

Supporting Information

Garai and Frieden 10.1073/pnas.1222478110

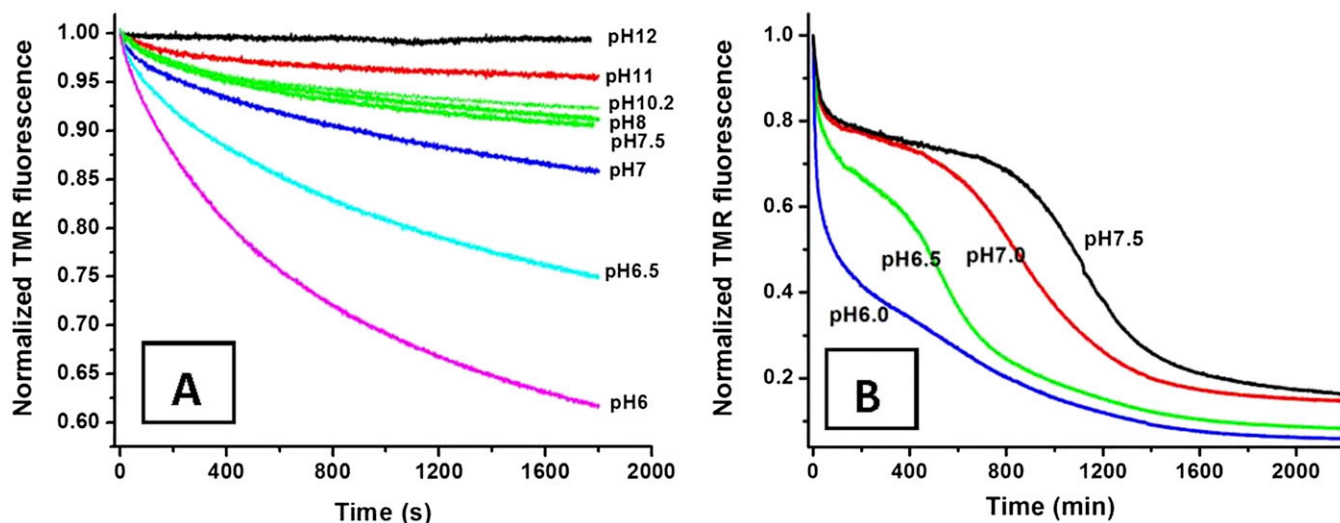


Fig. S1. pH dependence of oligomerization (A) and fibrillization (B) of tetramethylrhodamine (TMR)-amyloid β ($A\beta_{1-42}$). (A) Time course of fluorescence change following dilution of a 100 μ M stock solution containing monomeric TMR- $A\beta_{1-42}$ prepared in 4 M GdnCl to final concentrations of 2.0 μ M in 20 mM phosphate buffer at different pH values and 25 $^{\circ}$ C. The final GdnHCl concentration was 0.16 M. (B) Full time course of 2.0 μ M TMR- $A\beta_{1-42}$ fluorescence in 20 mM phosphate buffer at different pH values. All buffers contained 1 mM EDTA and 5 mM β -mercaptoethanol (β ME). The experiments in B were performed with continuing stirring.

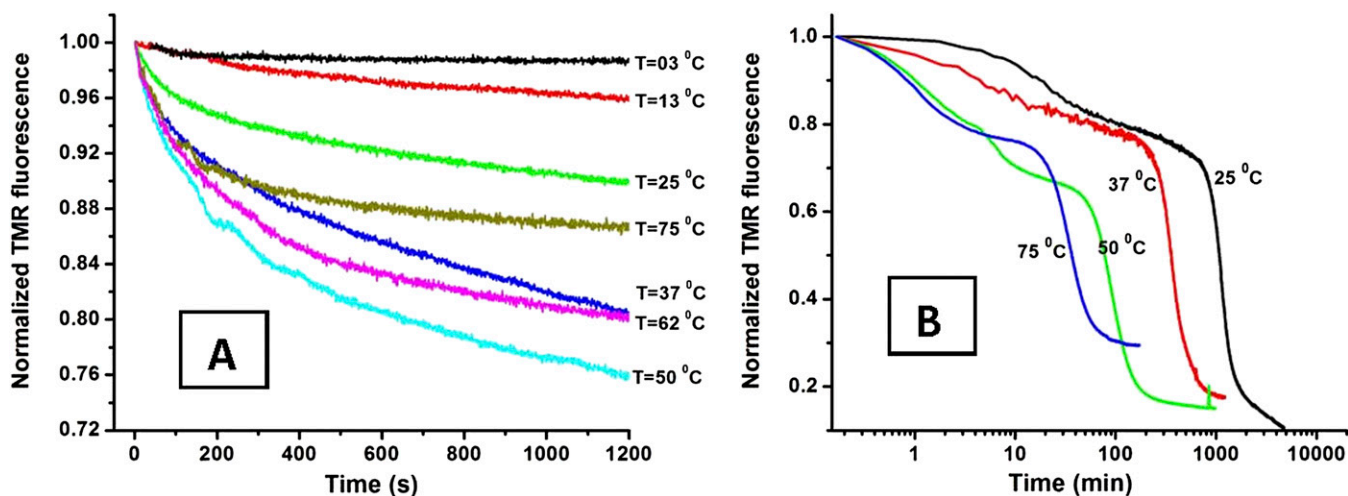


Fig. S2. Temperature dependence of oligomerization (A) and fibrillization (B) of TMR- $A\beta_{1-42}$. (A) Time course of fluorescence change following dilution of a 100 μ M stock solution containing monomeric TMR- $A\beta_{1-42}$ prepared in 4 M GdnCl to final concentrations of 2.0 μ M in 20 mM phosphate buffer at pH 7.5 and various temperatures. The final GdnHCl concentration was 0.16 M. (B) Full time course of 2.0 μ M TMR- $A\beta_{1-42}$ fluorescence in 20 mM phosphate buffer, pH 7.5, containing 150 mM NaCl at various temperatures as shown. All buffers contained 1 mM EDTA and 5 mM β ME. The experiments in B were performed with continuing stirring. The abscissa of B is logarithmic.

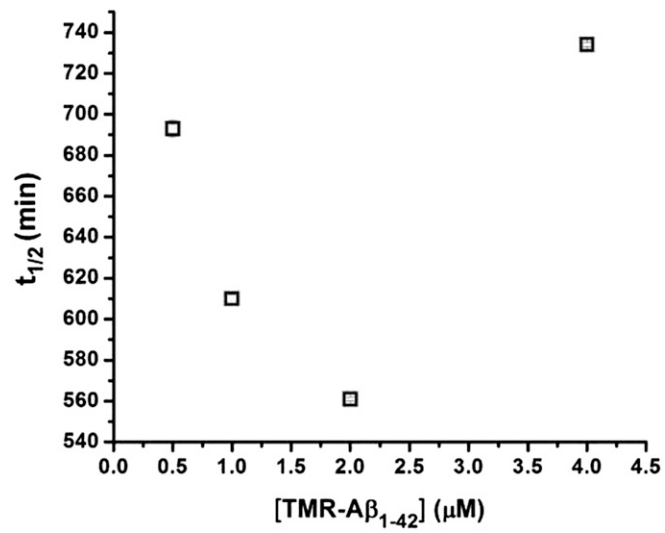


Fig. S3. Concentration-dependent half-time ($t_{1/2}$) of the growth phase of TMR-A β_{1-42} . The experiments were carried out in 20 mM phosphate buffer, pH 7.5, in the presence of 150 mM NaCl, 1 mM EDTA, and 5 mM β ME at 25 °C with continuous stirring. The half-time is relatively independent of TMR-A β_{1-42} concentration.