## **Supporting Information**

of

## Preparation of pH and redox dual-sensitive core crosslinked

## micelles for overcoming drug resistance of DOX

Xiao-Qing Yi, Quan Zhang, Dan Zhao, Jia-Qi Xu, Zhen-Lin Zhong,\* Ren-Xi Zhuo and Feng Li\*

Key Laboratory of Biomedical Polymers of Ministry of Education & Department of Chemistry, Wuhan University, Wuhan 430072, P. R. China.

Key Laboratory of Biomedical Polymers of Ministry of Education & Department of Chemistry, Wuhan University, Wuhan 430072, P. R. China.

\*Corresponding author. E-mail: lifeng@whu.edu.cn, zlzhong@whu.edu.cn



Fig. S1. <sup>1</sup>H NMR spectra (300 MHz, CDCl<sub>3</sub>) of MPMC (A), TMBPEC (B) and amphiphilic block copolymer PEG-P(TMBPEC-co-MPMC) (C).



Fig. S2. GPC traces of amphiphilic block copolymer PEG-P(TMBPEC-co-MPMC)



**Fig. S3**. The size change of CCL/SS micelles and UCL micelles by DLS against 2000-fold dilution in PBS (pH 7.4, 0.1 M). The initial micelle concentration was 1 mg/mL.



Fig. S4. Expressions of P-glycoprotein in HeLa and MCF-7/ADR cells. GAPDH was used as a

control.