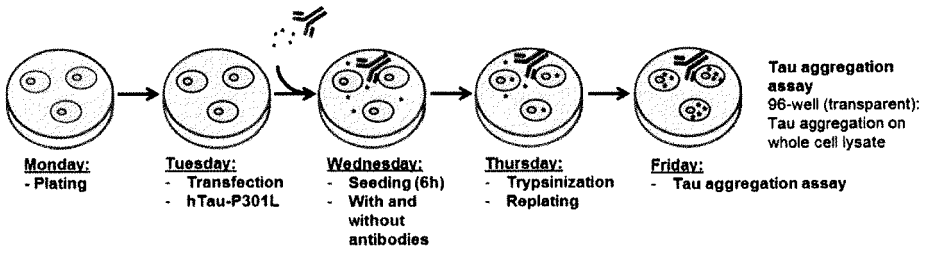


FIG 8

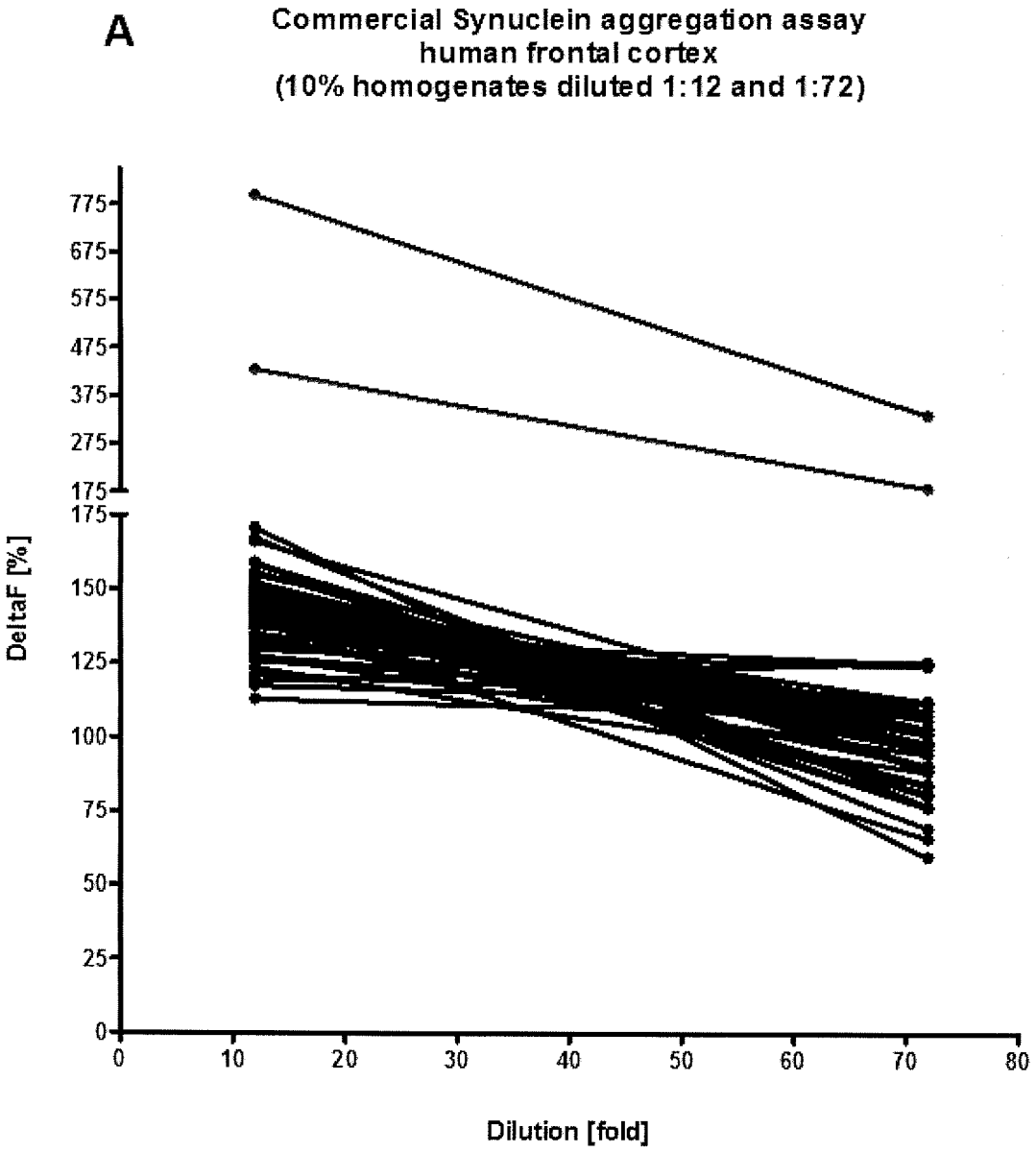

A
Commercial Synuclein aggregation assay
human frontal cortex
(10% homogenates diluted 1:12 and 1:72)
DeltaF [%]
775
675
575
475
375
275
175
175
150
125
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Dilution [fold]

FIG 9A

B

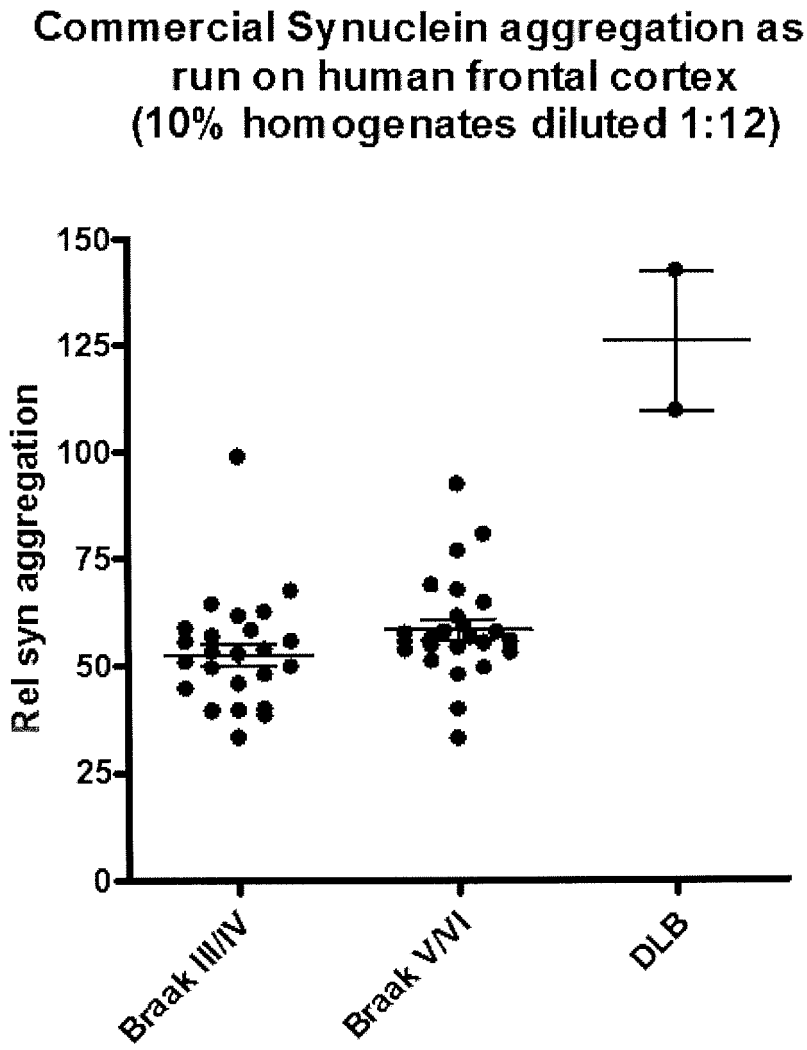

Commercial Synuclein aggregation assay
run on human frontal cortex
(10% homogenates diluted 1:12)
Rel syn aggregation
150
125
100
75
50
25
0
Braak III/IV
Braak V/VI
DLB

FIG 9B

C

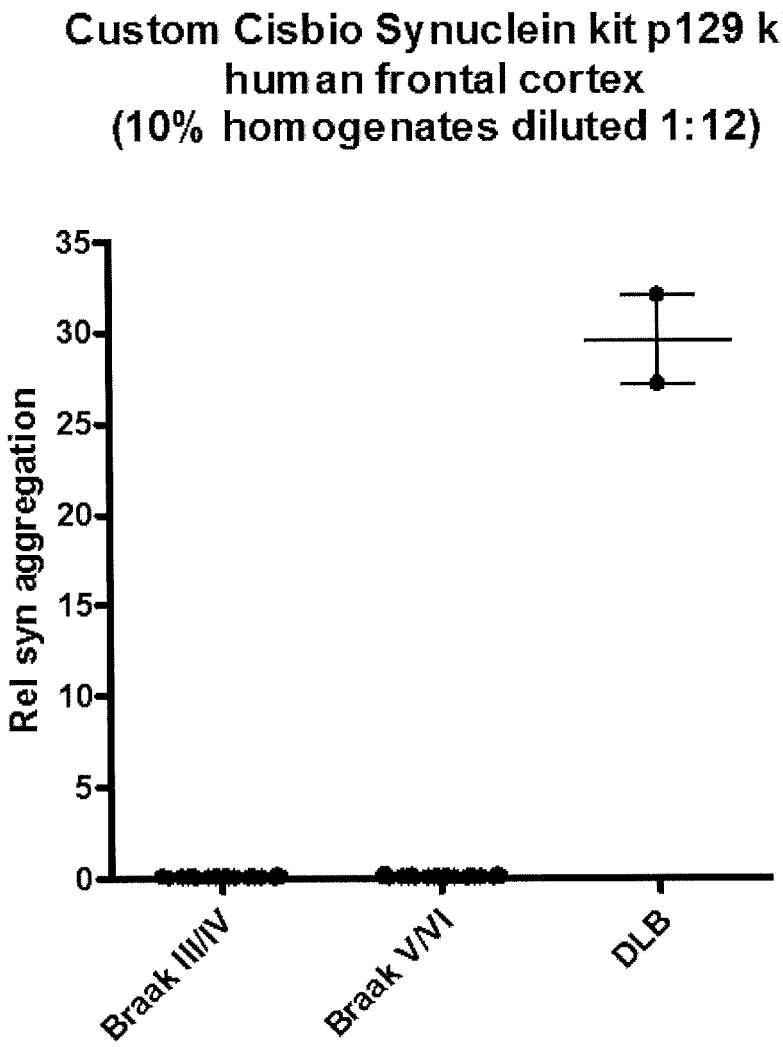

Custom Cisbio Synuclein kit p129 kit
human frontal cortex
(10% homogenates diluted 1:12)
Rel syn aggregation
35
30
25
20
15
10
5
0
Braak III/IV
Braak V/VI
DLB

FIG 9C