**Supplementary Materials**

**Inhibition of Aβ aggregation by cholesterol-end-modified PEGs vesicle and micelle**

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**Figure. S1**. ThT assay results of Aβ40 aggregation in the presence of each concentration of Chol-PEGs. (A) Aβ40 incubated with Chol-PEG2000, Chol-PEG/Aβ40 (B) Aβ40 incubated with Chol-PEG500. The final concentration of Chol-PEGs at Chol-PEG/Aβ=10 and Chol-PEG/Aβ=50 is 94 µM and 470 µM respectively.



**Figure.S2.** ThT assay results of Aβ40 aggregation in the presence PEGs and Chol-PEGs alone (without Aβ40) as controls. (A) Aβ40 incubated with mPEG2000-NH2 and Chol-PEG2000 alone, (B) Aβ40 incubated with mPEG500-NH2 and Chol-PEG500 alone.

**Figure. S3.** Polyacrylamide gel electrophoresis of each polymer incubate with or without Aβ40. (A) Immediately after sample preparation, (B) After incubate 48 hour.