Supporting Information for

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

Ying Wang,‡^a Qiaojie Luo,‡^b Rui Sun,^a Guangyu Zha,^b Xiaodong Li,^b Zhiquan Shen^a and Weipu Zhu*^a

^a MOE Key Laboratory of Macromolecular Synthesis and Functionalization,
Department of Polymer Science and Engineering, Zhejiang University, Hangzhou
310027, People's Republic of China

^b Department of Oral and Maxillofacial Surgery, Affiliated Stomatology Hospital,
College of Medicine, Zhejiang University, Hangzhou 310006, P. R. China

* Correspondence to: W. P. Zhu (E-mail: *zhuwp@zju.edu.cn*)

† Electronic Supplementary Information (ESI) available. See DOI: 10.1039/b000000x/

: These two authors contributed equally to this work.

Characterization of POEG₂₂M, POEGM₂₂-CHO and POEGM₂₂-DOX

POEG₂₂M, POEGM₂₂-CHO and POEGM₂₂-DOX were all characterized by ¹H NMR spectroscopy, as shown in Fig. S1 with all the relevant signals well labelled.

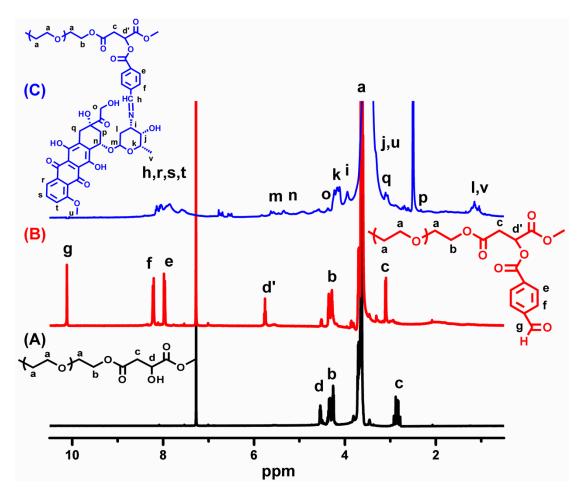


Fig. S1 ¹H NMR spectra of POEG₂₂M (A), POEGM₂₂-CHO (B) in CDCl₃, and POEGM₂₂-DOX (C) in DMSO-d₆.

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.

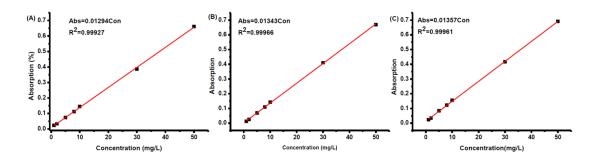


Fig. S2 Calibration curves of DOX in PBS (0.01 M, pH = 7.4) (A), PBS (0.01 M, pH = 5.8) (B) and acetate buffer solution (0.01 M, pH = 5.0).