

Supporting Information

Reduction responsive and surface charge switchable polyurethane micelles with acidity cleavable crosslinks for intracellular drug delivery

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Supplemental Figures

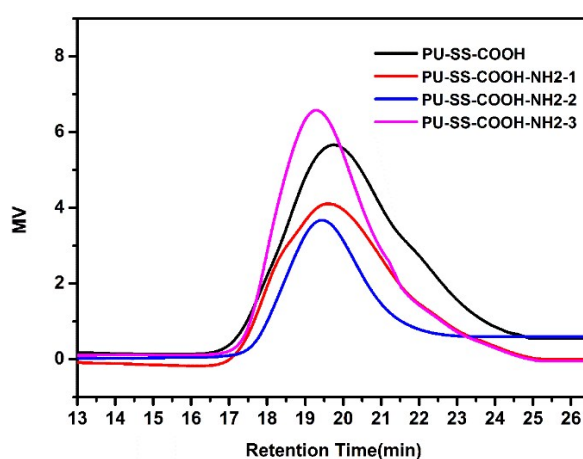


Figure. S1. The GPC curves of PU-SS-COOH, PU-SS-COOH-NH₂-1, PU-SS-COOH-NH₂-2 and PU-SS-COOH-NH₂-3.

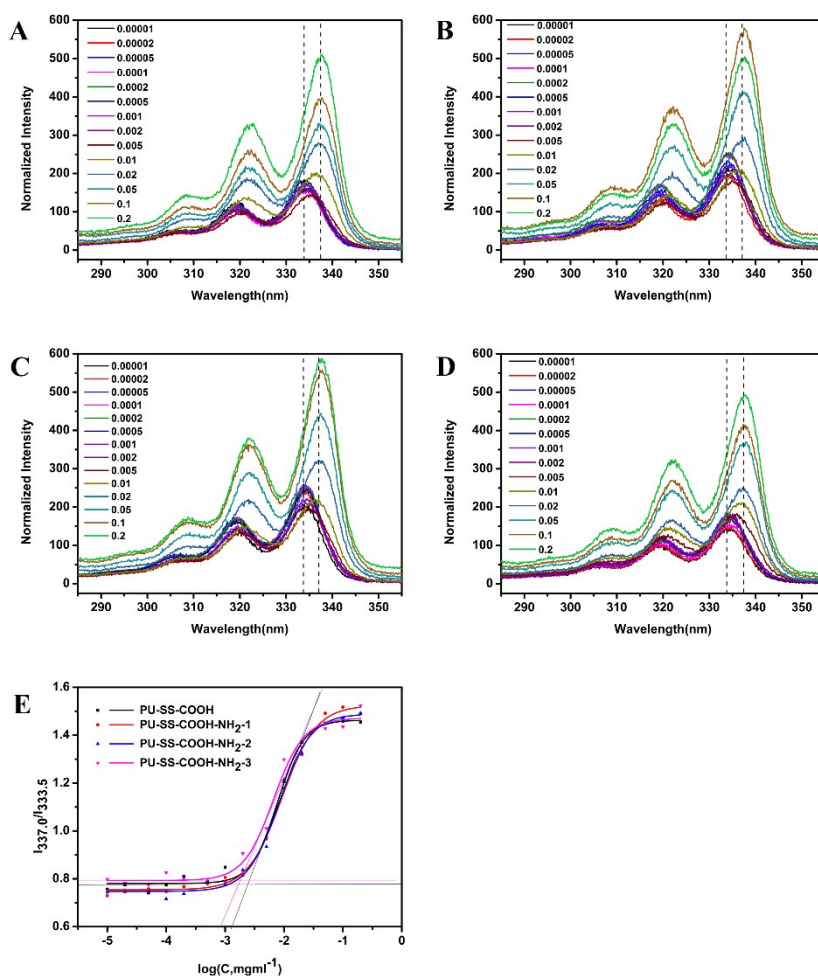


Figure S2. Typical fluorescence excitation spectra (372 nm) of PU-SS-COOH (A), PU-SS-COOH-NH₂-1 (B), PU-SS-COOH-NH₂-2 (C) and PU-SS-COOH-NH₂-3 (D). I_{337.0}/I_{333.5} ratios in the excitation spectra as a function of micellar concentrations (log C, mg, ml⁻¹). The CMC was obtained from the intersection of the two tangent lines shown by the arrows. The CMC of PU-SS-COOH, PU-SS-COOH-NH₂-1, PU-SS-COOH-NH₂-2 and PU-SS-COOH-NH₂-3 was determined to be 2.75×10⁻³ mg, ml⁻¹, 2.45×10⁻³ mg, ml⁻¹, 2.4×10⁻³ mg, ml⁻¹ and 2.04×10⁻³ mg, ml⁻¹. (E)

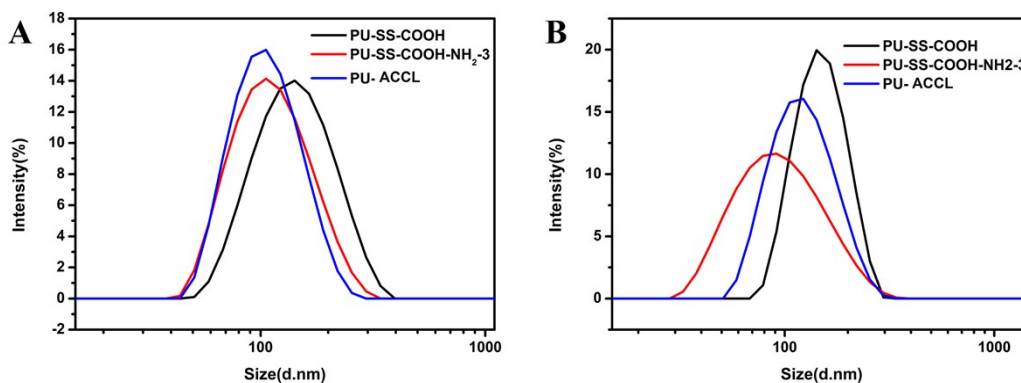


Figure S3. Size distribution of the PU-SS-COOH, PU-SS-COOH-NH₂-3 and PU-ACCL micelles exist in Na₂HPO₄ (A) and their PTX loaded micelles (B).

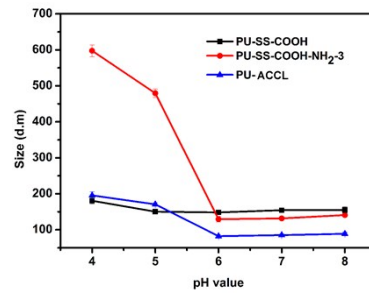


Figure. S4. pH dependent size changing of of PU micelles.

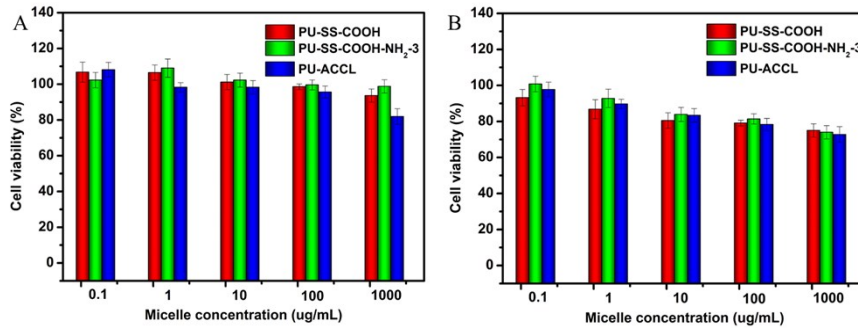


Figure. S5. Viability of HUVECs cells (A) and HepG2 (B) after 48 h of incubation with various concentrations of empty reduction-sensitive polyurethane micelles determined by the CCK8 assay.