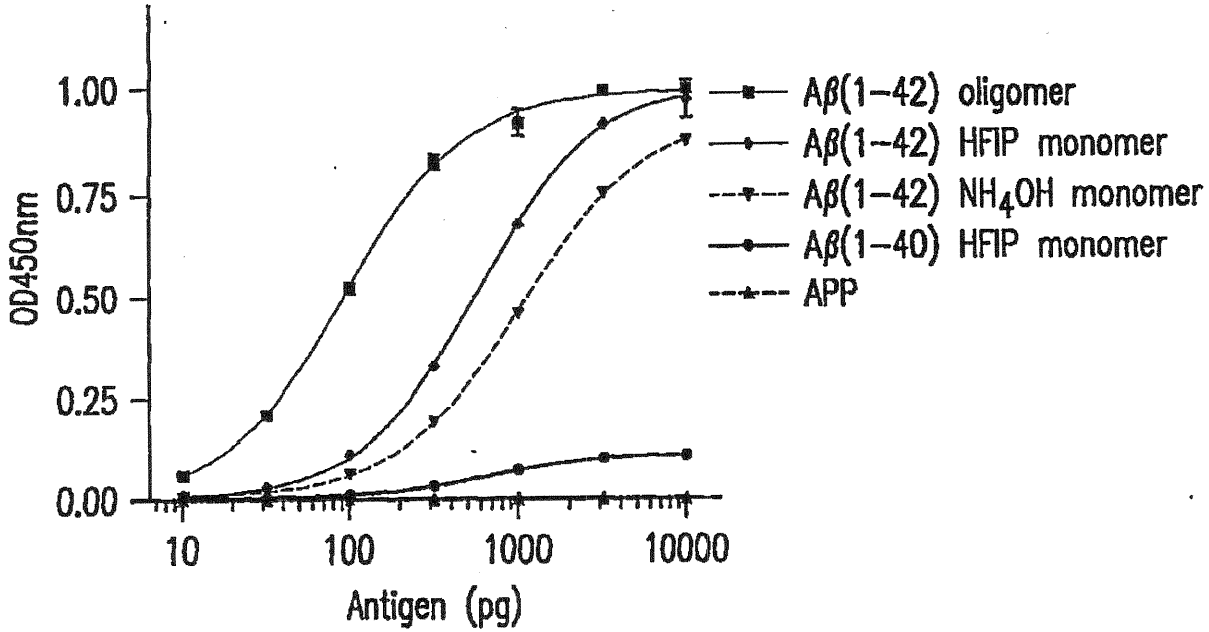
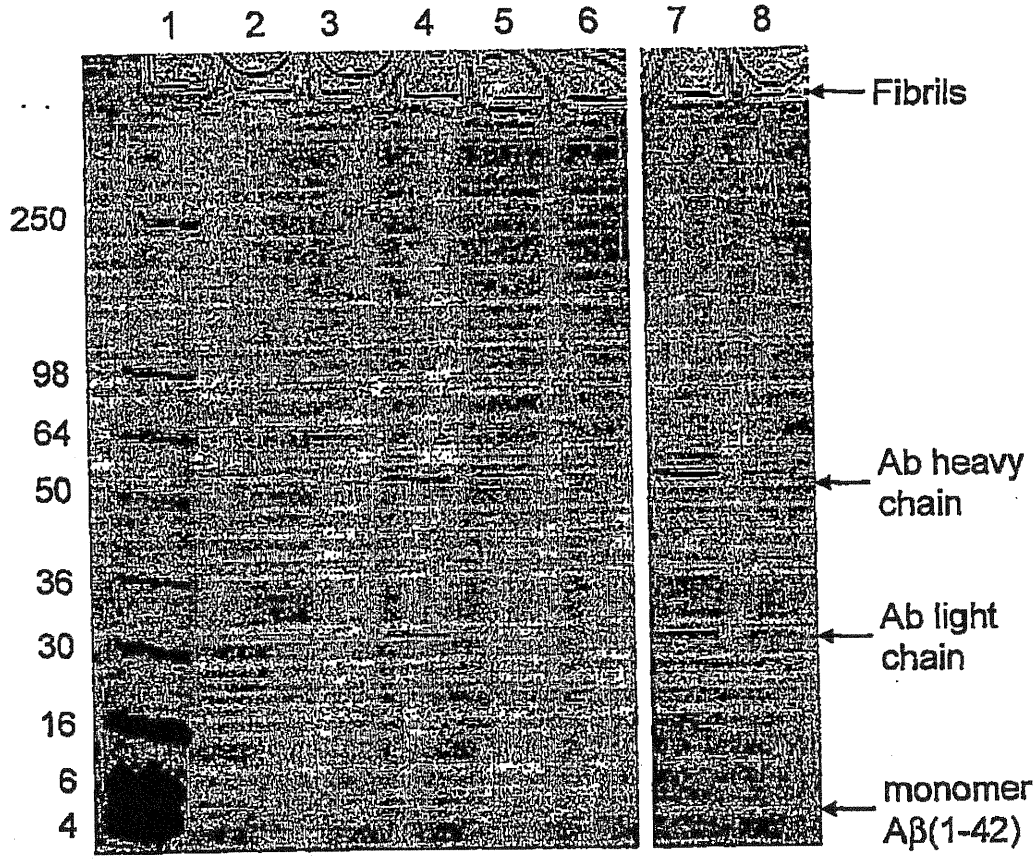
Sandwich-Elisa of Several Aβ-Forms with Biotinylated Clone 8F5 Coated Clone 6G1

coated anti-Aβ clone 6G1 --> Aβ-Forms --> biotinylated clone 8F5 --> Streptavidin-POD --> development



	Aβ(1-42) oligomer	Aβ(1-42) HFIP monomer	Aβ(1-42) NH_4OH monomer	Aβ(1-40) HFIP monomer
BOTTOM	-0.001218	0.004304	0.006727	0.004288
TOP	0.9926	1.002	0.9292	0.1116
LOGEC50	1.958	2.745	3.003	2.825
HILLSLOPE	1.215	1.270	1.204	1.375
EC50	90.74	555.8	1007	667.8

FIG.1



1. Marker
2. Fibril preparation control
3. Fibril preparation ; + mMAb 6E10 ; 20h 37°C ; supernatant
4. Fibril preparation ; + mMAb 6E10 ; 20h 37°C ; pellet
5. Fibril preparation ; + mMAb 4G8 ; 20h 37°C ; supernatant
6. Fibril preparation ; + mMAb 4G8 ; 20h 37°C ; pellet
7. Fibril preparation ; + mMAb 8F5 ; 20h 37°C ; supernatant
8. Fibril preparation ; + mMAb 8F5 ; 20h 37°C ; pellet

FIG.2

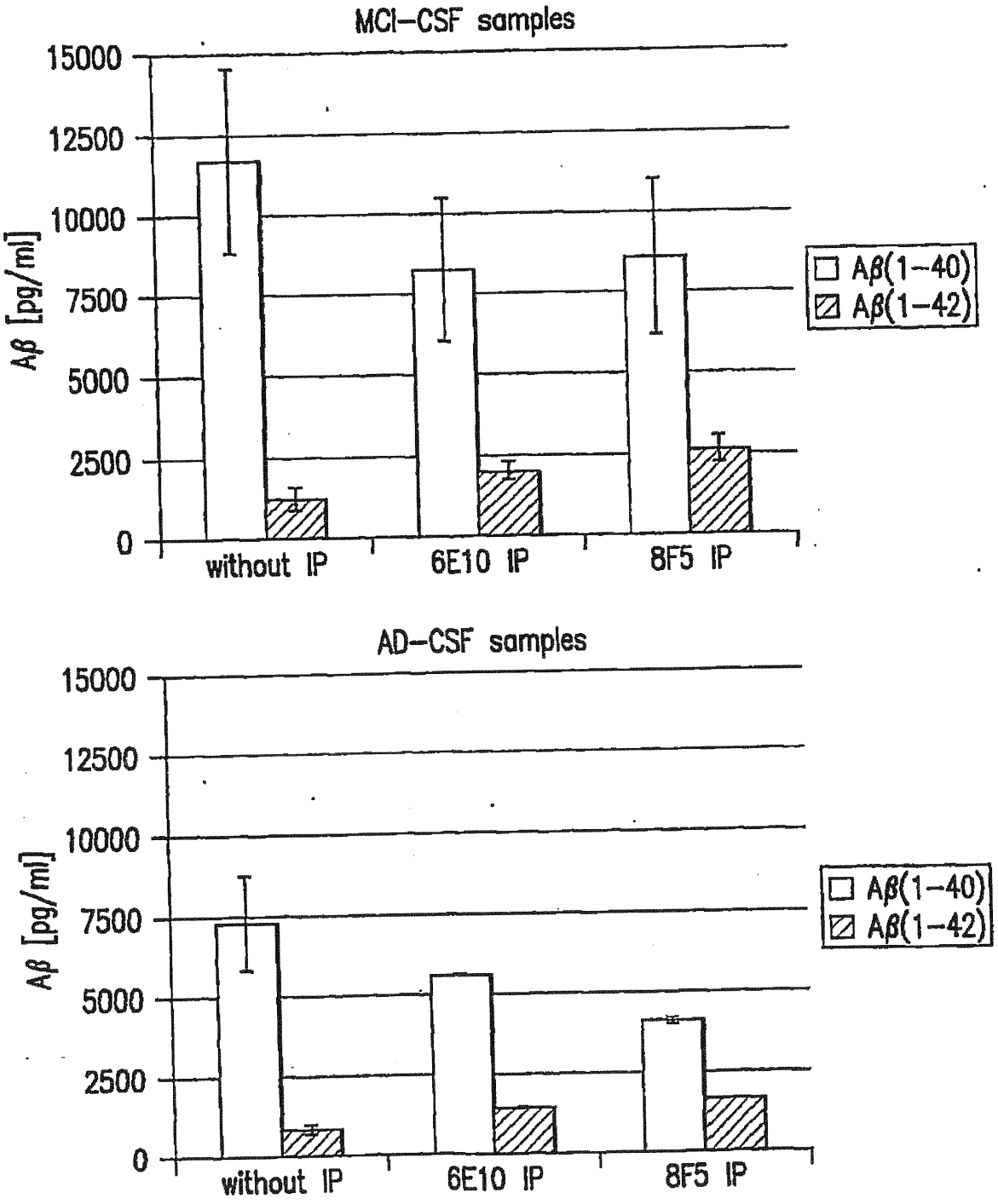
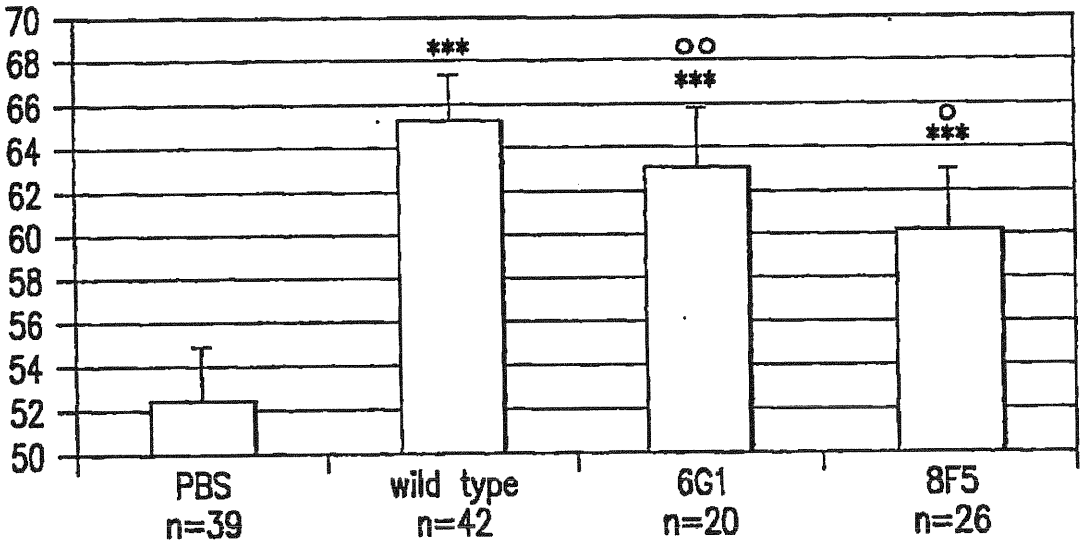

MCI–CSF samples
15000
12500
10000
7500
5000
2500
0
Aβ [pg/ml]
without IP
6E10 IP
8F5 IP
Aβ(1–40)
Aβ(1–42)
AD–CSF samples
15000
12500
10000
7500
5000
2500
0
Aβ [pg/ml]
without IP
6E10 IP
8F5 IP
Aβ(1–40)
Aβ(1–42)

FIG.3



*** $P<0.001$ vs. 50%
o $P<0.05$; oo $P<0.01$
post hoc t-test vs. PBS after $P<0.001$ in ANOVA

FIG.4

VH 8F5

GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTAGTGCAGCCTGGAGGGCCC
TGAAACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAGCTATGGCATGTCT
TGGGTTCGCCAGACTCCAGACAAGAGGCTGGAATTGGTCGCAAGCATCAATA
GTAATGGTGGTAGCACCTATTATCCAGACAGTGTGAAGGGCCGATTCACCAT
CTCCAGAGACAATGCCAAGAACACCCTGTACCTGCAAATGAGCAGTCTGAAG
TCTGAGGACACAGCCATGTATTACTGTGCAAGTGGTGACTACTGGGGCCAAG
GCTCCACTCTCACAGTCTCCTCA (SEQ ID NO:1)

FIG.5A

VL 8F5

GATGTTGTGATGACCCAAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCA
AGCCTCCATCTCTTGCAGATCTAGTCAGAGCCTTGTATATAGTAATGGAGACA
CCTATTTACATTGGTACCTGCAGAAGCCAGGCCAGTCTCCAAAGCTCCTGATC
TACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAGTGGCAGTG
GATCAGGGACAGATTTCACACTCAAGATCAGCAGAGTGGAGGCTGAGGATCT
GGGAGTTTATTTCTGCTCTCAAAGTACACATGTTCCTTGGACGTTCGGTGGAG
GCACCAAGCTAGAAATCAAACGG (SEQ ID NO:2)

FIG.5B

VH 8F5

EVQLVESGGGLVQPGGSLKLSCAASGFTFSSYGMSWVRQTPDKRLELVASINSN
GGSTYYPDSVKGRFTISRDNAKNTLYLQMSSLKSEDTAMYYCASGDYWGQGST
LTVSS (SEQ ID NO:3)

CDR1 (VH) = SYGMS (SEQ ID NO:5)
CDR2 (VH) = SINSNGGSTYYPDSVKG (SEQ ID NO:6)
CDR3 (VH) = SGDY (SEQ ID NO:7)

FIG.6A

VL 8F5

DVVMTQTPLSLPVSLGDQASISCRSSQSLVYSNGDTYLHWYLQKPGQSPKLLIYK
VSNRFSGVPDRFSGSGSGTDFTLKISRVEAEDLGVYFCSQSTHVPWTFGGGTKLE
IKR (SEQ ID NO:4)

CDR1(VL) = RSSQSLVYSNGDTYLH (SEQ ID NO:8)
CDR2(VL) = KVSNRFS (SEQ ID NO:9)
CDR3(VL) = SQSTHVPWT (SEQ ID NO:10)

FIG.6B

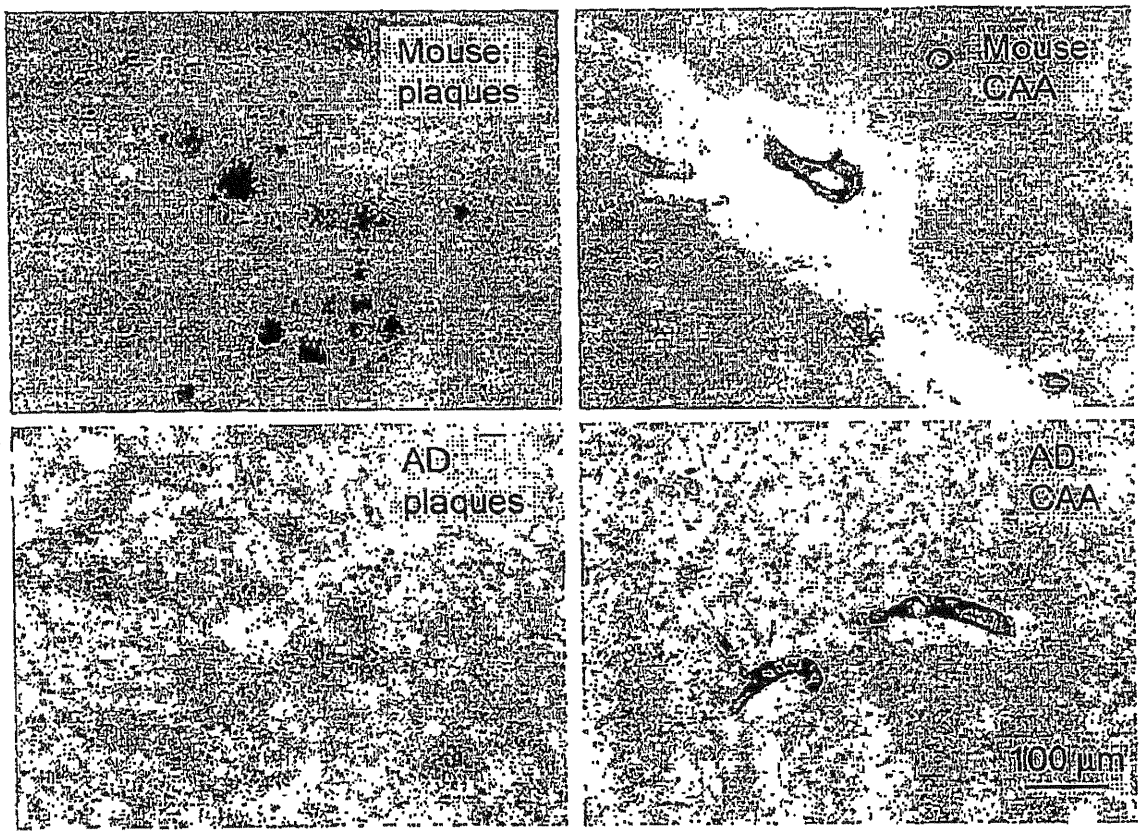


FIG.7A

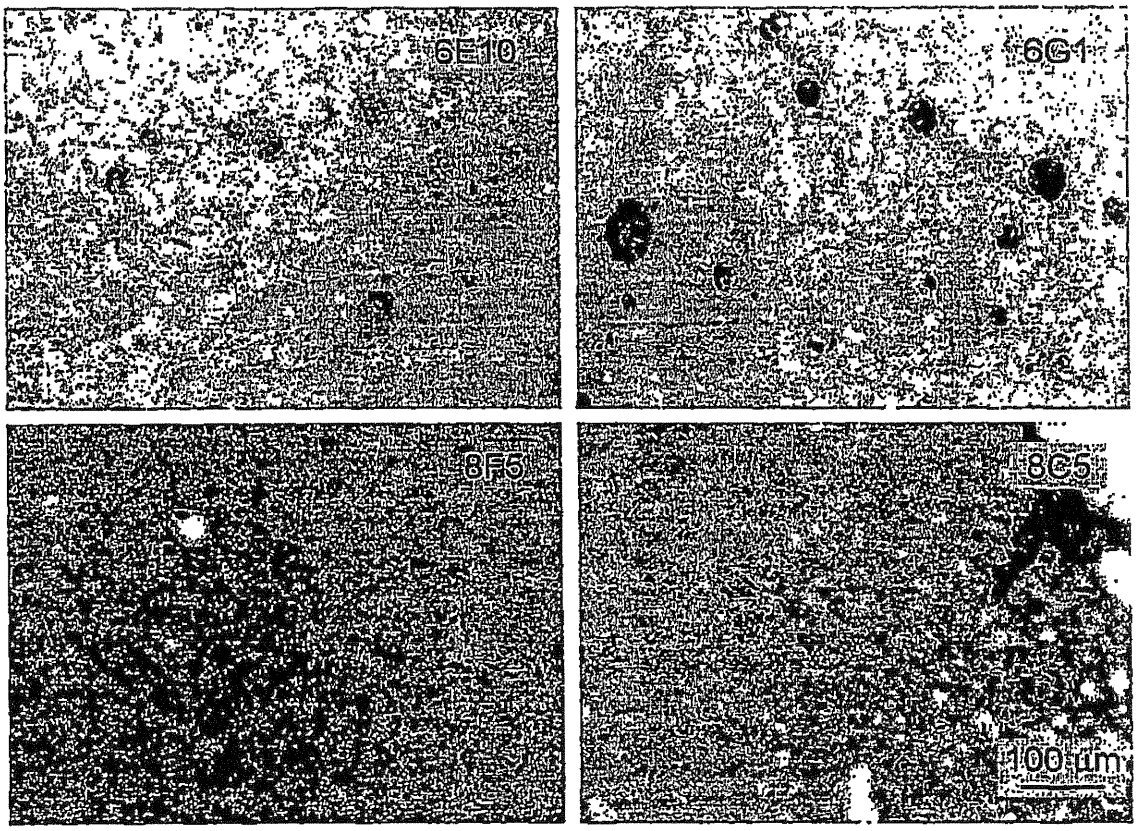


FIG.7B

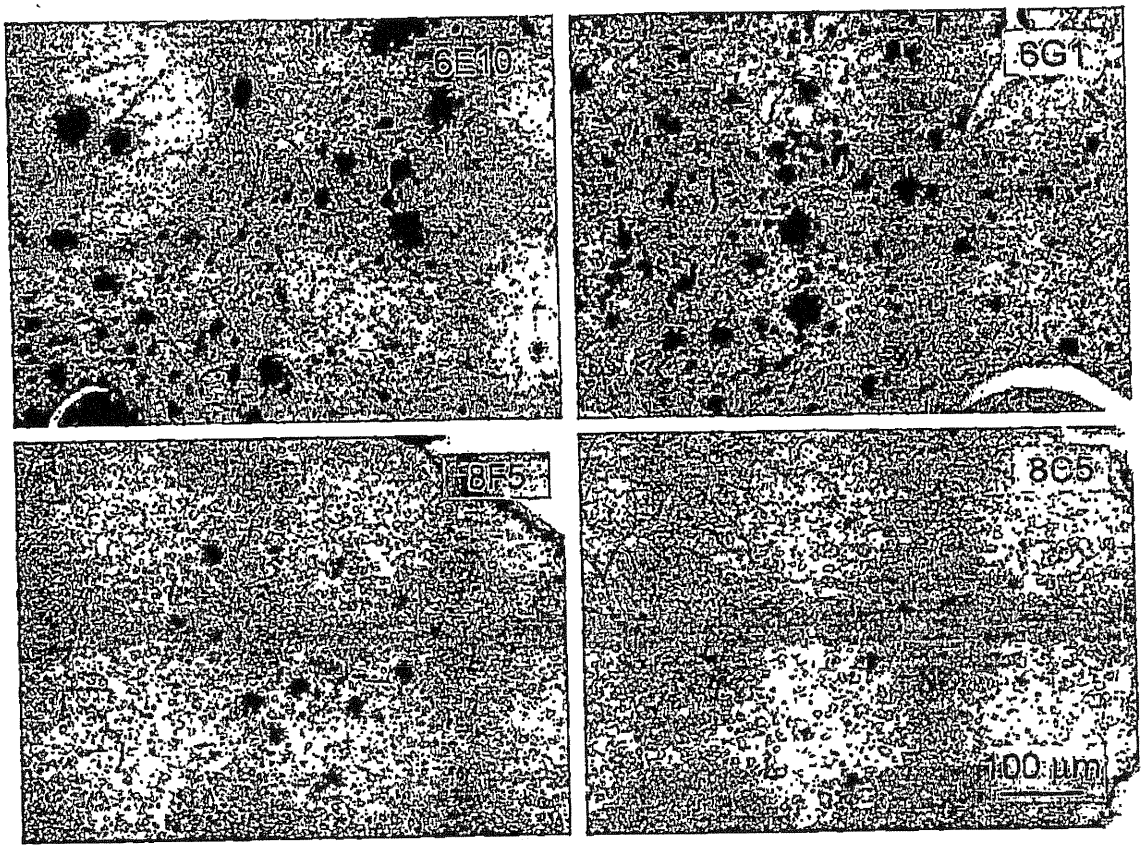


FIG.7C

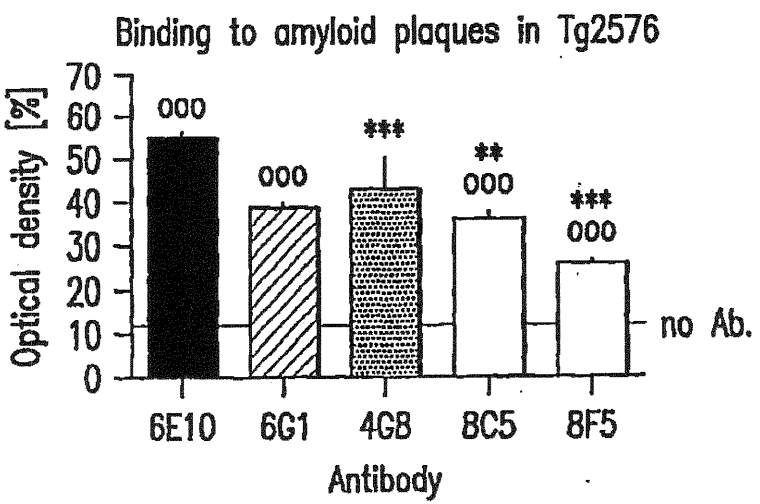


FIG.7D

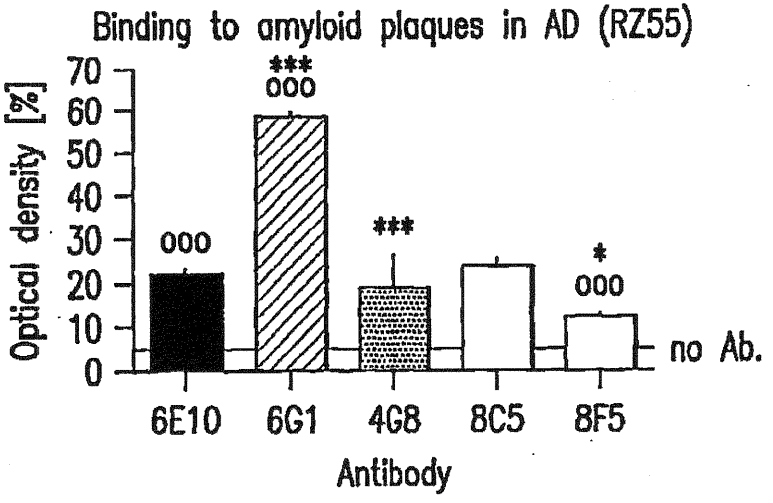


FIG.7F

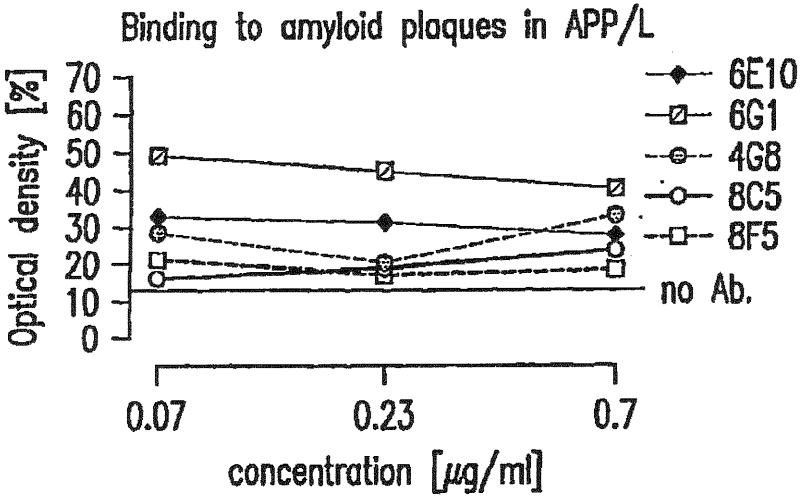


FIG.7E

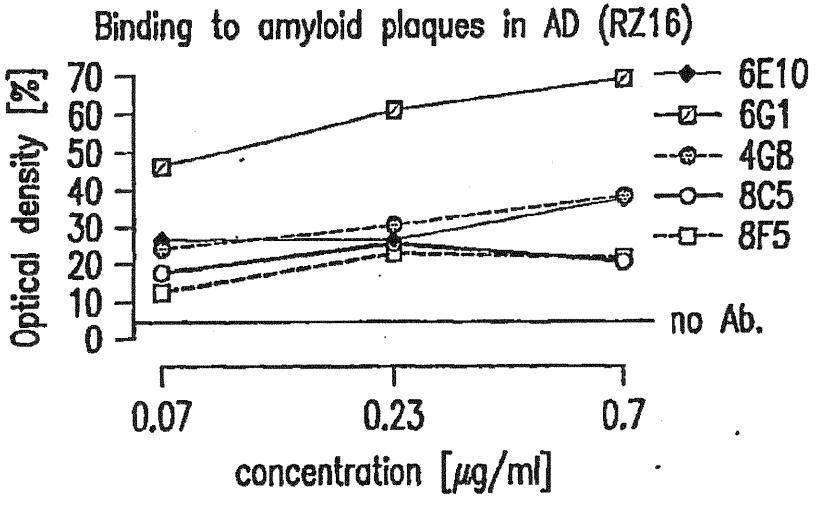


FIG.7G

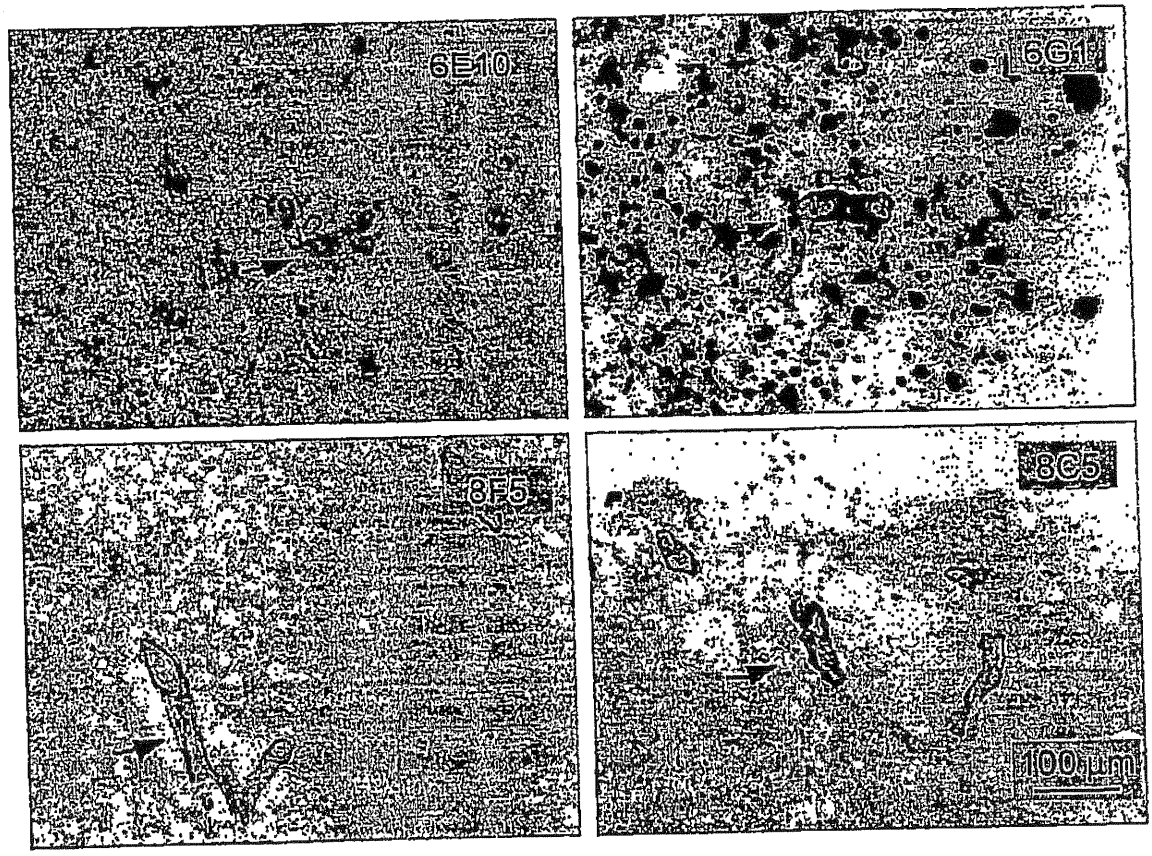
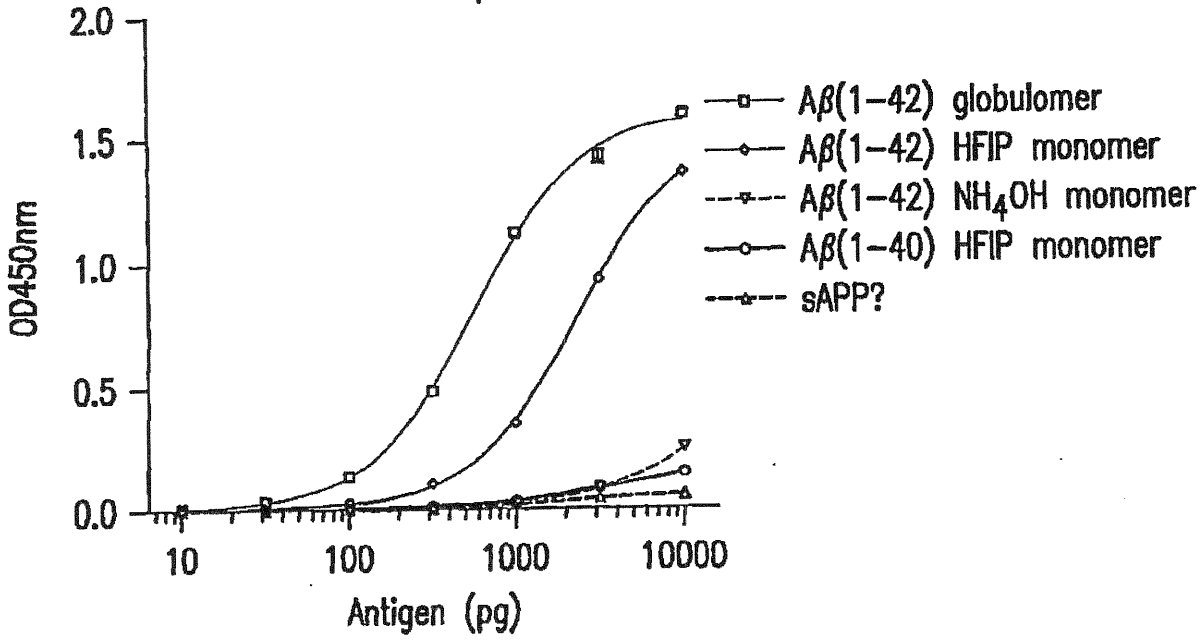


FIG.7H

Sandwich-Elisa of Several Aβ-Forms with Biotinylated Coated Clones

coated anti-Aβ clone 6G1 --> Aβ-Forms --> biotinylated clone 8C5 --> Streptavidin-POD --> development



	Aβ(1-42) globulomer	Aβ(1-42) HFIP monomer	Aβ(1-42) NH_4OH monomer	Aβ(1-40) HFIP monomer	sAPP?
BOTTOM	0.0003317	0.005757	-0.008508	0.0002754	0.0003000
TOP	1.601	1.545	1.137	0.2455	0.06415
LOGEC50	2.755	3.370	4.505	3.794	3.237
HILLSLOPE	1.369	1.377	1.052	0.9842	1.197
EC50	568.2	2346	31991	6222	1725

FIG.8

VH 8C5

GAGGTGCAGTTGGTGGAGTCTGGGGGAGGCTTAGTGCAGCCTGGAGGGTCCC
TGAAACTCTCCTGTACAGCCTCTGGATTCACTTTCAGTAGCTATGGCATGTCT
TGGGTTCGCCAGACTCCAGACAAGAGGCTGGAGTTGGTCGCAAGTATTAAAA
ATAATGGTGGTAGCACCTATTATCCAGACAGTTTGAAGGGCCGATTCACCAT
CTCCAGAGACAATGCCAAGAACACCCTGTACCTGCAAATGAGCAGTCTGAAG
TCTGAGGACACAGCCATGTATTATTGTGCAAGTGGGGATTACTGGGGCCAAG
GCACCACTCTCACAGTCTCCTCA (SEQ ID NO:11)

FIG.9A

VL 8C5

GATGTTGTGATGACCCAAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCA
AGCCTCCATCTCTTGCAGATCTAGTCAGAGCCTTGTACACAGTAATGGAGAC
ACCTTTTTACATTGGTACCTGCAGAAGCCAGGCCAGTCTCCAAAGCTCCTGAT
CTACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAGTGGCAGTG
GATCAGGGACAGATTTCACACTCAAGATCAGCAGAGTGGAGGCTGAGGATCT
GGGAATTTATTTCTGCTCTCAGAGTATACATGTTCCGTGGACGTTCGGTGGAG
GCACCAAGCTGGAAATCAAACGG (SEQ ID NO:12)

FIG.9B

VH 8C5

EVQLVESGGGLVQPGGSLKLSCTASGFTFSSYGMSWVRQTPDKRLELVASIKNN
GGSTYYPDLSLKGRFTISRDNAKNTLYLQMSSLKSEDTAMYYCASGDYWGQGTT
LTVSS (SEQ ID NO:19)

CDR1 (VH) = SYGMS (SEQ ID NO:13)

CDR2 (VH) = SIKNNGGSTYYPDSLKG (SEQ ID NO:14)

CDR3 (VH) = SGDY (SEQ ID NO:15)

FIG.10A

VL 8C5

DVVMTQTPLSLPVSLGDQASISCRSSQSLVHSNGDTFLHWYLQKPGQSPKLLIYK
VSNRFSGVPDRFSGSGSGTDFTLKISRVEAEDLGIYFCSQSIHVPWTFGGGTKLEI
KR (SEQ ID NO:20)

CDR1 (VL) = RSSQSLVHSNGDTFLH (SEQ ID NO:16)

CDR2 (VL) = KVSNRFS (SEQ ID NO:17)

CDR3 (VL) = SQSIHVPWT (SEQ ID NO:18)

FIG.10B