

**Fig. S1** Circular dichroism spectra of several concentrations of A $\beta$ 1-40 peptide in a buffer (10 mM Tris·HCl, pH 7.5 containing 150 mM NaCl, 5 mM MgCl<sub>2</sub>) at 4°C.



**Fig. S2** As a reference experiment of Fig. 3, the nonspecific RNA,  $\lambda boxB$ -Flu, did not change the fluorescence anisotropy (A) Structure of  $\lambda boxB$ -Flu. (B) Fluorescence anisotropy of  $\lambda boxB$ -Flu in verious concentrations of A $\beta$ 1-40 peptide in the binding buffer at 4°C.