

Supplementary Material

Effect of hydrophobic chain length in amphiphilic chitosan conjugates on intracellular drug delivery and smart drug release of redox-responsive micelle

Yuting Yuan ^{1,2,3}, Wenqiang Tan ^{1,3,*}, Yingqi Mi ^{1,3}, Linqing Wang ^{1,2,3}, Zhen Qi ⁴, Zhanyong Guo ^{1,2,3,*}

¹ Key Laboratory of Coastal Biology and Bioresource Utilization, Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, Yantai 264003, China; ytyuan@yic.ac.cn (Y.Y.); yqmi@yic.ac.cn (Y.M.); linqingwang@yic.ac.cn (L.W.);

² University of Chinese Academy of Sciences, Beijing 100049, China

³ Center for Ocean Mega-Science, Chinese Academy of Sciences, Qingdao 266071, China

⁴ College of Life Sciences, Yantai University, Yantai 264005, China; qzqq2022@163.com (Z.Q.);

* Correspondence: zhanyongguo@hotmail.com (Z.G.); wqtan@yic.ac.cn (W.T.); Tel.: +86-535-2109171 (Z.G.); Fax: +86-535-2109000 (Z.G.)

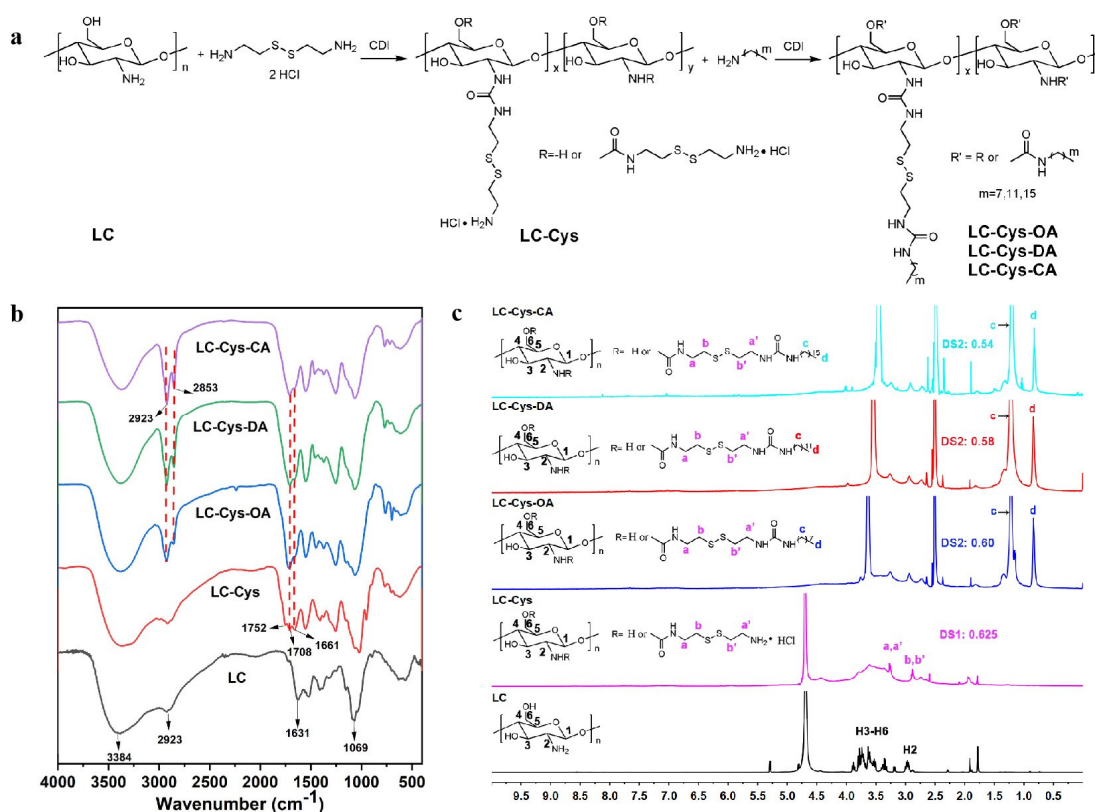


Figure. S1. Synthetic route for amphiphilic LC-Cys-OA / LC-Cys-DA / LC-Cys-CA conjugates (a), FTIR

(b) and ¹H NMR spectra (c) of LC and amphiphilic conjugates.

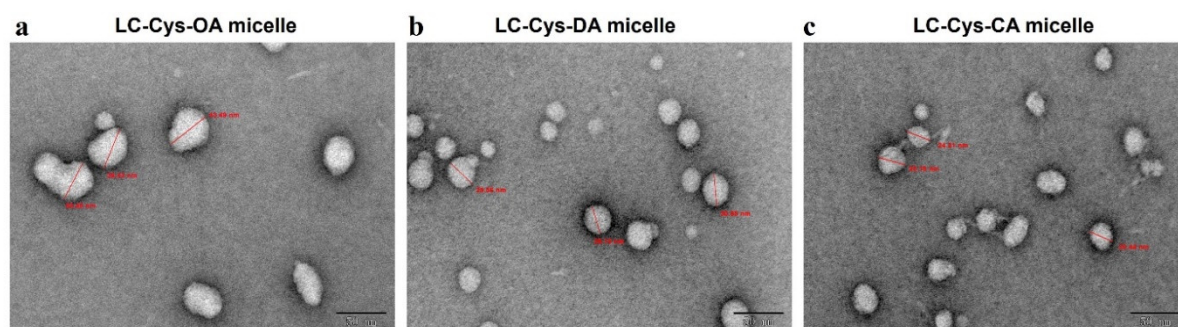


Figure. S2. TEM images of LC-Cys-OA, LC-Cys-DA and LC-Cys-CA micelles.

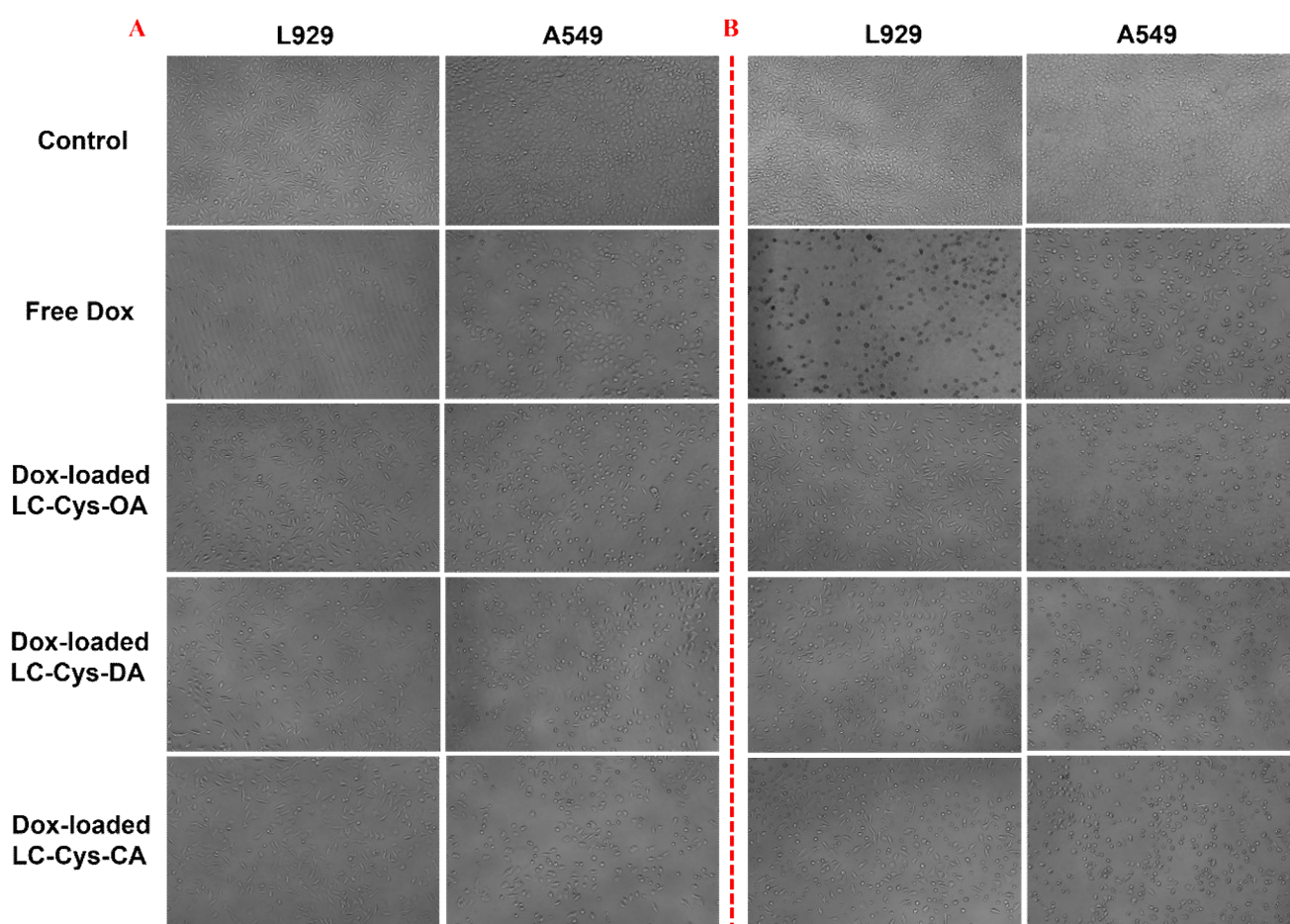


Figure. S3. The morphology of L929 cell and A549 cell dealt with free Dox and Dox-loaded LC-Cys-OA, Dox-loaded LC-Cys-DA and Dox-loaded LC-Cys-CA micelles for 24 h (A) and 48 h (B).