

**LIPOPROTEIN LIPASE IS A NOVEL A $\beta$ -BINDING PROTEIN THAT  
PROMOTES GLYCOSAMINOGLYCAN-DEPENDENT CELLULAR UPTAKE  
OF A $\beta$  IN ASTROCYTES**

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**Methods**

A $\beta$  oligomers were prepared as previously described (Lambert et al., Journal of Neurochemistry, 2001, 79, 595-605). In brief, A $\beta$ 42 was dissolved in hexafluoro-2-propanol (HFIP) and aliquots were placed into microcentrifuge tubes. HFIP was removed by evaporation with traces removed under vacuum and the tubes were stored at -80 °C. An aliquot of A $\beta$ 42 was mixed with DMSO to a final concentration of 5 mM, which was then added to ice-cold F12 medium without phenol red to 100  $\mu$ M. This solution was incubated at 4 °C for 24 h and then centrifuged at 14,000 x g for 10 min. The supernatant was used as the A $\beta$  oligomer preparation.

**Legend**

**Supplemental Fig.1. Determination of assembly state of A $\beta$  which binds to LPL. (A, Left blot).** Freshly dissolved A $\beta$  (50 ng) was separated by SDS-PAGE and transferred to a PVDF membrane. A $\beta$  was probed with 6E10 followed by the horseradish peroxidase-labeled anti-mouse antibody and the chemiluminescent substrate ECL Plus. **(A, Right blot).** LPL (5  $\mu$ g/ml) and A $\beta$  (500 nM) were incubated in DMEM at 37 °C for 3 h. Protein complexes formed were immunoprecipitated with an anti-LPL antibody ( $\alpha$ -LPL) and the immunoprecipitates were analyzed by Western blotting using 6E10, an anti-A $\beta$  antibody. **(B, Left blot).** A $\beta$  oligomer preparation (1  $\mu$ g) was separated by SDS-PAGE and transferred to a PVDF membrane. A $\beta$  was probed with 6E10 followed by the horseradish peroxidase-labeled anti-mouse antibody and the chemiluminescent substrate ECL Plus. **(B, Right blot).** LPL (5  $\mu$ g/ml) and A $\beta$  oligomer (500 nM) preparation were incubated in DMEM at 37 °C for 3 h. Protein complexes formed were immunoprecipitated with an anti-LPL antibody ( $\alpha$ -LPL) and the immunoprecipitates were analyzed by Western blotting using 6E10, an anti-A $\beta$  antibody.

Supplemental Fig. 1  
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