Supporting Information for

Novel Hydroxyl-containing Reduction-responsive Pseudo-poly(aminoacid) via Click Polymerization as Efficient Drug Carrier

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Figure S11. Zeta potential (mv) of blank mPEG-HRSCP-mPEG NPs and DOX-loaded mPEG-HRSCP-mPEG NPs.

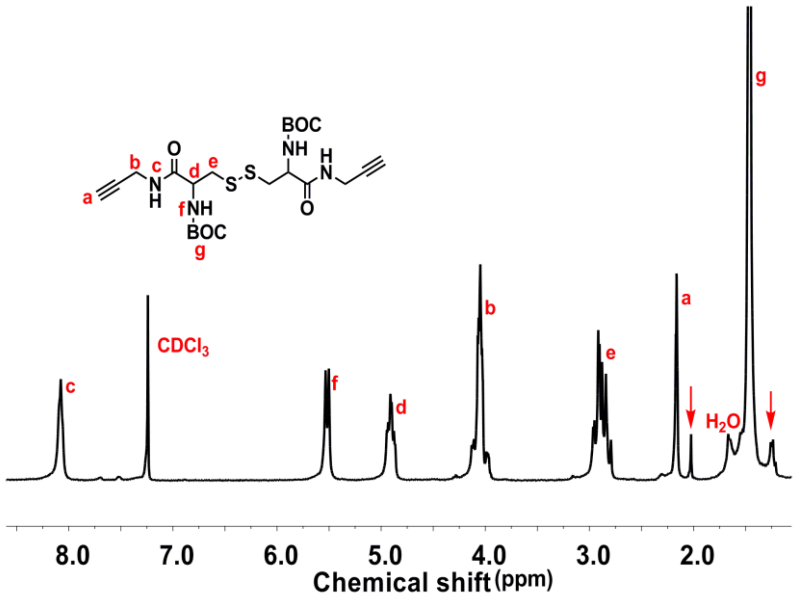

Figure S1. ^{1}H NMR for dialkyned monomers1 in $CDCl_3$.

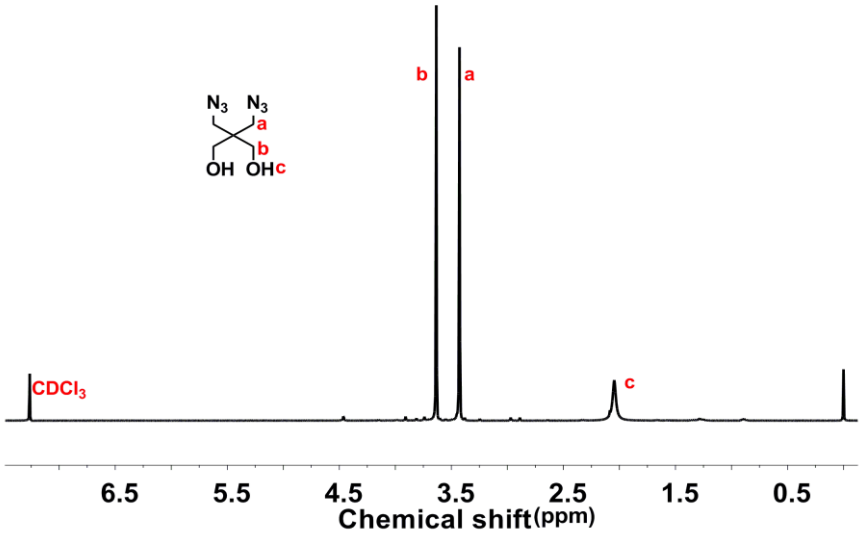

Figure S2. ^{1}H NMR spectrum of BAP in $CDCl_3$.

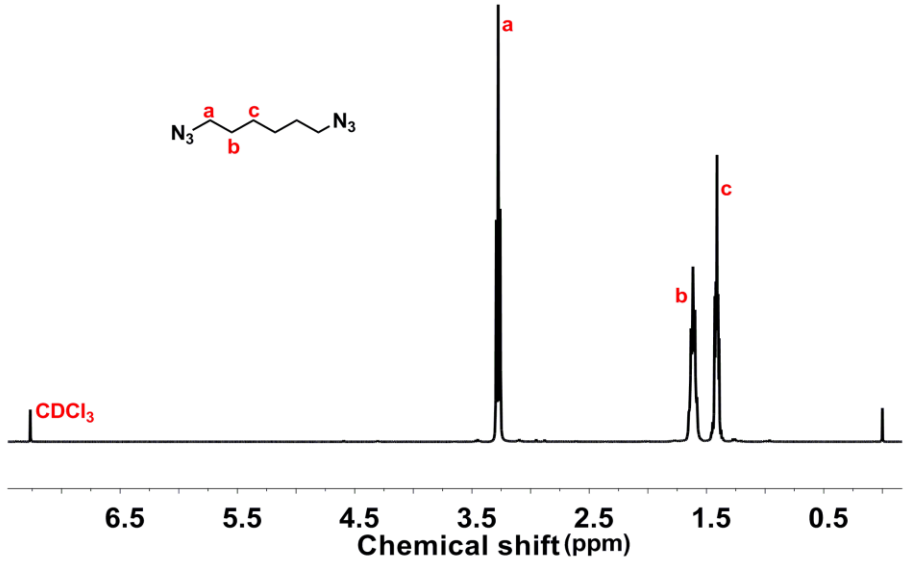

Figure S3. ^{1}H NMR spectrum of BAH in $CDCl_3$.

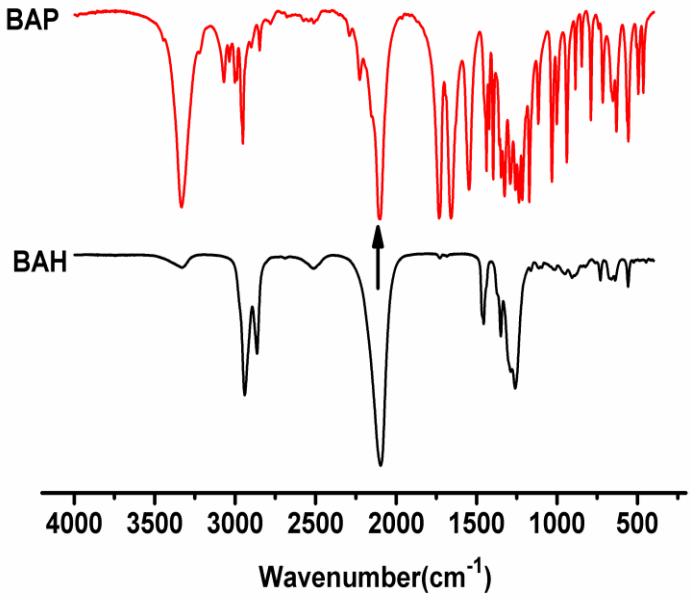

Figure S4. FT-IR spectra of BAP and BAH.

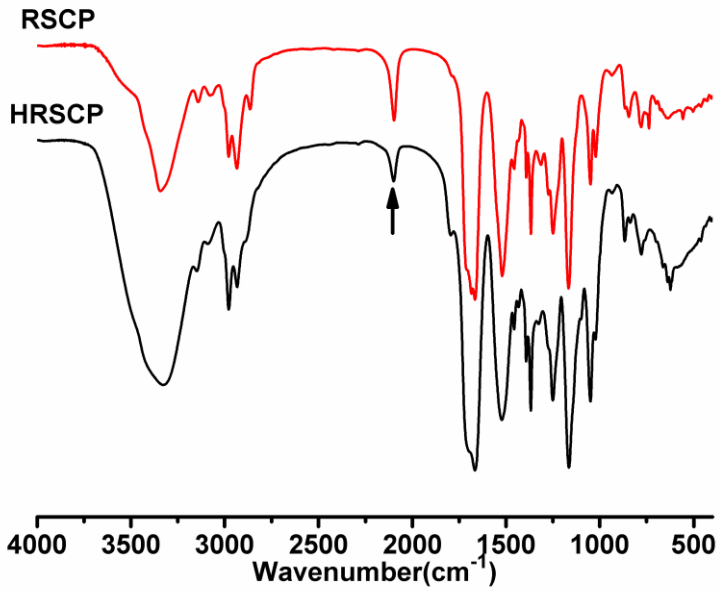

Figure S5. FT-IR spectra of HRSCP and RSCP.

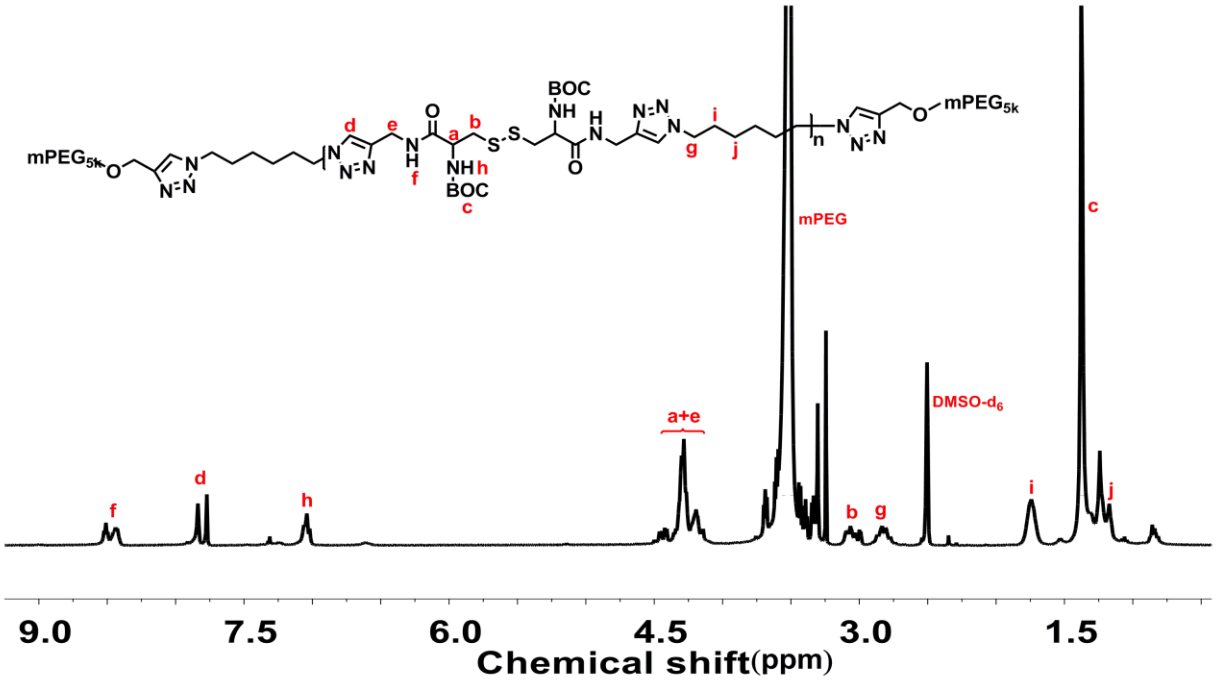

Figure S6. ^{1}H NMR characterization of mPEG-RSCP-mPEG.

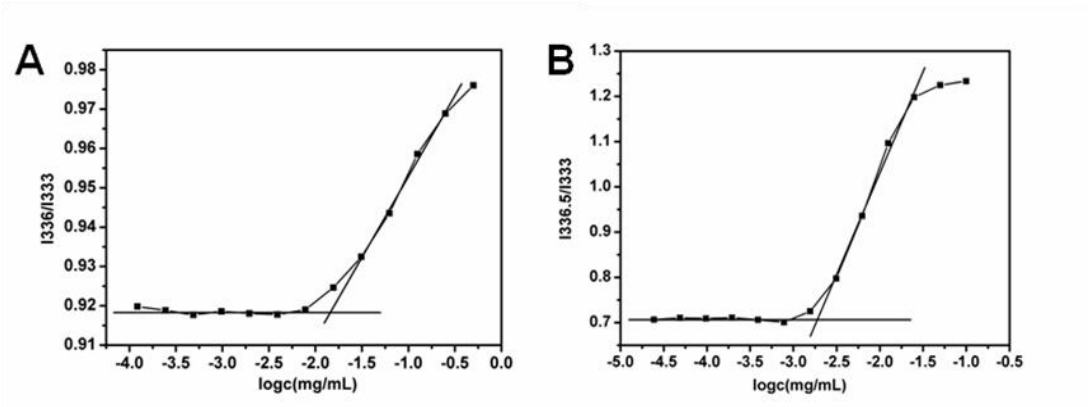

Figure S7. (A) Critical aggregation concentration (CAC) of mPEG-HRSCP-mPEG NPs, (B) Critical aggregation concentration (CAC) of mPEG-RSCP-mPEG NPs ,derived from the plot of I 336/I 333 ratio vs copolymer concentration indistilled water. After calculation, CMC = 11.9 × 10^{-3} mg/mL, 1.84 × 10^{-3} mg/mL, respectively.

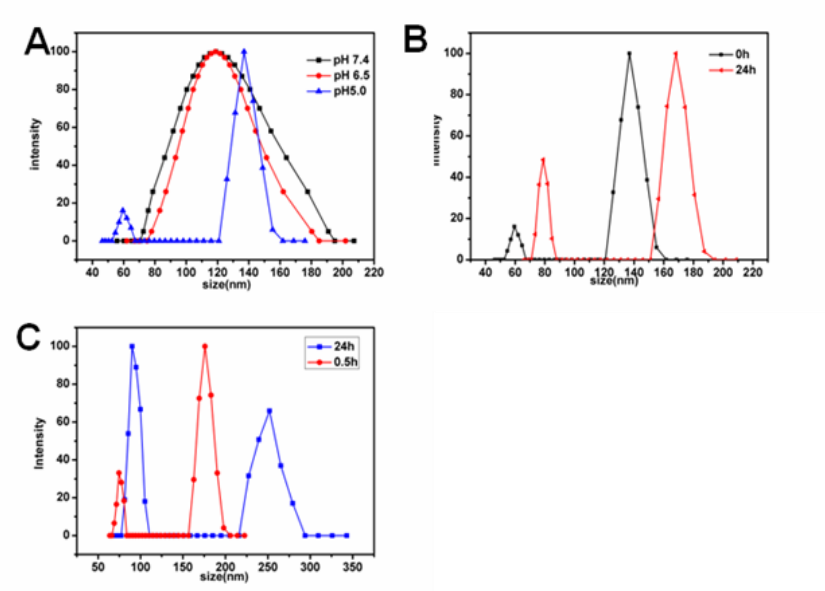

Figure S8. (A) DLS results of mPEG-HRSCP-mPEG NPs at distinct pH value. (B) changes of the average diameters at pH 5.0 at different time point. (C) DLS results of mPEG-HRSCP-mPEG NPs at pH 7.4 in response to 10 mM GSH.

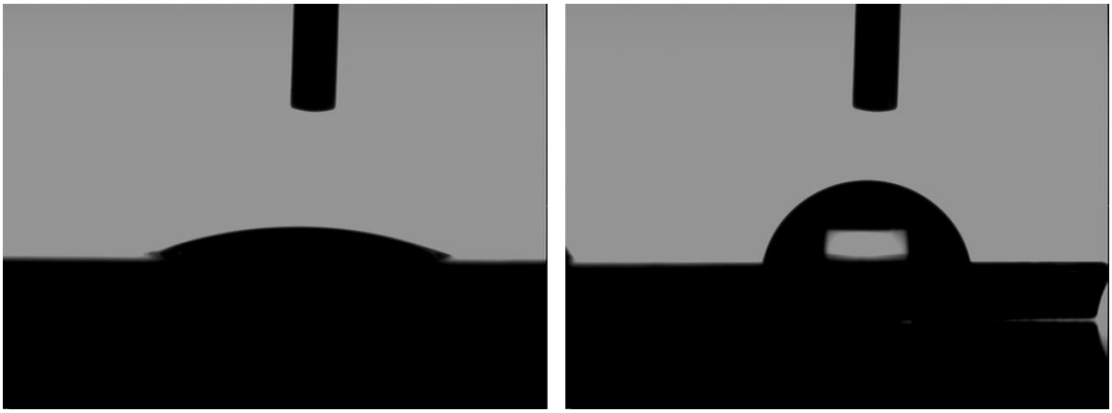

Figure S9. Recorded images of water drops (10 μL) on the surface of films of mPEG-HRSCP-mPEG (A) and mPEG-RSCP-mPEG (B).

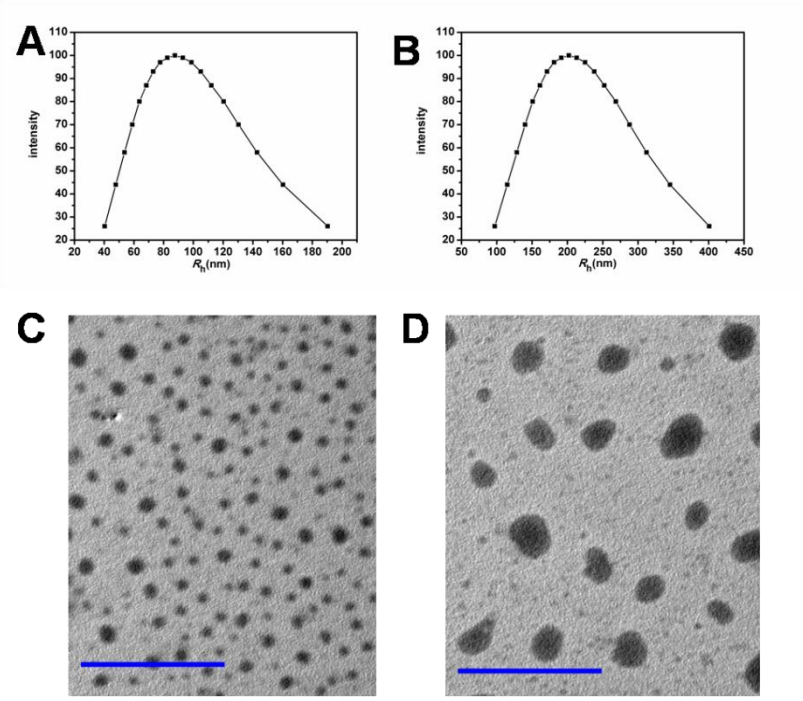

Figure S10. Hydrodynamic radius distributions of (A) Blank mPEG-RSCP-mPEG NPs and (B) DOX-loaded mPEG-RSCP-mPEG NPs; TEM micrograph of (C) Blank mPEG-RSCP-mPEG NPs and (D) DOX-loaded mPEG-RSCP-mPEG NPs (scale bars: 500 nm).

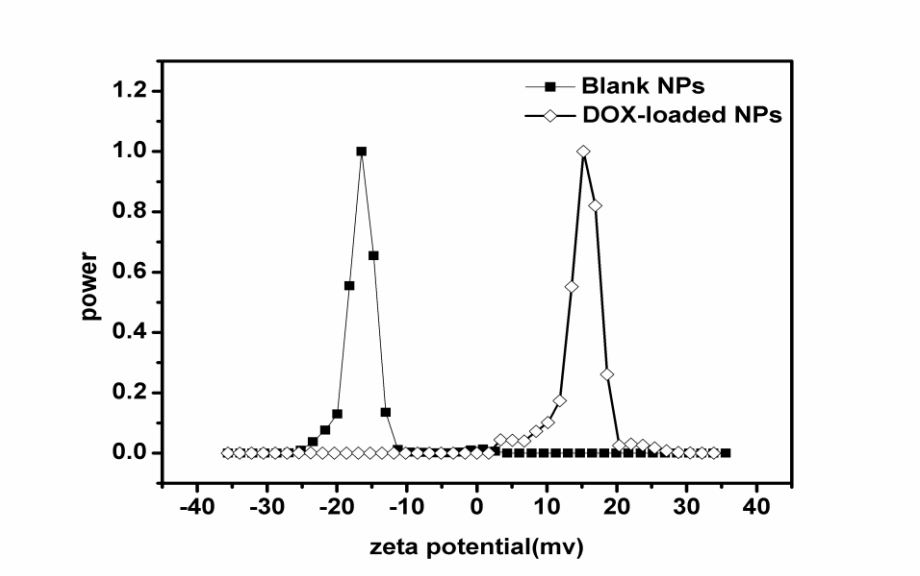

Figure S11. Change in the zeta potential (mv) of blank mPEG-HRSCP-mPEG NPs in distilled water and DOX-loaded mPEG-HRSCP-mPEG NPs.