Supporting Information for

Acid-Triggered Drug Release from Micelles Based on Amphiphilic Oligo(ethylene glycol)-Doxorubicin Alternative Copolymer†

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Characterization of POEG$_{22}$M, POEGM$_{22}$-CHO and POEGM$_{22}$-DOX

POEG$_{22}$M, POEGM$_{22}$-CHO and POEGM$_{22}$-DOX were all characterized by $^1$H NMR spectroscopy, as shown in Fig. S1 with all the relevant signals well labelled.

**Fig. S1** $^1$H NMR spectra of POEG$_{22}$M (A), POEGM$_{22}$-CHO (B) in CDCl$_3$, and POEGM$_{22}$-DOX (C) in DMSO-d$_6$.

**Determination of the Calibration Curves of DOX in Phosphate Buffer (PBS, pH 7.4, 5.8, 5.0)**

Calibration curves of DOX in PBS (0.01M, pH = 7.4, 5.8) and acetate buffer solution (0.01 M, pH = 5.0) were determined by measuring the absorption of DOX with known concentrations via Shimadzu UV2550 UV-vis spectrophotometer at a wavelength of 479 nm, which is the
typical absorption for DOX. The absorption as a function of DOX concentration was recorded to generate the calibration curve, which is shown in Fig. S2.

**Fig. S2** Calibration curves of DOX in PBS (0.01 M, pH = 7.4) (A), PBS (0.01 M, pH = 5.8) (B) and acetate buffer solution (0.01 M, pH = 5.0).