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Supporting Information

Genipin Cross-Linked PEG-*block*-poly(L-lysine)/Disulfide-Based Polymer Complex Micelles as Fluorescent Probes and pH-/Redox-Responsive Drug Vehicles

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Table S1. Characterization of polyethylene glycol-*block*-poly(Z-L-lysine) **(**PEG-*b*-PZLL) and poly(DTPA-*co*-cysam) copolymers.

Sample	$\mathbf{M_n}$	$\mathbf{M_w}$	$\mathbf{M_n/M_w}$
PEG-*b*-$PZLL_{25}$	12,300	15,900	1.29
PEG-*b*-$PZLL_{55}$	20,100	22,300	1.11
poly(DTPA-*co*-cysam)	3,700	4,500	1.21

Table S2. Hydrodynamic diameter (size) and polydispersity index (PDI) of poly(DTPA-*co*-cysam)/ metal ion aggregates.

Metal ion	Size (nm)	PDI
Ca^{2+}	505.3±114.9	0.48±0.09
Mg^{2+}	579.5±16.6	0.42±0.08
Cu^{2+}	329.1±34.8	0.41±0.04
Al^{3+}	104.7±0.7	0.19±0.01
Fe^{3+}	150.1±2.8	0.23±0.01
In^{3+}	428.2±18.5	0.51±0.12

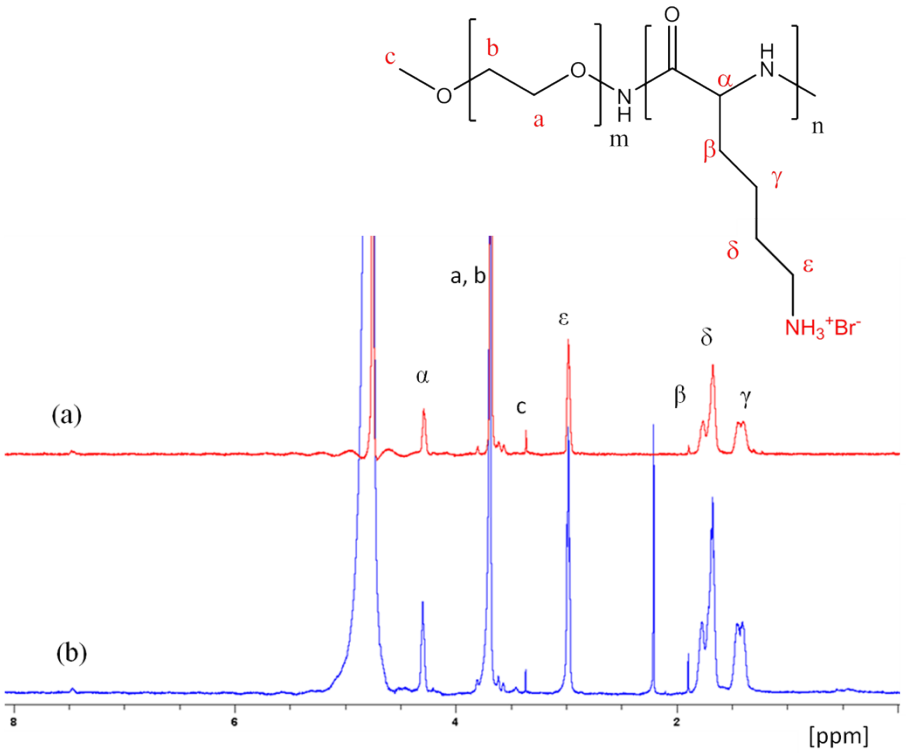

Figure S1. ^{1}H NMR spectra of (a) PEG-*b*-PLL$_{25}$ and (b) PEG-*b*-PLL$_{55}$ block copolymers.

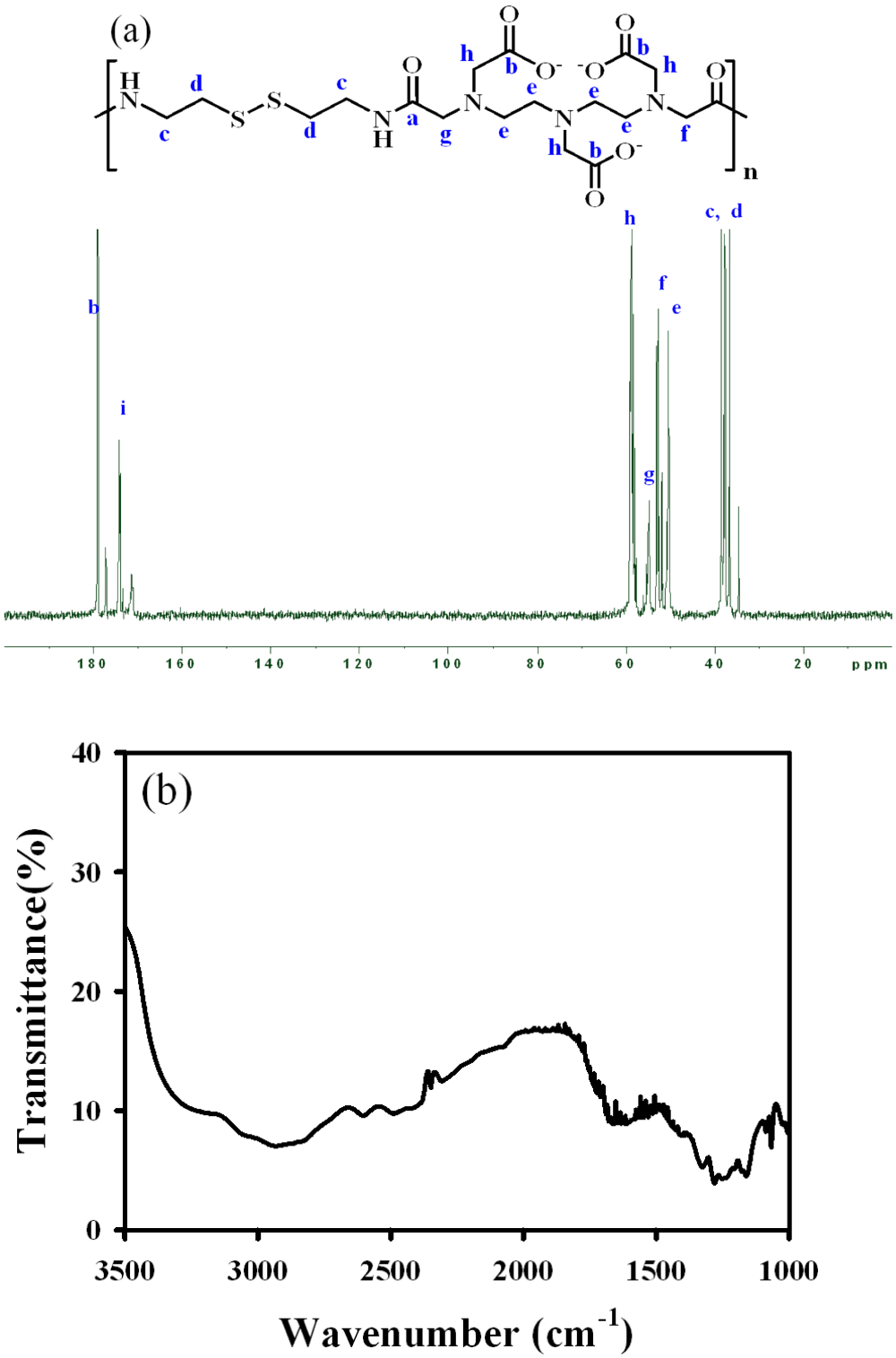

Figure S2. (a) ^{13}C NMR and (b) FTIR spectra of poly(DTPA-*co*-cysam) copolymer.

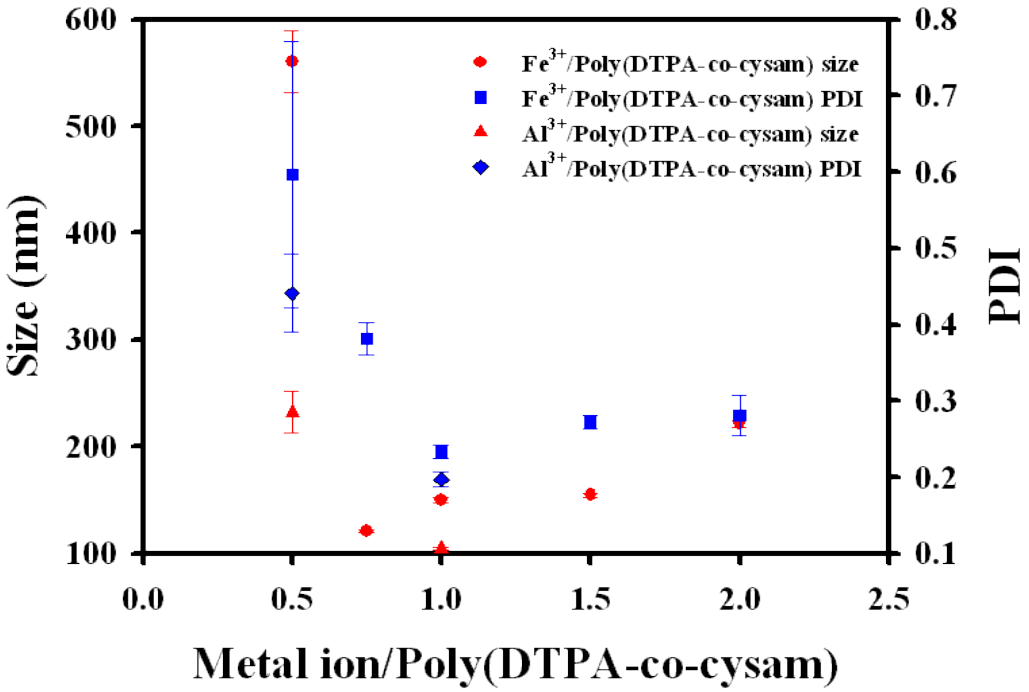

Figure S3. Hydrodynamic diameter (size) and polydispersity index (PDI) of poly(DTPA-*co*-cysam)/Fe^{3+} and poly(DTPA-*co*-cysam)/Al^{3+} aggregates as a function of the molar ratio of metal ion and poly(DTPA-*co*-cysam).

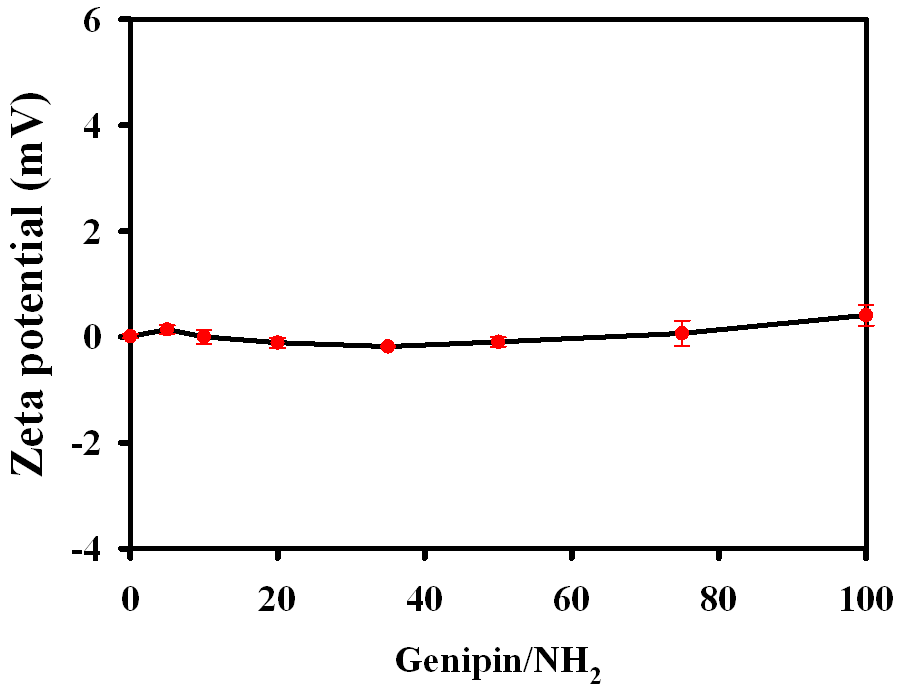

Figure S4. Zeta potential of PEG-*b*-PLL_{25}/poly(DTPA-*co*-cysam) micelles in the presence of Fe^{3+} ion as a function of the molar ratio of genipin to amino group (CF_{Gen}).

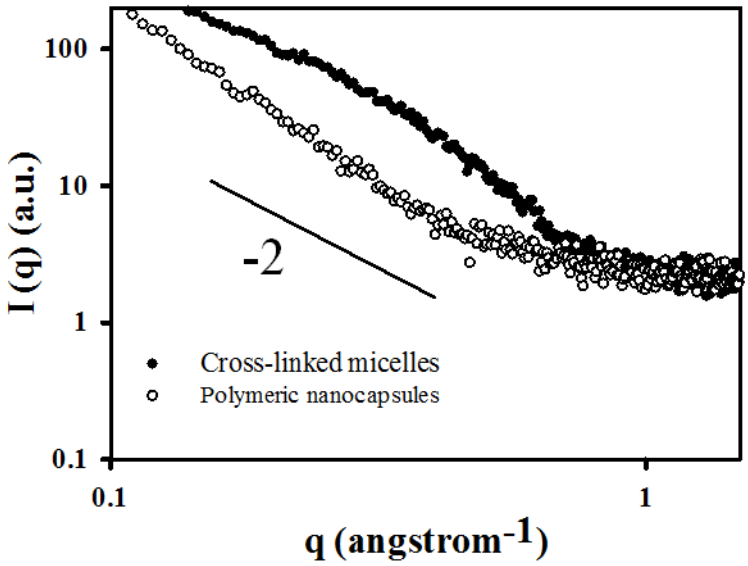

Figure S5. SAXS patterns of genipin cross-linked PEG-*b*-PLL_{25}/poly(DTPA-*co*-cysam) micelles (CF_{Gen}=0.4) (solid circle) and as-prepared polymeric nanocapsules (open circle).

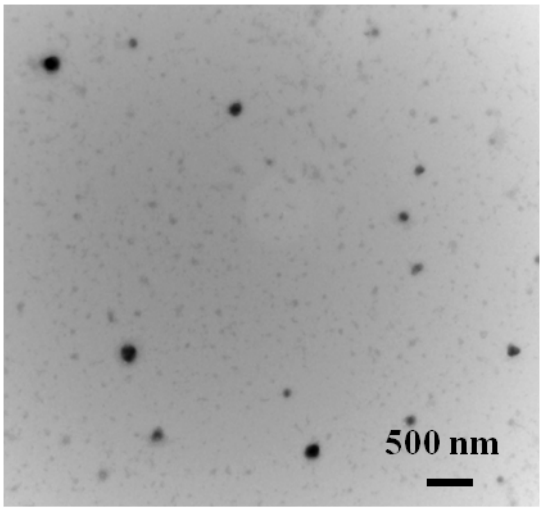

Figure S6. TEM image of DOX-loaded, genipin cross-linked PEG-*b*-PLL_{25}/poly(DTPA-*co*-cysam) micelles (CF_{Gen}=0.4) prepared in the presence of Fe^{3+} ion using method I.