Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supporting information

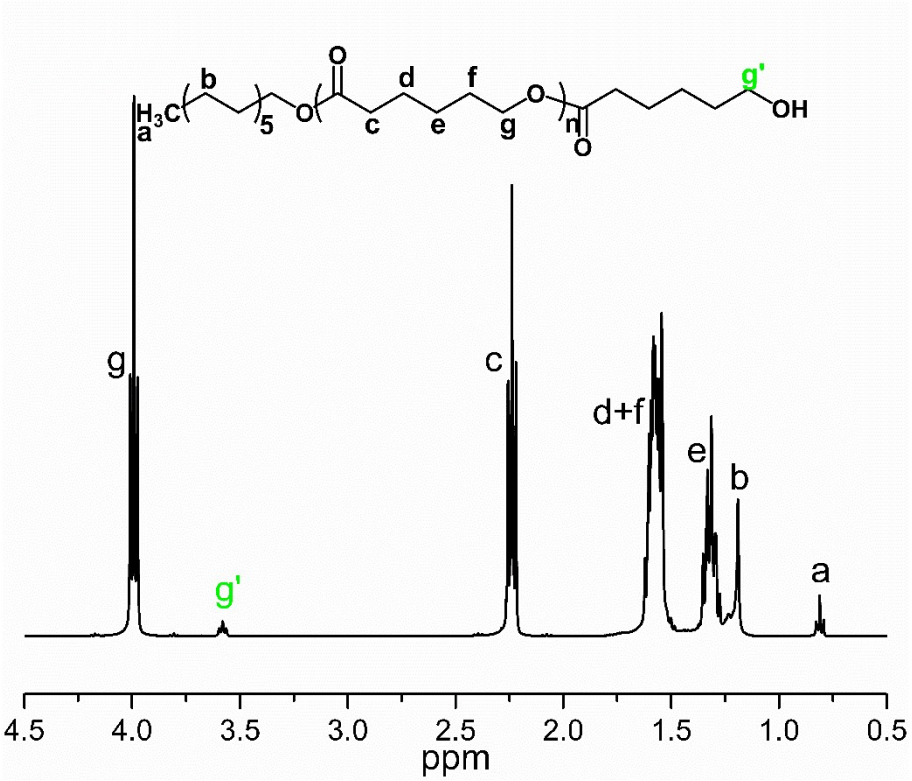

Fig.S1 ^{1}H NMR of PCL.

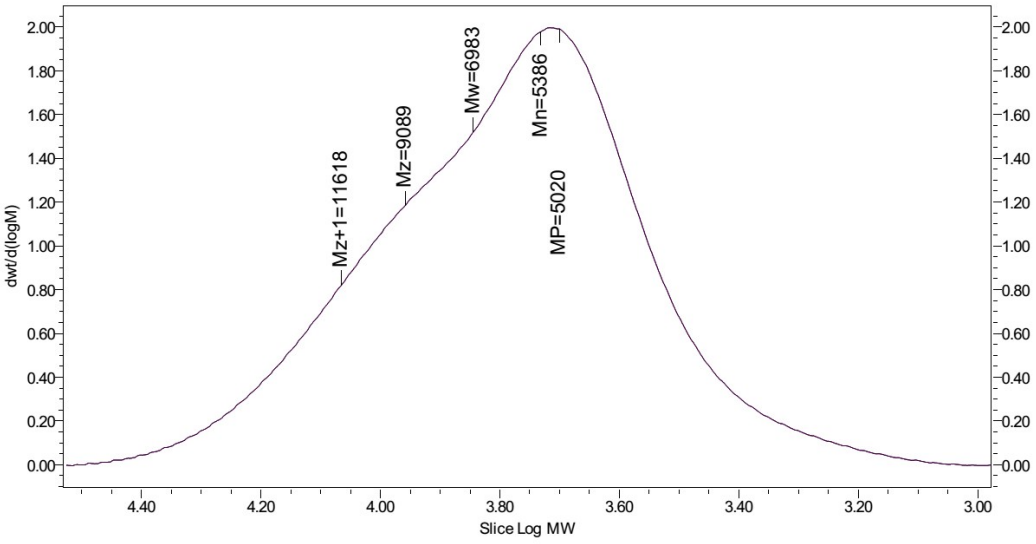

Fig.S2 GPC test patterm of PCL. (The molecular weight and polydispersity of the copolymers were determined by a gel permeation chromatograph instrument system (Waters 1515). The measurements were performed using THF as the eluent at a flow rate of 0.6 mL/min at 40 °C and a series of narrow polystyrene standards for the calibration of the columns.)

Table S1 The molecular weight of PCL obtains by GPC analysis.

Item	Mn(Da)	Mw(Da)	MP	Mz(Da)	Mz+1(Da)	PDI	Mz/Mw	Mz+1/Mw
Data	5400	7000	5000	9100	11600	1.30	1.30	1.66

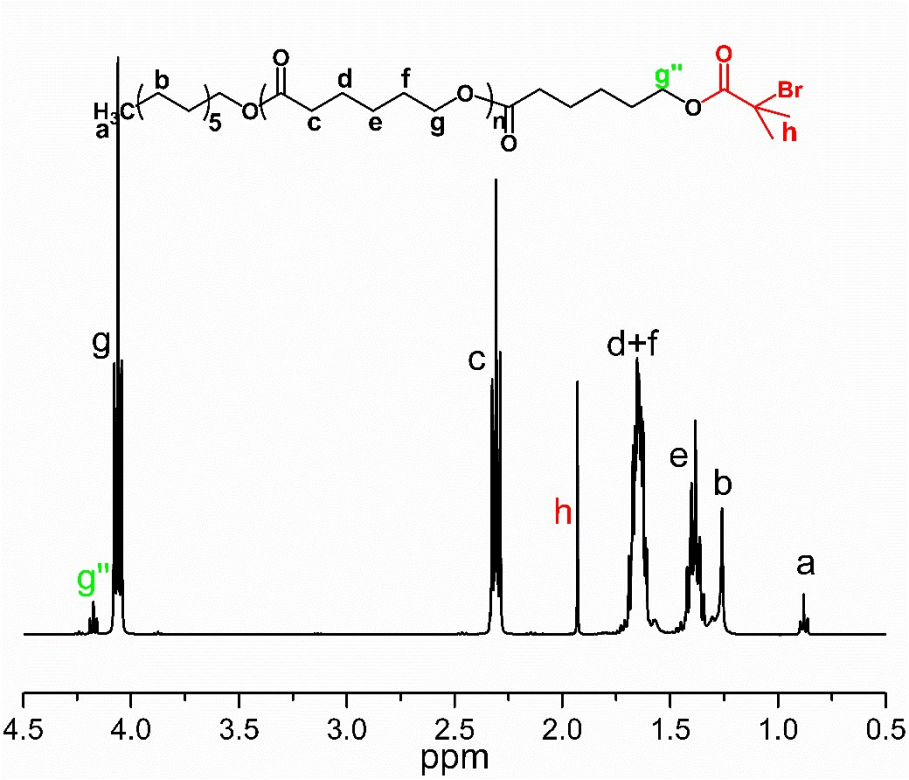

Fig.S3 ^{1}H NMR of PCL-Br.

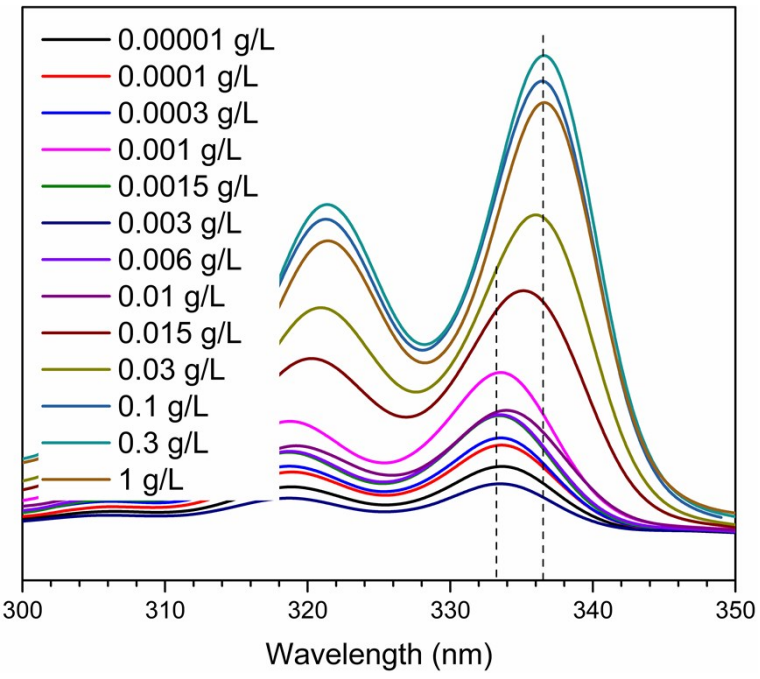

Fig.S4 Fluorescene excitation spectra of pyrene/PCL-PDEAMPC against concentration of PCL-PDEAMPC micelles in distilled water (emission wavelength: 390 nm).

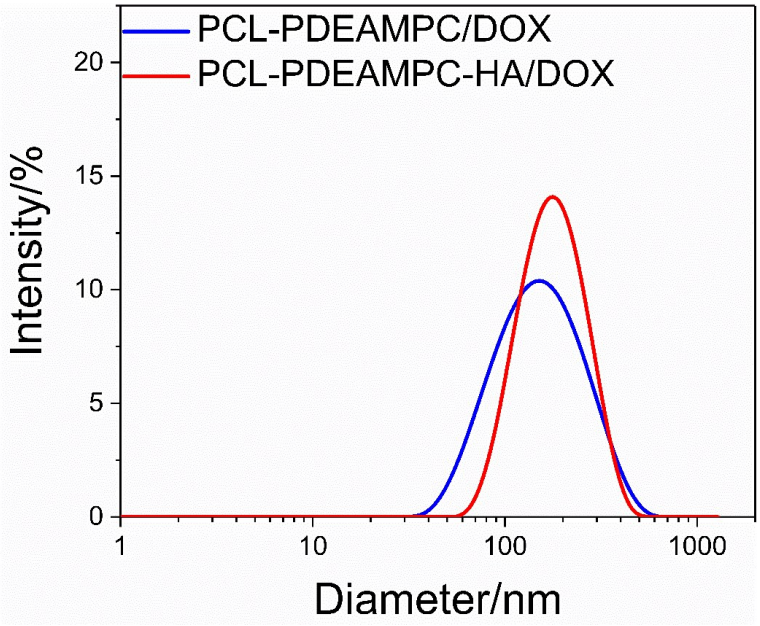

Fig.S5 Intensity vs. diameter of DOX-loaded micelles.

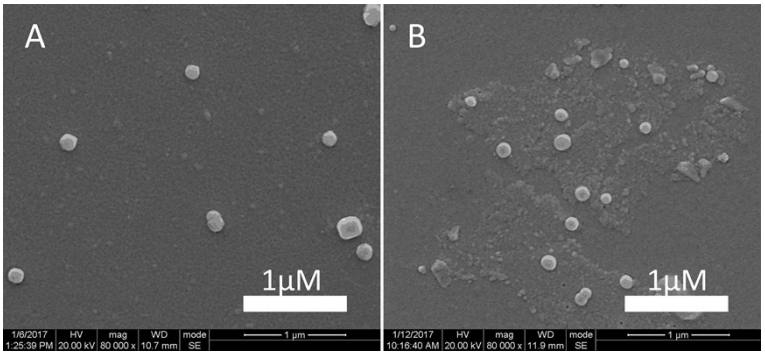

Fig.S6 Scanning electron microscope (SEM) images of DOX-loaded micelles (A: PCL-PDEAMPC/DOX; B: PCL-PDEAMPC-HA/DOX).

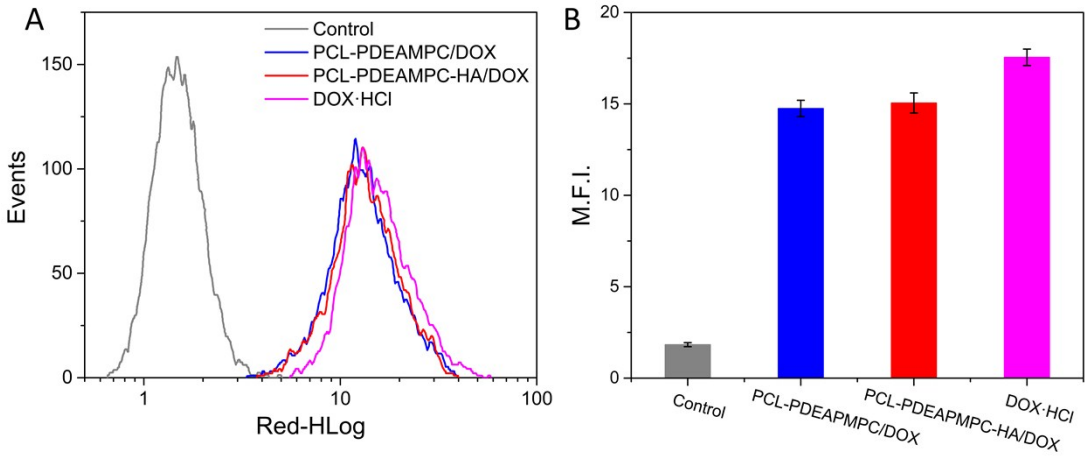

Fig.S7 Flow cytometry analyses (A) and the mean fluorescence intensity (B) of 4T1 cells incubation with PCL-PDEAMPC- HA/DOX micelles and free DOX for 2 h.