Supporting information

Supplementary Figure 1

Legend to Figure S1

Specificities of the ELISAs: Each amount of Aβ37, Aβ38, Aβ39, Aβ40, Aβ42, Aβ43 or Aβ45 was placed on the plate coated with each carboxyl terminus–specific antibody. HRP-labeled 82E1 (specific for the amino terminus of human Aβ) was used to detect bound Aβ1-x, except Aβ38 ELISA in which 82E1 is used as the capture with Aβ38 carboxyl terminus–specific HRP-labeled antibody as the detector.
Supplementary Figure 2A, B

**Legend to Figure S2A, B**

A: The presence of Aβs in CSF, as shown by Western blotting. Aβs in CSF were immunoprecipitated with 82E1. The 82E1-immunoprecipitated Aβs were loaded onto a lane and subjected to Tris/Tricine/8M urea SDS-PAGE. After electrotransfer, the blot was immunolabeled with 82E1. Aβ42 and 43 were hardly separated under the conditions.

B: The presence of Aβ42 and Aβ43 in CSF, as shown by Western blotting. One hundred picograms for each authentic Aβ and the 82E1-immunoprecipitate (right-most lane) were loaded onto each lane and subjected to Tris/Tricine SDS–PAGE. After electrotransfer, the blot was immunolabeled with 82E1, 44A3 (specific for Aβ42) or Aβ43 polyclonal antibody.
Supplementary Figure 3

Legend to Figure S3

The production of Aβs by raft-associated γ-secretase prepared from control, MCI and AD cortices (Brodmann areas 9-11), as assessed by Western blotting. The samples were loaded onto each lane and subjected to Tris/Tricine SDS–PAGE. After electrotransfer, the blot was immunolabeled with 3B1 (specific for Aβ38), BA27 (specific for Aβ40), 44A3 (specific for Aβ42) and Aβ43 polyclonal antibody. At time 0, MCI/AD specimens accumulated Aβ42/43, whereas control (SP stage 0) specimens did not.
Legend to Figure S4

The raft-associated γ-secretase prepared from AD, MCI and control cortices was incubated with βCTF for 2h at 37°C. Produced Aβs were quantified by Western blotting using specific antibodies. The amounts of ln(Aβ38+Aβ42) between controls, AD and MCI brains are not significantly different (ANOVA, P=0.969), ruling out selective inactivation of γ-secretase in MCI/AD.