Supporting Information

Thiol and pH Dual-Responsive Dynamic Covalent Shell Cross-Linked Micelles for Triggered Release of Chemotherapeutic Drugs†

Xianglong Hu,a Hui Li,a Shizhong Luo,*b Tao Liu,a Yanyan Jianga and Shiyong Liua

CAS Key Laboratory of Soft Matter Chemistry, Department of Polymer Science and Engineering, Hefei National Laboratory for Physical Sciences at the Microscale, University of Science and Technology of China, Hefei, Anhui 230026, China; Anhui Key Laboratory of Functional Molecular Solids and Anhui Key Laboratory of Molecule-based Materials, College of Chemistry and Materials Science, Anhui Normal University, Wuhu, Anhui 241000, China

* To whom correspondence should be addressed.
E-mail: sliu@ustc.edu.cn, shzhluo@mail.ahnu.edu.cn

a University of Science and Technology of China
b Anhui Normal University
Fig. S1. DMF GPC traces recorded for PCL$_{43}$-Br and PCL$_{43}$-b-P(OEGMA$_{0.67}$-co-MAEBA$_{0.33}$)$_{73}$ diblock copolymer.
**Fig. S2.** Plot of emission intensity of Nile red at the emission maxima 615 nm ($\lambda_{ex} = 550$ nm; slit widths: Ex. 5 nm, Em. 5 nm) as a function of concentration of PCL$_{43}$-b-P(OEGMA$_{0.67}$-co-MAEA$_{0.33}$)$_{73}$ diblock copolymer. Nile red concentration was fixed to be $1.0 \times 10^{-6}$ M.
Fig. S3. Time dependence of relative light scattering intensities recorded for 0.05 g/L aqueous solution of (○) Non-crosslinked (NCL) micelles and (□) Shell cross-linked (SCL) micelles fabricated from PCL$_{43}$-b-P(OEGMA$_{0.67}$-co-MAEA$_{0.33}$)$_{73}$ diblock copolymer upon treating with 0.1 g/L lipase at 37 °C.