Electronic Supplementary Material (ESI) for Soft Matter

Supporting Information

Sugar-Installed Thermoresponsive Micellar Aggregates Self-Assembled from "Coil-Comb-Coil" Triblock Glycopolymers: Preparation and Recognition with Concanavalin A

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^{1}H NMR spectra of PMAIpGlc Macro CTA, Diblock copolymer and Triblock copolymer

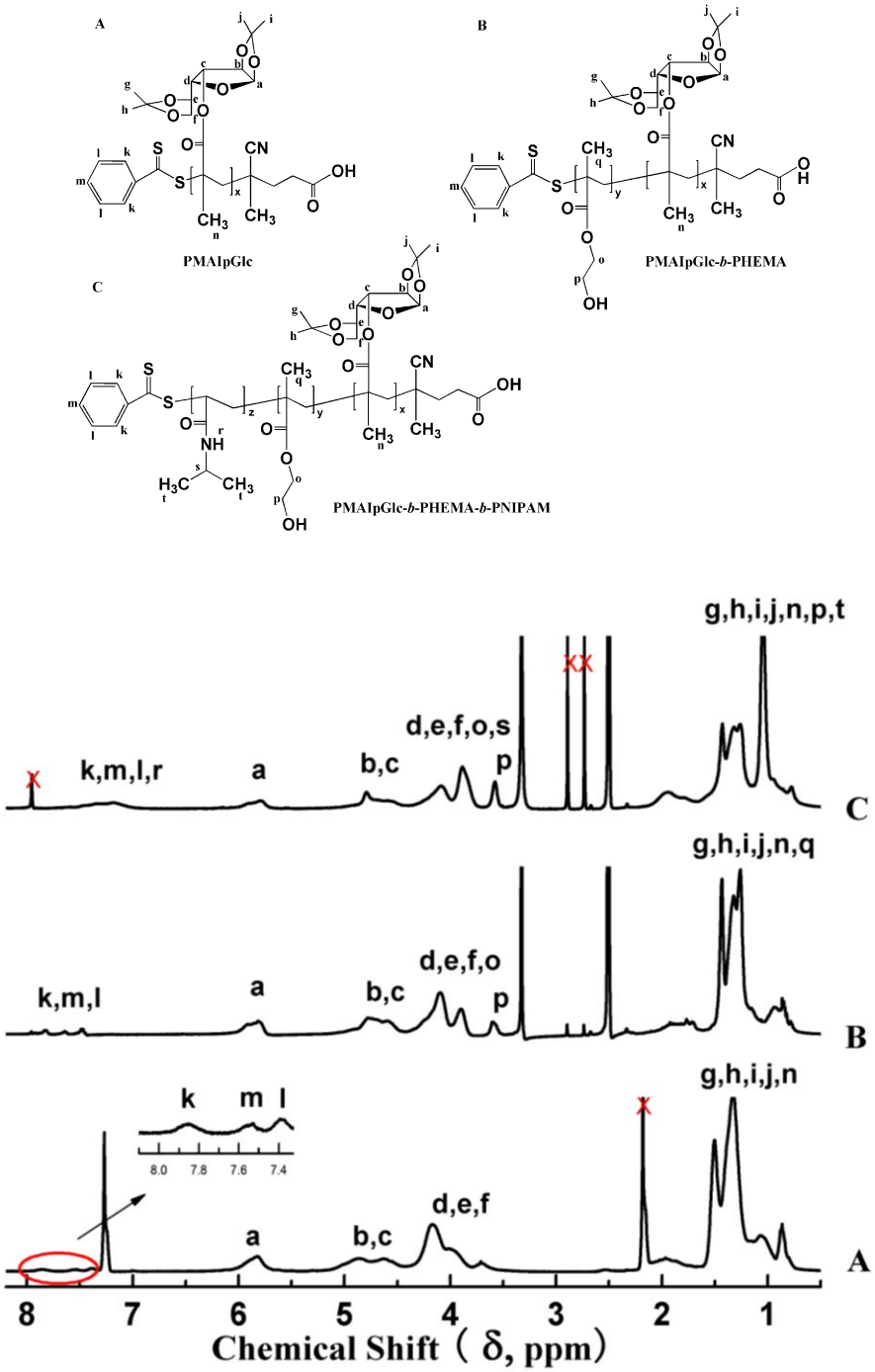

Figure S1. ^{1}H NMR spectra of (A) $PMAIpGlc_{23}$ homopolymer, (B) $PMAIpGlc_{23}$-*b*-$PHEMA_{13}$ diblock copolymer and (C) $PMAIpGlc_{23}$-*b*-$PHEMA_{13}$-*b*-$PNIPAM_{68}$ triblock copolymer.

The DP_n of PMAIpGlc was determined from relative intensities of the MAIpGlc

repeat unit signals at δ 5.8 ppm (anomeric proton) and the signals at 7.4-8.0 ppm of CTA end group (aromatic protons) (Figure S1, curve A). For diblock copolymer PMAIpGlc-*b*-PHEMA, the DP_n of PHEMA block was calculated by comparing the relative intensities of signal at δ 3.6 ppm (O-CH_2-CH_2-OH) with that of PMAIpGlc at δ 5.8 ppm (Figure S1, curve B). Because of the overlap of NIPAM repeat unit signals at δ 3.82 ppm (-$CH(CH_3)_2$) with PMAIpGlc and PHEMA signals (Figure S1, curve C), the DP_n of PNIPAM block was determined based on the integration area of signals at δ 5.8 ppm and signals from δ 3.7-4.4 ppm. The characteristics of PMAIpGlc-*b*-PHEMA-*b*-PNIPAM linear triblock copolymers are listed in Table 1.

CMC Determination of $PMAGlc_{23}$-*b*-P(HEMA-*g*-$PCL_{32})_{14}$-*b*-$PNIPAM_{59}$ Triblock Copolymer

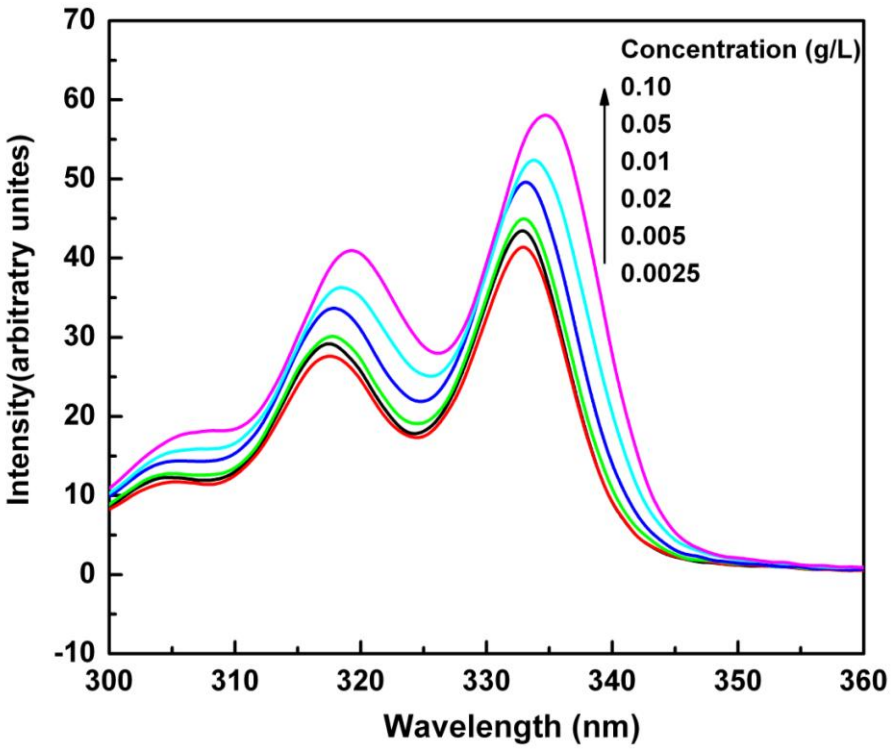

Figure S2. Excitation spectra of pyrene as a function of PMAGlc-*b*-P (HEMA-*g*-PCL)-*b*-PNIPAM concentration in water. (Sample $PMAGlc_{23}$-*b*-P (HEMA-*g*-$PCL_{32})_{14}$-*b*-$PNIPAM_{59}$, λ_{em}=390 nm).

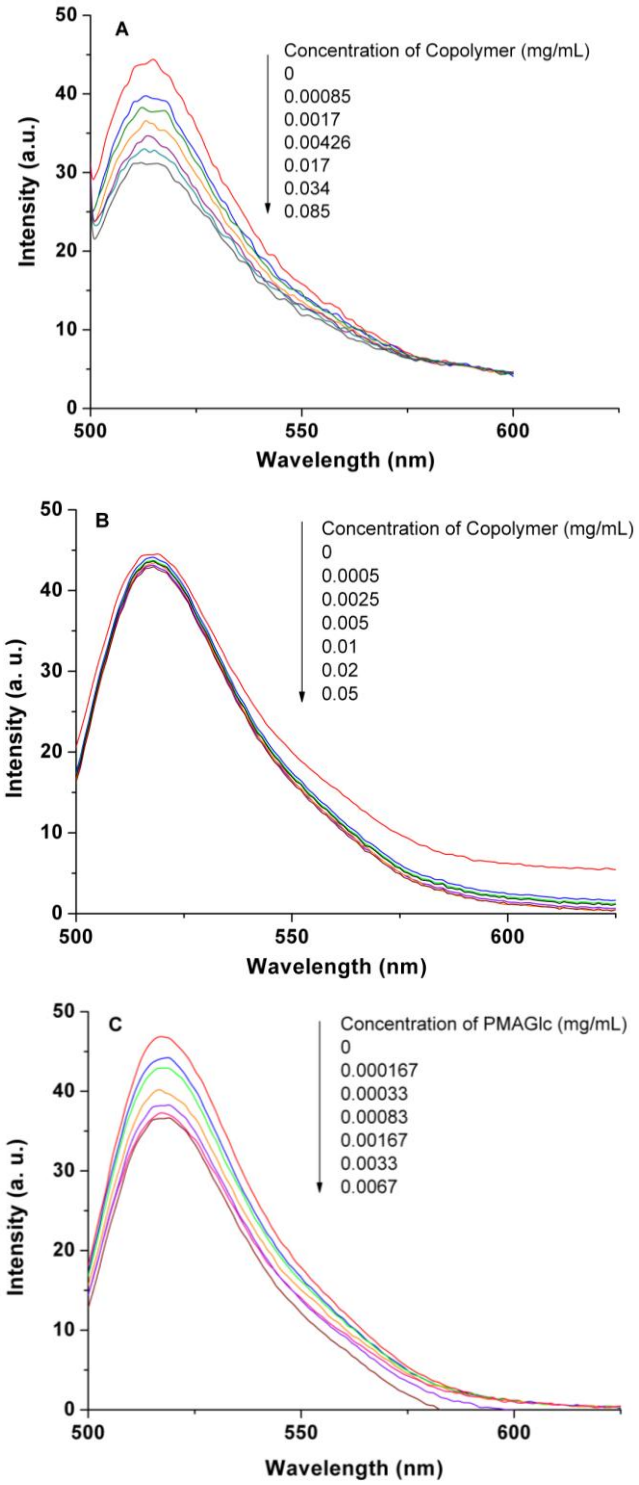

Figure S3. Dependence of the fluorescence spectra of FTIC-Con A on the concentrations of different glycopolymers (λ_{ex}=490 nm). (A) PMAGlc$_{23}$-*b*-P(HEMA-*g*-CL$_{32}$)$_{14}$-*b*-PNIPAM$_{59}$, (B) PMAGlc$_{35}$-*b*-P(HEMA-*g*-CL$_{15}$)$_{20}$-*b*-PNIPAM$_{109}$ and (C) PMAGlc$_{35}$ homopolymer in PBS (pH 7.4).