

Supporting Information:

pH and reduction dual responsive cross-linked polyurethane micelles as an intracellular drug delivery system

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Table S1. Synthesis parameters and characterization data for the polyurethane block copolymers.

Sample	Feed ratio	Ratios in Polymer ^a	Mn ^b (g/mol)	PDI ^b	PEG content ^a (wt%)	pK _a
	PEG/O-DTT/HEP/HDI (molar ratio)	PEG/O-DTT/HEP/HDI (molar ratio)				
PU(PEG- <i>co</i> -HEP- <i>co</i> -O-DTT)-1	0.90/1.0/4.0/5.9	0.74/1.0/2.4/4.1	32,000	1.49	53.8	6.6
PU(PEG- <i>co</i> -HEP- <i>co</i> -O-DTT)-2	0.38/1.0/1.0/2.4	0.33/1.0/0.98/2.3	23,800	1.23	49.2	6.7
PU(PEG- <i>co</i> -HEP- <i>co</i> -O-DTT)-3	0.90/4.0/1.0/5.9	0.74/2.6/1.0/4.4	30,000	1.38	52.8	6.6

^a Determined by NMR. ^b Obtained by GPC.

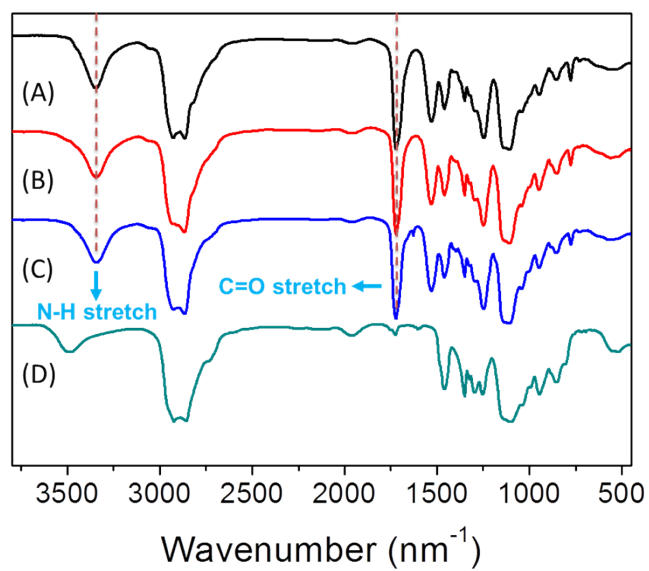


Figure S1. FT-IR Spectra of PU(PEG-*co*-HEP-*co*-O-DTT)-1 (A) , -2 (B) , -3 (C) and PEG-2000 (D).

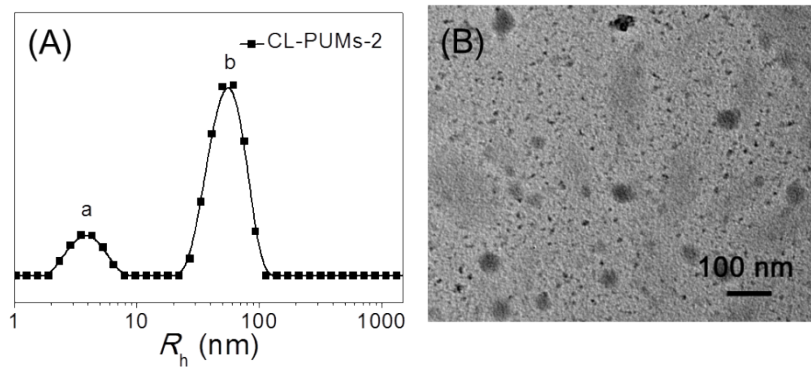


Figure S2. (A) The hydrodynamic radii (R_h) of CL-PUMs-2 in DMF solution which contained a main peak around 60 nm (a) and a small peak around 5 nm for the incomplete crosslinking copolymers (b); (B) TEM image taken after drying of the CL-PUMs-2 solution in DMF.