**SUPPORTING INFORMATION**

**Association Behavior of Amphiphilic ABA Triblock Copolymer Composed of Poly(2-methoxyethyl acrylate) (A) and Poly(ethylene oxide) (B) in Aqueous Solution**

**Yoko Mizoue1, Kazutoshi Haraguchi2, Shin-ichi Yusa1,\***

1Department of Applied Chemistry, Graduate School of Engineering, University of Hyogo, 2167 Shosha, Himeji, Hyogo 671-2280, Japan; ym85725@gmail.com

2College of Industrial Technology, Nihon University, 1-2-1 Izumicho, Narashino, Chiba, Japan; haraguchi.kazutoshi@nihon-u.ac.jp

\*Correspondence: yusa@eng.u-hyogo.ac.jp



**Scheme S1.** Synthesis of MEOM*n* (*n* = 85 and 777).



**Figure S1.** Mechanism of single-electron transfer-living radical polymerization (SET-LRP); M; monomer, P; polymer, Cu; copper, X; halogen, L; ligand, *kact*; activation, *kdeact*; deactivation, *kp*; propagation, *kt*; termination.



**Figure S2.** Gel-permeation chromatography (GPC) elution curves of PEO11340-Br (---), MEOM85 (—), and MEOM777 (—) using THF as an eluent with a flow rate of 1.0 mL/min at 40°C.



**Figure S3.** Attenuated total reflection (ATR) Fourier-transform infrared (FTIR) spectra of (a) PEO11340-Br, (b) MEOM85, and (c) MEOM777.



**Figure S4.** Hydrodynamic radius (*R*h) distributions of MEOM85 aqueous solution prepared by dialysis from THF solution against aqueous solution; the final polymer concentration (*C*p) was adjusted to 0.1 g/L.



**Figure S5.** Debye plots for (a) MEOM85 and (b) MEOM777 in water.



**Figure S6.** Water suppression by gradient-tailored excitation (WATERGATE) 1H NMR spectroscopy in D2O for (a) MEOM85 and (b) MEOM777 at 25°C.