Electronic Supplementary Information

Dual Drug-Loaded Reversible Core-Crosslinked nanocarrier with pH-Modulated Targeting and Redox-Controlled Drug Release for Overcoming Drug Resistance

*Dan Zhao, Shujie Ma, Xiaoqing Yi, Sixue Cheng, Renxi Zhuo, Feng Li**

Key Laboratory of Biomedical Polymers of Ministry of Education &College of Chemistry& Molecular Science, Wuhan University, Wuhan 430072, China

**E-mail address:lfsj2004@hotmail.com; lifeng@whu.edu.cn (F. Li),*

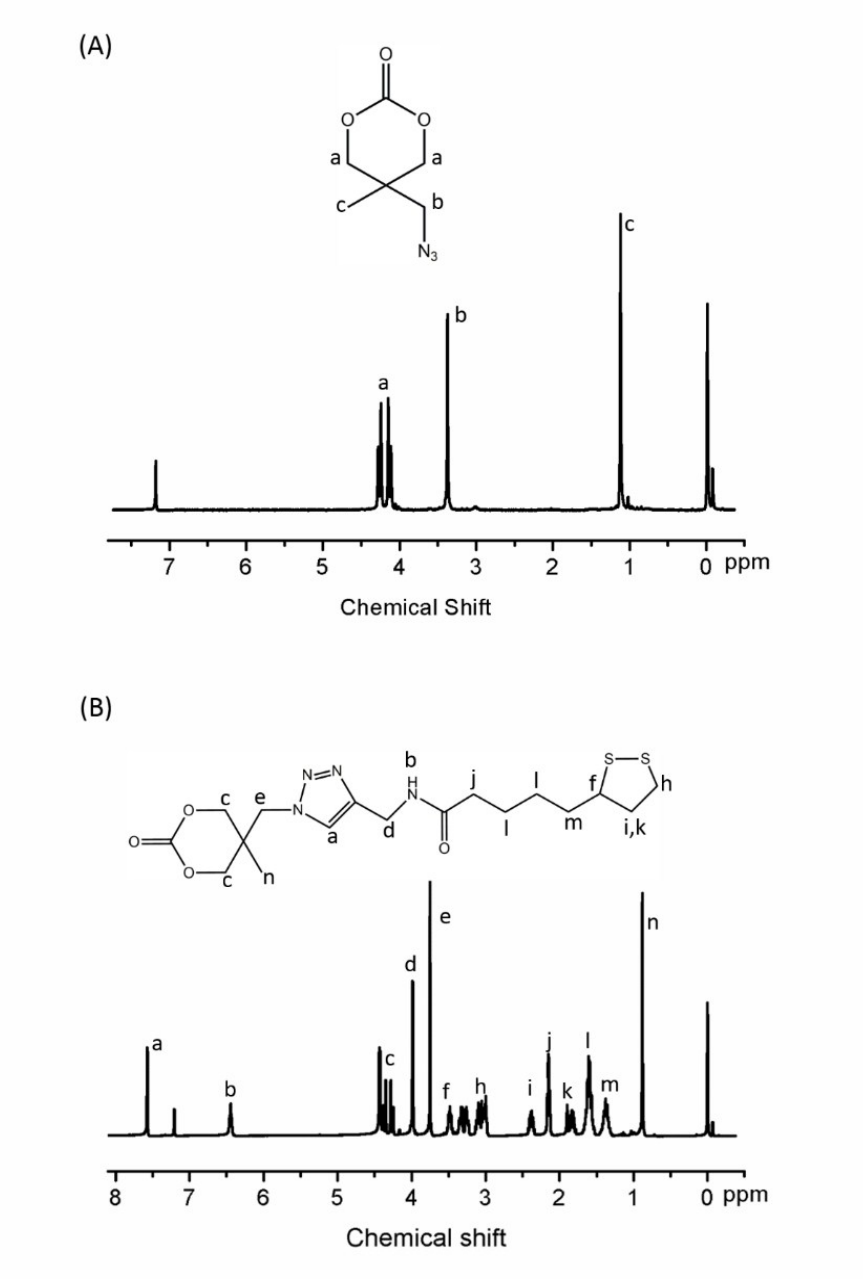

Figure S1.[1]H NMR spectra (300 MHz) of AMPC (A) and AMPC-PTA (B).

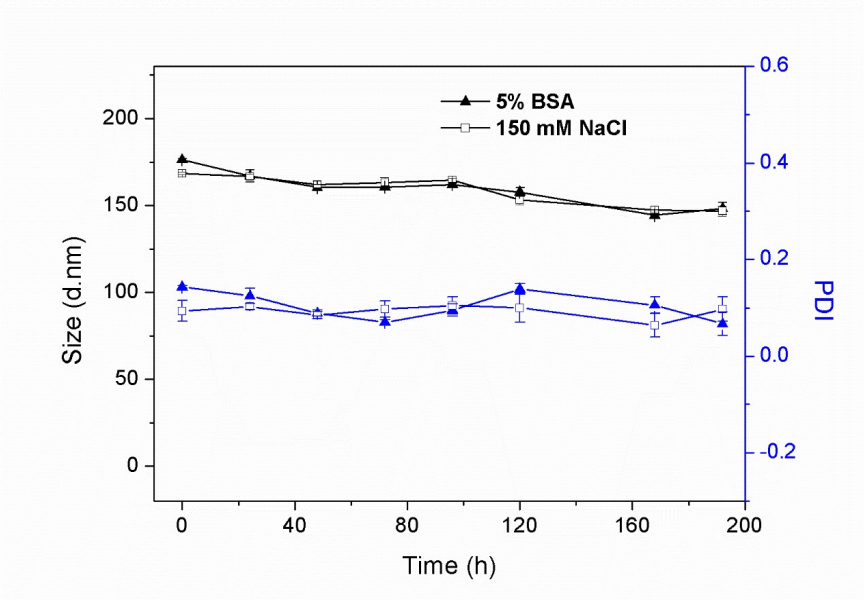

Figure S2. The size and distribution of crosslinked PBA-TA/PEG-P(AMPC-g-PTA) incubatedin PBS (pH 7.4,0.01M) solution containing 5% BSA or 150 mM NaCl obtained by DLS.

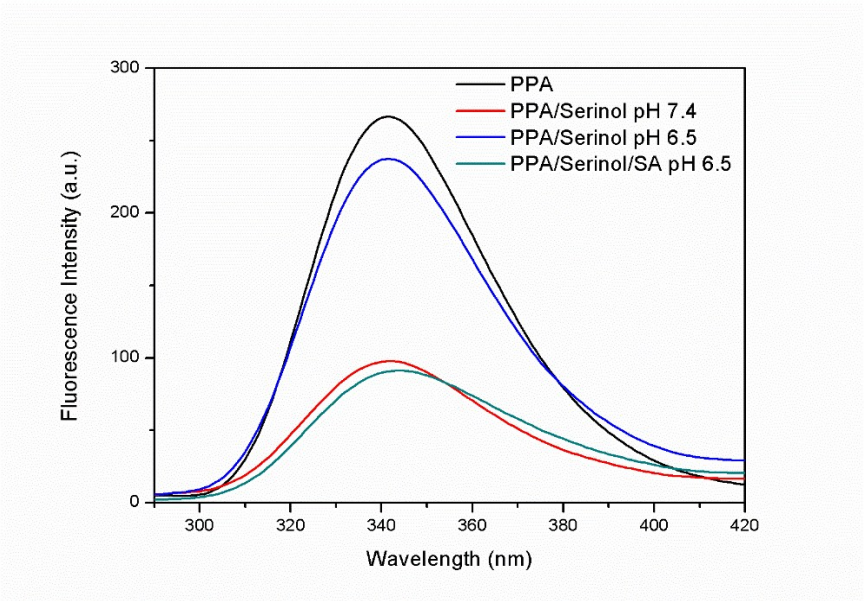

Figure S3. The fluorescence emission spectra of PPA (40 μM) in PBS solution,λ_{ex} = 255 nm.

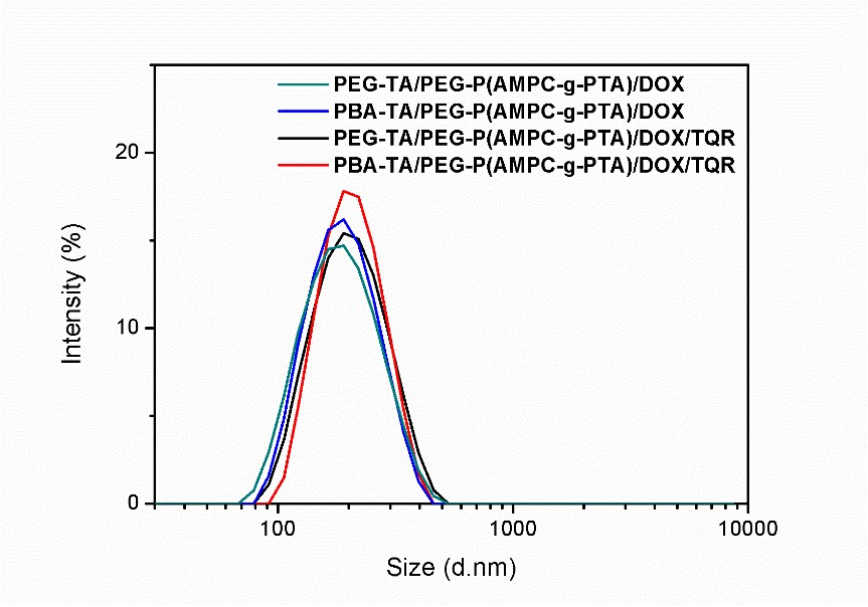

Figure S4. The DLS size of crosslinked PEG-TA/PEG-P(AMPC-g-PTA)/DOX, PBA-TA/PEG-P(AMPC-g-PTA)/DOX, PEG-TA/PEG-P(AMPC-g-PTA)/DOX/TQR and PBA-TA/PEG-P(AMPC-g-PTA)/DOX/TQR.

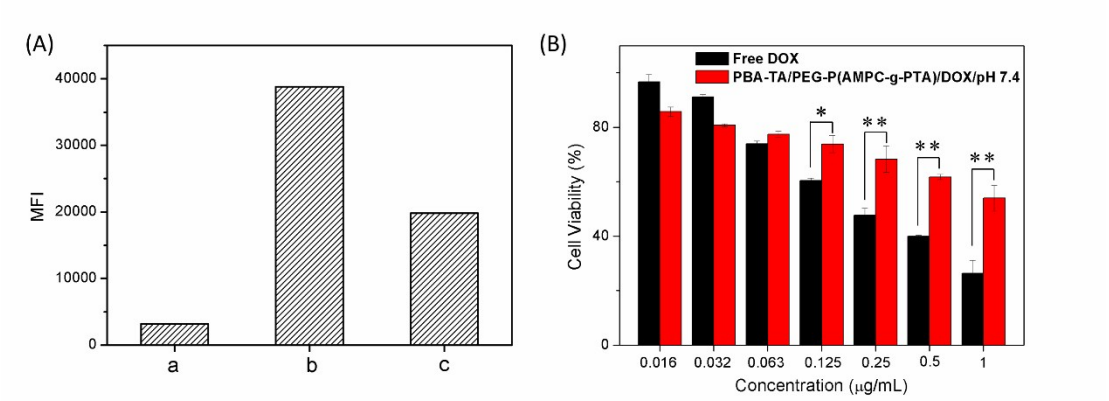

Figure S5.(A) The flow cytometry analysis of RAW264.7 cells treated with (a) blank medium, (b) free DOX, (c) PBA-TA/PEG-P(AMPC-g-PTA)/DOX at pH 7.4 for 4 h. (B) The cell viability of RAW264.7 cells incubated with free DOX, PBA-TA/PEG-P(AMPC-g-PTA)/DOX at pH 7.4 for 48 h.

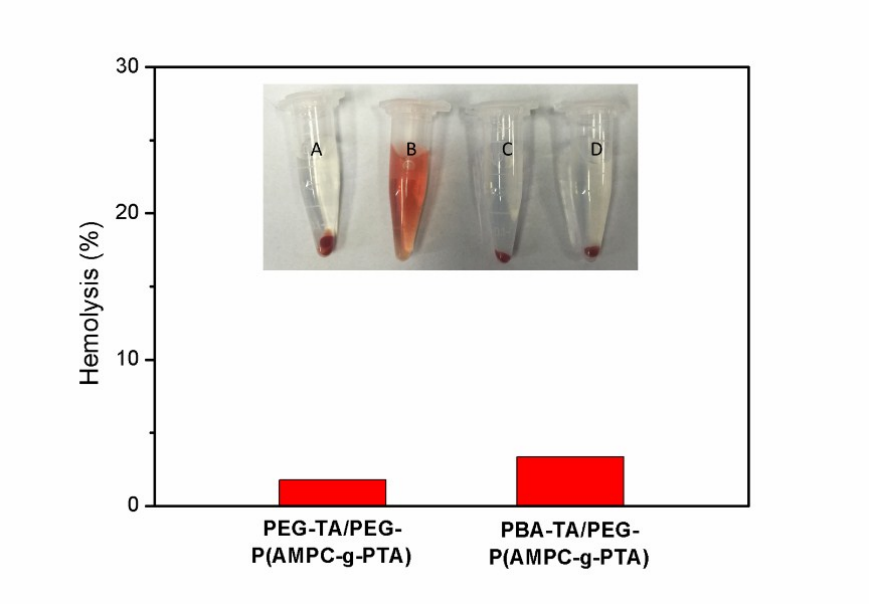

Figure S6. Hemolysis test ofblankPEG-TA/PEG-P(AMPC-g-PTA) and PBA-TA/PEG-P(AMPC-g-PTA) micelles. Inset: the photographic images of hemolysis after incubation with (A) PBS, (B) water, (C) PEG-TA/PEG-P(AMPC-g-PTA) and (D) PBA-TA/PEG-P(AMPC-g-PTA) micelles.