

Supporting Information

Physicochemical Properties of Micelles of Poly (styrene-*b*-[3-(methacryloylamino)propyl] trimethylammonium chloride-*b*-ethylene oxide) in Aqueous Solutions

Jingjing Liu,¹ Dian Liu,¹ Yuuichi Yokoyama,² Shin-ichi Yusa,² and Kenichi

*Nakashima*¹*

¹Department of Chemistry, Faculty of Science and Engineering, Saga University, 1

Honjo-machi, Saga 840-8502, Japan

² Department of Materials Science and Chemistry, University of Hyogo, 2167

Shosha, Himeji 671-2280, Japan

*To whom any correspondence should be addressed. Fax: +81-952-28-8548. E-mail:

nakashik@cc.saga-u.ac.jp

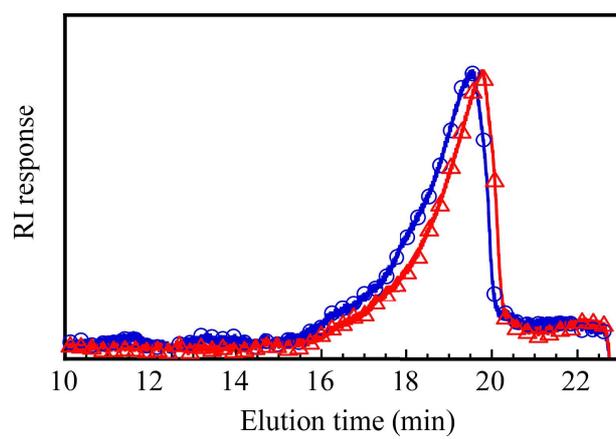


Figure S1. GPC elution curves of PEG-*b*-PMAPTAC (Δ) and PEG-*b*-PMAPTAC-*b*-PSt (\circ) at 40 °C using DMSO containing 10 mM LiBr as the eluent.

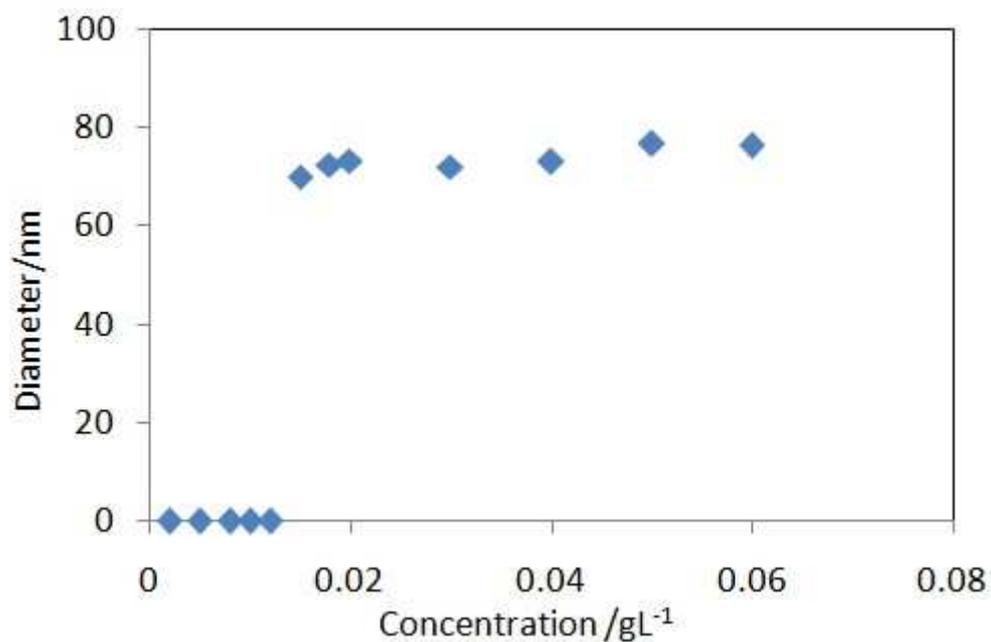


Figure S2. Hydrodynamic diameter (D_h) of the micelles of PS-*b*-PMAPTAC-*b*-PEO as a function of the concentration of the polymer. The PDI values are 0.056~0.119 depending on the samples. Below the concentration of 0.015 gL⁻¹, the scattered light intensity was so weak that we could not obtain reliable data. Thus, we plotted the data on the $D_h = 0$ nm line in this figure for the samples with a concentration below 0.015 gL⁻¹.

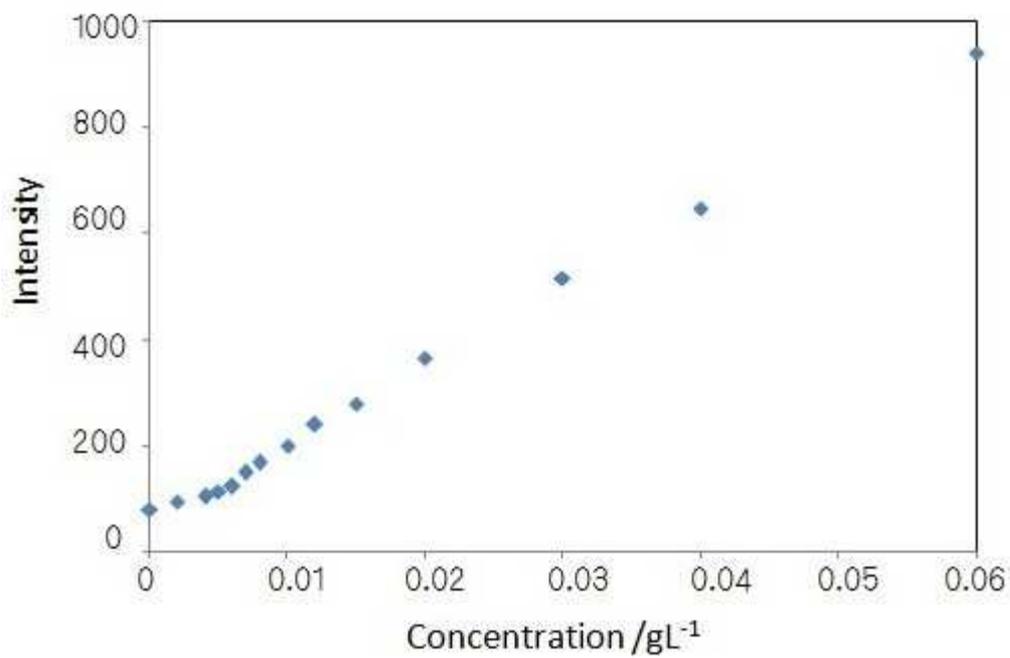


Figure S3. Light scattering intensity of micellar solutions of PS-*b*-PMAPTAC-*b*-PEO as a function of the concentration of the polymer.

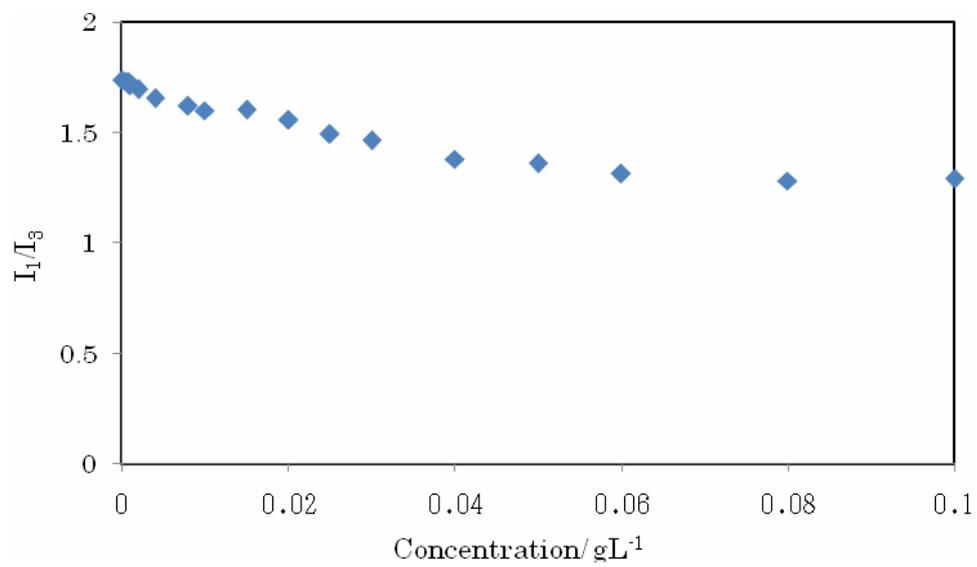


Figure S4. Fluorescence intensity of Pyrene in micellar solutions of PS-*b*-PMAPTAC-*b*-PEO as a function of the polymer concentration.