

Electronic Supporting Information

Amphiphilic block copolymers significantly influence functions of bacteriorhodopsin in water

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M kinetics of BR/P123 after and before centrifugation

The suspension of bacteriorhodopsin (BR), a membrane protein in an aqueous solution of an amphiphilic block copolymer P123 was centrifuged at 20,000 rpm (~50, 000 g) for 45 min at 4 °C, and then the sedimentation was re-suspended in 10 mM phosphate buffer saline (PBS) solution at pH 7.0 with the same volume as before centrifugation. The photoresponse of the samples was detected in a home-made kinetic spectrophotometer. After triggered by a flash at about 570 nm, the absorption at 412 nm in the orthogonal direction was recorded. The results for the sample at different processing stages are shown in Fig. S1.

The M kinetics of BR/P123 in the re-suspended solutions was almost the same as that in the solution before centrifugation. Even after 4 days, the re-suspended solution did not exhibit any significant change of M decay time of BR/P123.

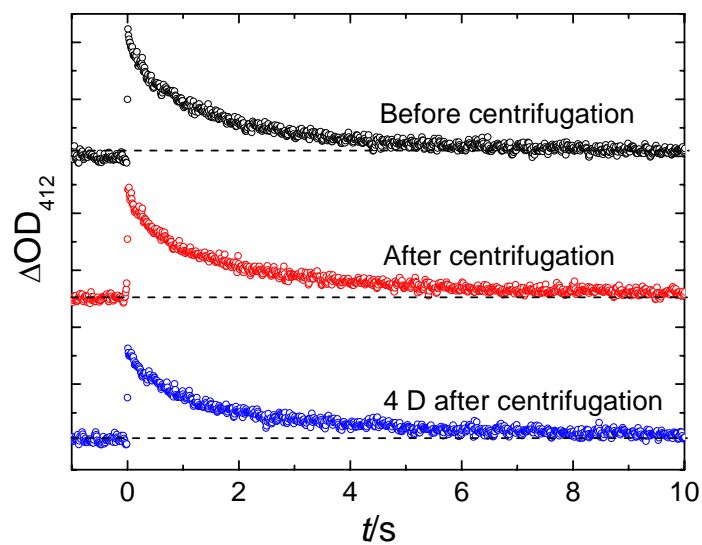


Fig. S1 Photoflash experiments of BR aqueous suspensions in addition of amphiphilic block copolymer, P123. Concentrations of P123 and BR were 5 wt % and 0.5 mg mL^{-1} with the molar ratio of P123/BR 625. The sample was in 10 mM PBS at pH 7.0.