Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting Information

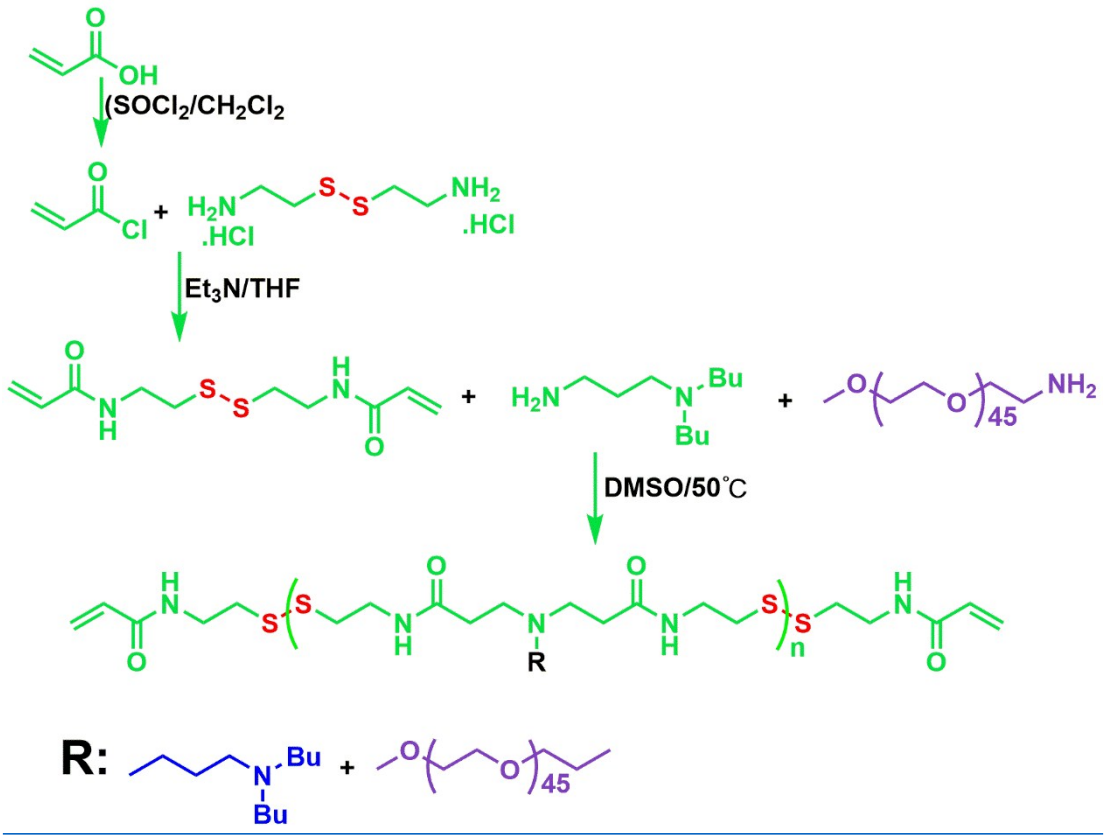

Figure S1. Synthesis route of the multifunctional copolymer, AC-Cys(DBP)-Cys(mPEG)-AC.

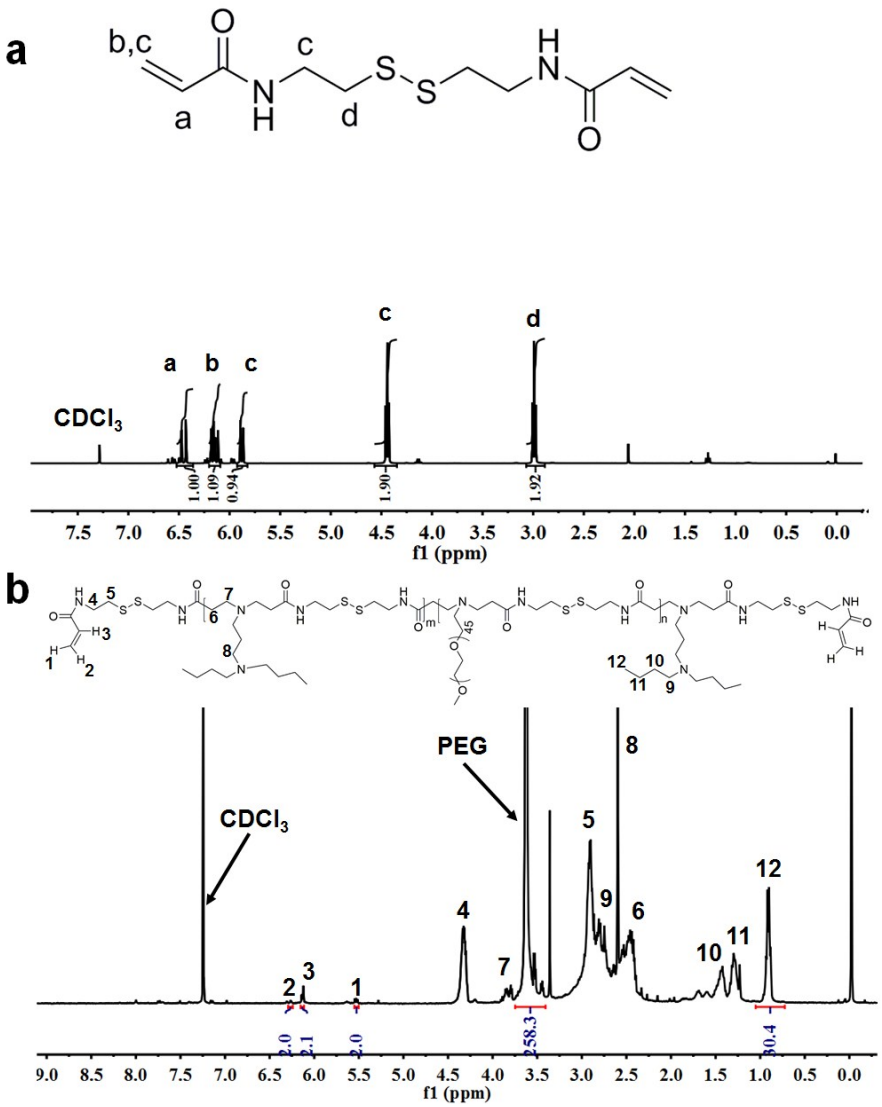

Figure S2. ^{1}H NMR spectra of a) AC-Cys-AC and b) AC-Cys(DBP)-Cys(mPEG)-AC.

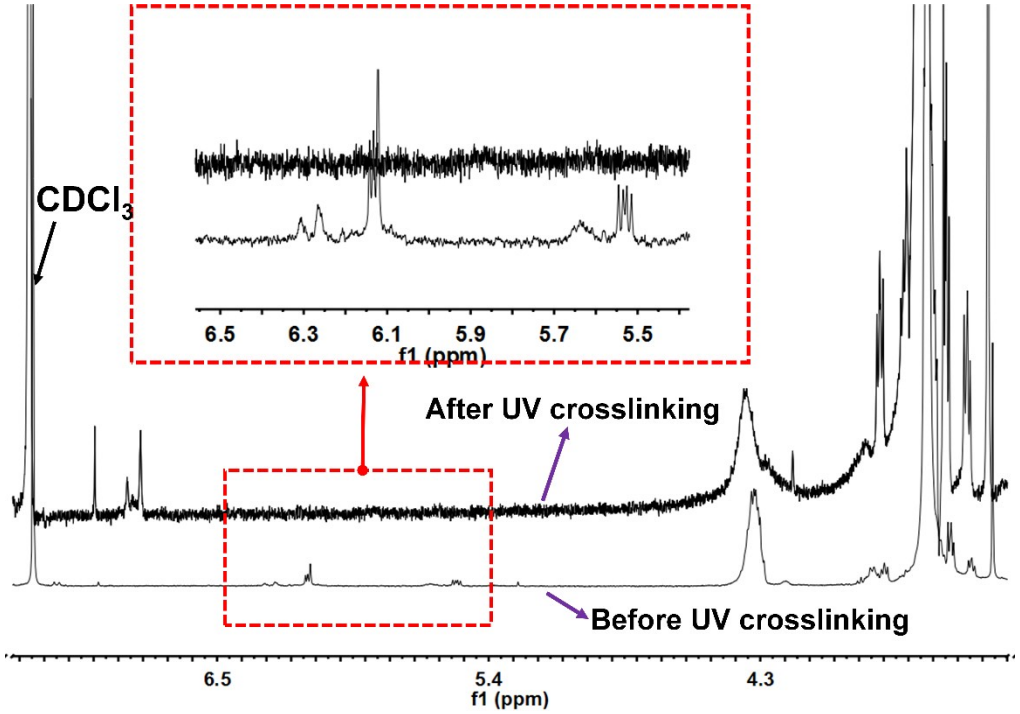

Figure S3. ^{1}H NMR spectra of the UV-crosslinked micelles and the non-crosslinked micelles.

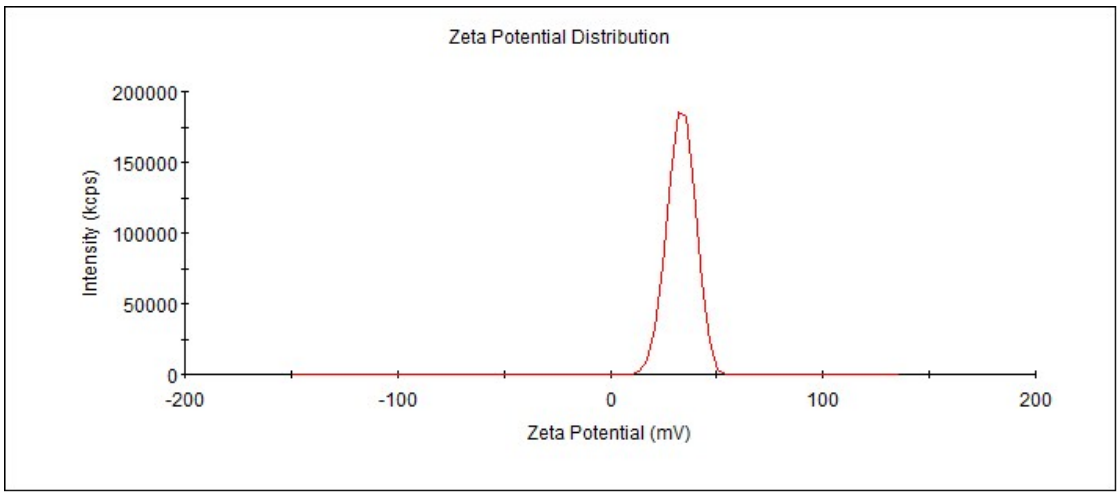

Figure S4. Zeta-potential distribution of PLK1shRNA micelles determined by DLS measurement.

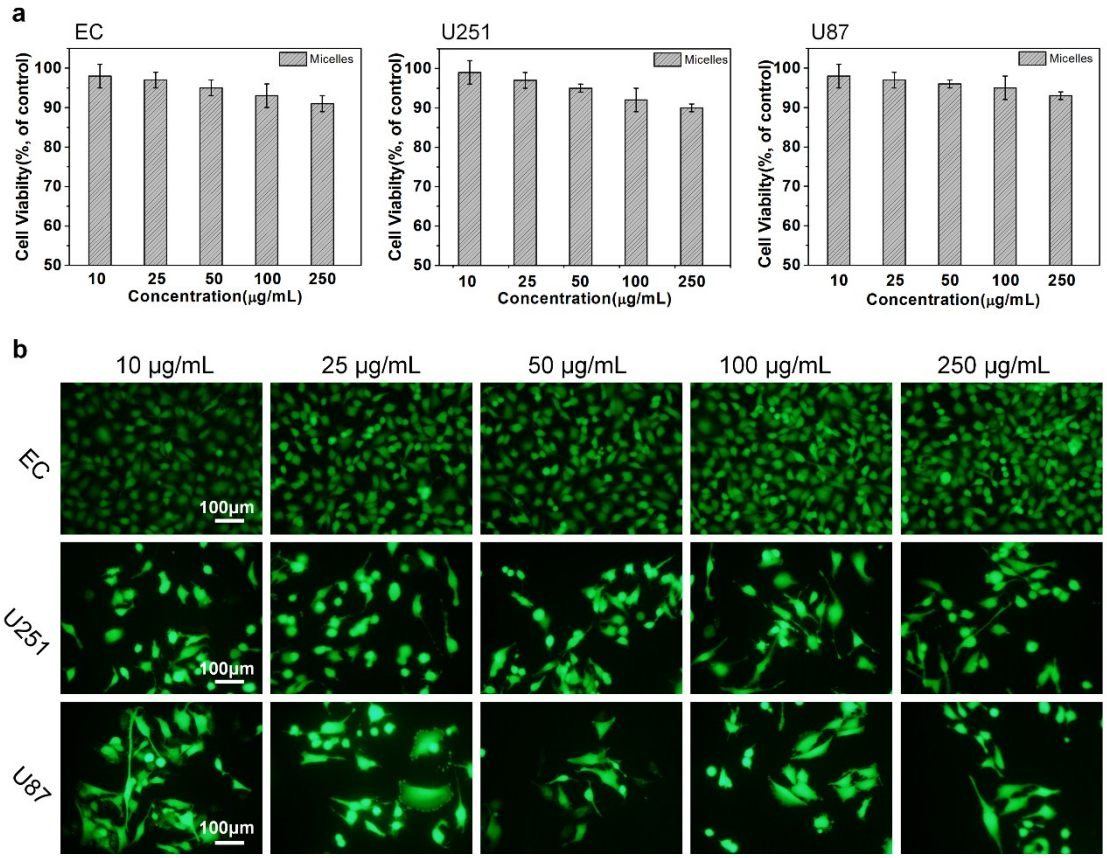

Figure S5. a) Cell viabilities of EC cells, U251 cells and U87 cells after incubation with blank micelles at diverse concentrations for 24 h. b) The corresponding fluorescence images. The cells were stained by calcein-AM (2 mM).

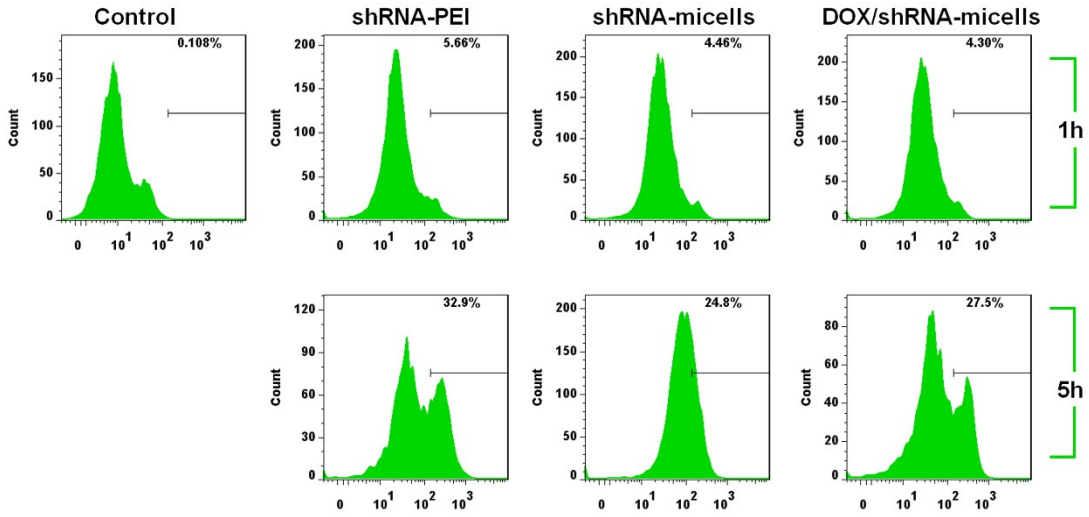

Figure S6. Transfection efficiency of PLK1shRNA in U87 cells mediated by PLK1shRNA-PEI nanoparticles, shRNA-micelles and DOX/shRNA-micelles after incubation for 1h and 5h, measured by flow cytometry.

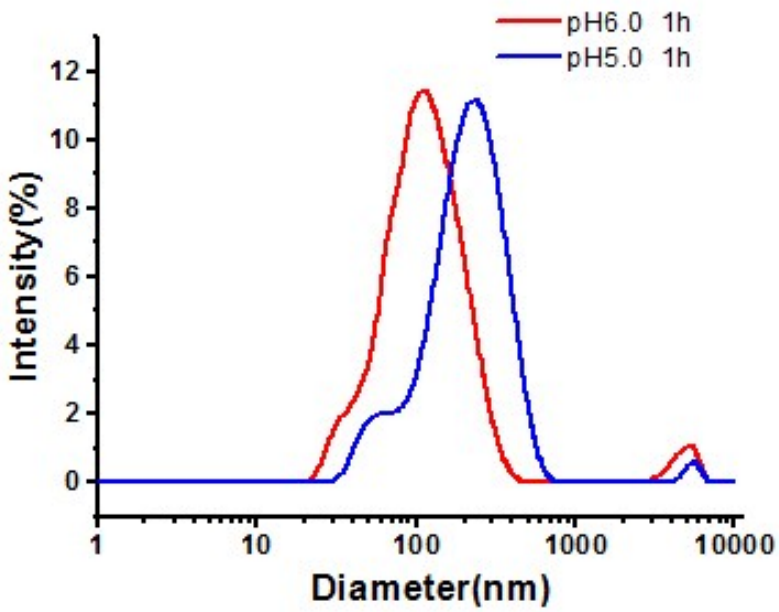

Figure S7. Change of size distribution profiles of the crosslinked double responsive micelles at pH 5.0 and 6.0 after 1 h.