Electronic Supplementary Material (ESI) for RSC Advances.

Biodegradable multi-blocked polyurethane micelles for intracellular drug delivery: the effect of disulfide location on the drug release profile

Electronic Supplementary Information

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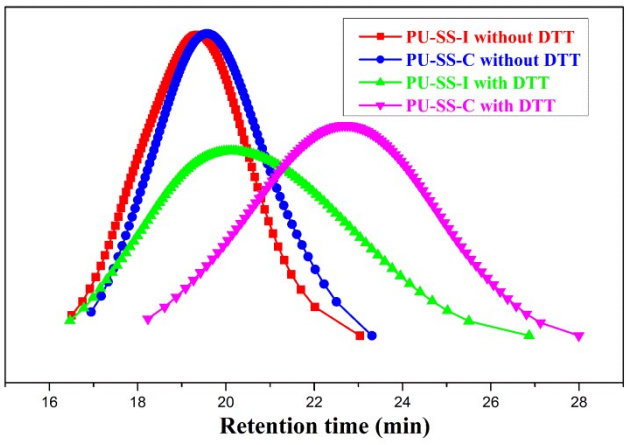

Fig. S1. GPC curves of purified PU-SS-C and PU-SS-I

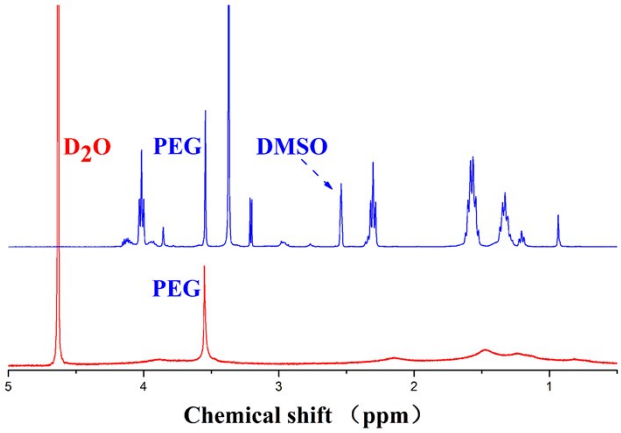

Fig.S2 ^{1}H NMR spectra of reduction-sensitive polyurethane (PU-SS-I) in DMSO-d6 and its micelles in D_2O

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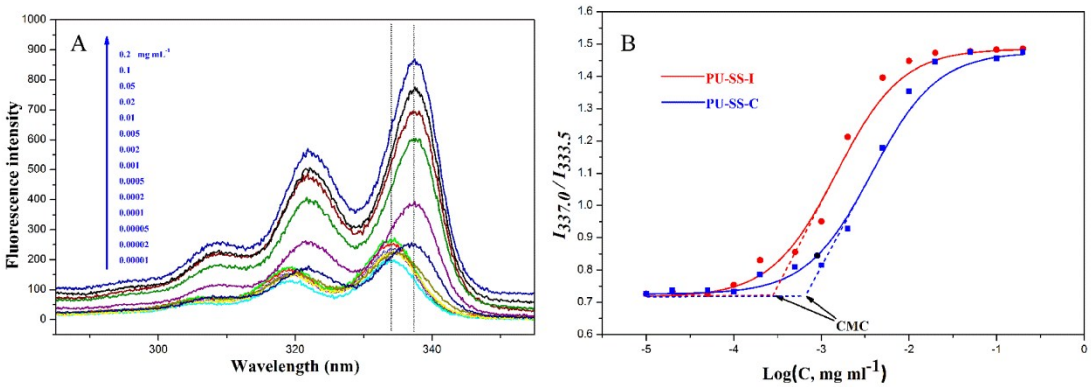

Fig. S3 (A) Typical fluorescence excitation spectra (λ_{em}=372 nm) of reduction-sensitive polyurethane micelles. (B) $I_{337.0}/I_{333.5}$ratios in the excitation spectra as a function of micellar concentrations (Log C). The CMCs are obtained from the intersection of the two tangent lines shown by the arrows.

Table S1. Composition and characteristics of reduction-sensitive polyurethanes and their micelles

	Feed ratio (mmol)						Molecular weights (g/mol)				
Samples	PCL	PEG	LDI	Cys	LDI	PEG	*M*n	*M*w	*M*n/*M*w	Size(nm)	Zeta potential (mv)
PU-SS-I	3.2		3.87	1	1.13	0.8	24121	40748	1.69	132.0	-20.7
PU-SS-C	3.2	0.8	5	1			19150	31586	1.65	137.2	-7.2

Table S2. Elemental analysis results of PU-SS-I and PU-SS-C

Sample	N (%)	C (%)	H (%)	S (%)
PU-SS-I	3.00	61.79	8.70	0.526
PU-SS-C	3.22	61.11	8.67	0.481