

Supporting Information

Synthesis and Nano-object Assembly of Biomimetic Block Copolymers for Catalytic Silver Nanoparticles

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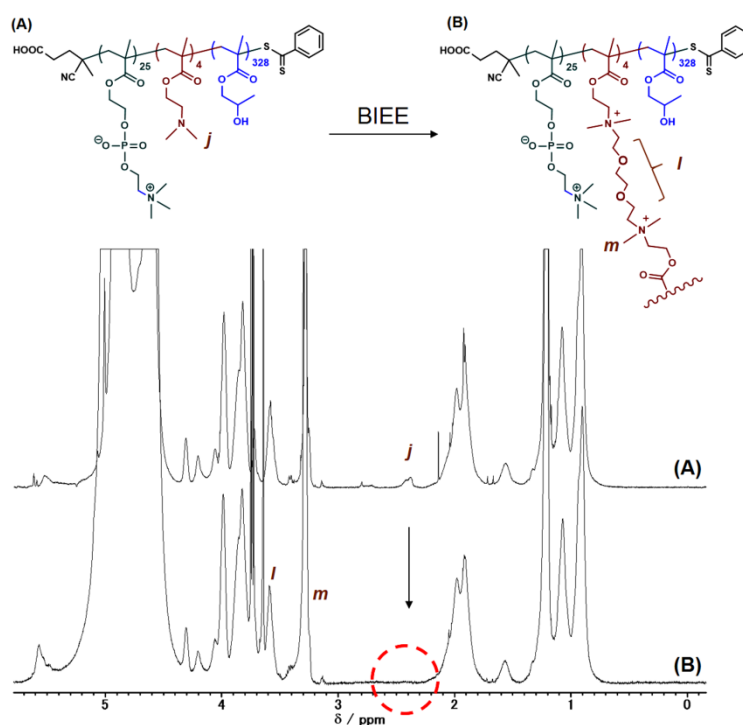


Figure S1. ¹H NMR spectra (1.0 wt%, D₂O at 20 °C) recorded for PMPC₂₅-b-PDMA₄-b-PHPMA₃₂₈ jellyfish assemblies (entry 6) (A) before and (B) after cross-linking (quaternization) using BIEE: the integrated areas of signals assigned to the DMA residues (around 2.4 ppm) are decreased after cross-linking. The cross-linking was conducted at room temperature for 48 h using jellyfish assemblies in water (25 w/w% solids concentration) with [BIEE]₀/[DMA unit]₀ = 1/2 molar ratio. The quaternization of the DMA moiety was determined to be 95%.

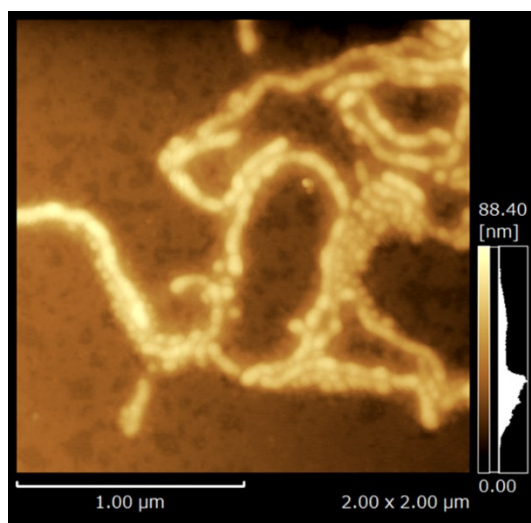


Figure S2. DM-AFM (height) image of PMPC₂₅-*b*-PDMA₄-*b*-PHPMA₃₂₈ jellyfish assemblies (entry 6) after cross-linking (quaternization) using BIEE in 1:1 methanol/water mixture (w/w).

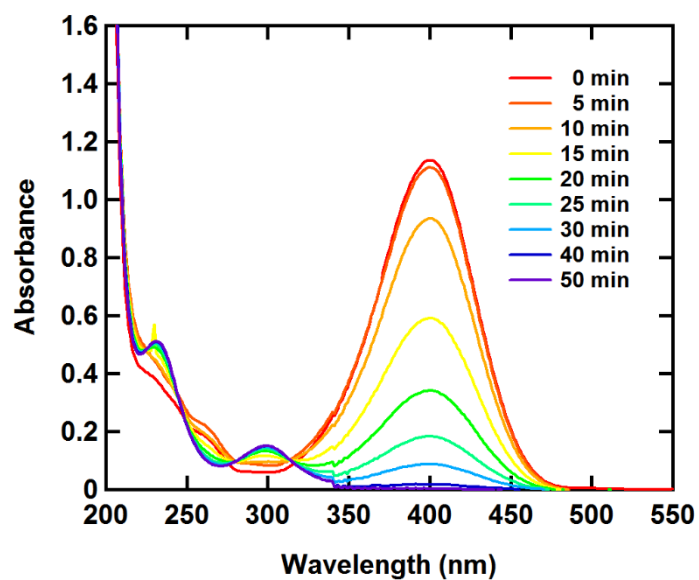


Figure S3 UV/vis spectra of 4-NP reduced by NaBH₄ catalyzed with Ag-NPs loaded PMPC₂₅-*b*-PDMA₄-*b*-PHPMA₄₀₀ vesicles (entry 8) in water.

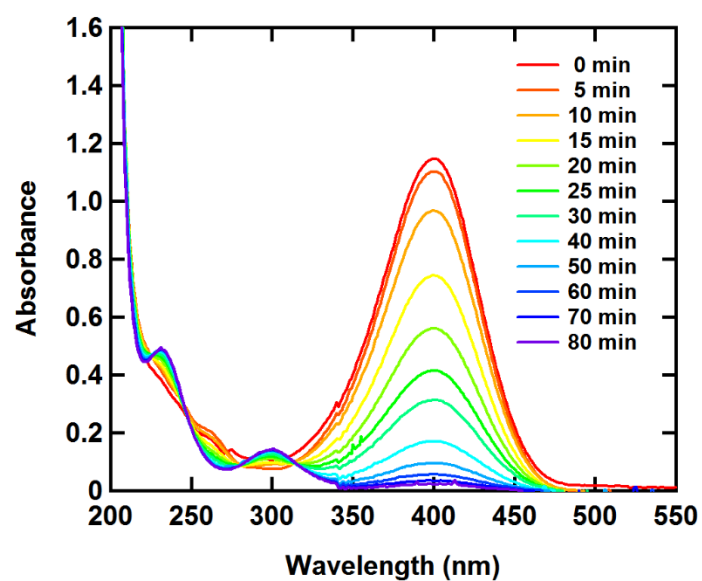


Figure S4. UV/vis spectra of 4-NP reduced by NaBH₄ catalyzed with Ag-NPs loaded PMPC₂₅-*b*-PDMA₄-*b*-PHPMA₄₀₀ sphere (entry 10) in water.