

*Supporting Information for*

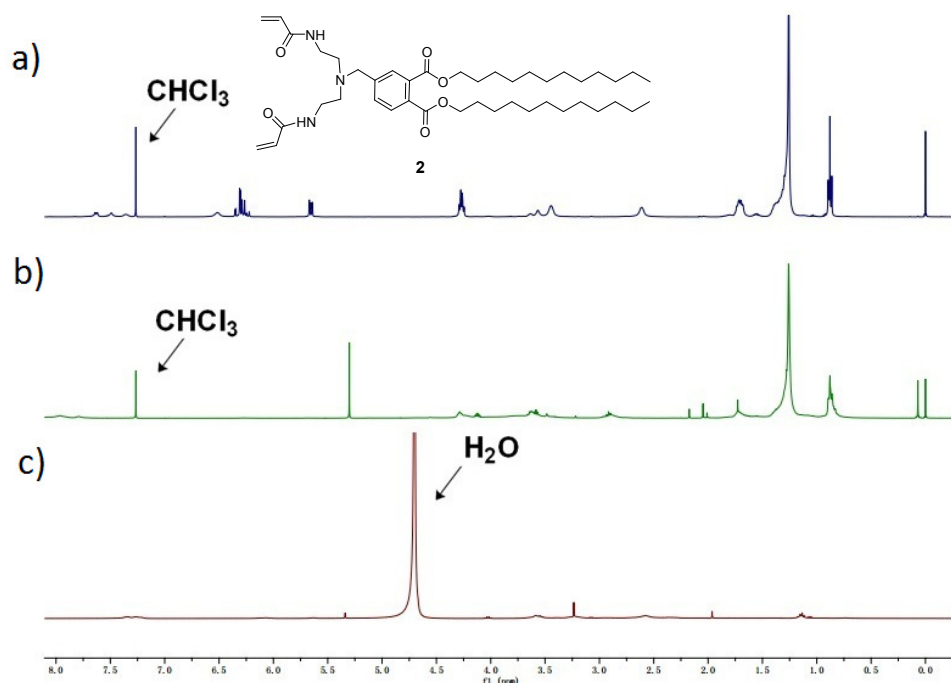
**Reverse Micelle-Based Water-Soluble  
Nanoparticles for Simultaneous Bioimaging  
and Drug Delivery**

*Ying Chen,<sup>a</sup> Yong Liu,<sup>a</sup> Yongchao Yao,<sup>a</sup> Shiyong Zhang,<sup>\*a,b</sup> and Zhongwei Gu<sup>a</sup>*

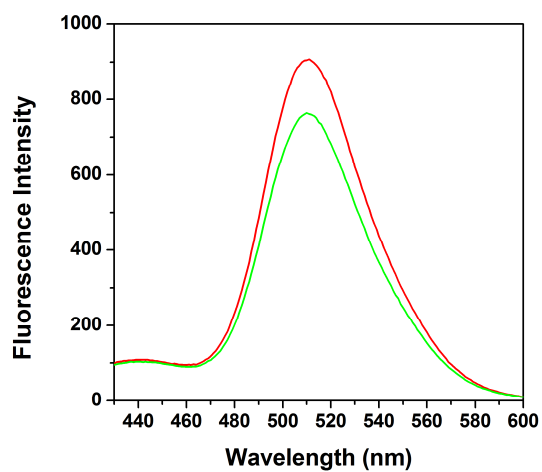
<sup>a</sup> National Engineering Research Centre for Biomaterials, Sichuan University, 29 Wangjiang Road, Chengdu 610064, China

<sup>b</sup> College of Chemistry, Sichuan University, 29 Wangjiang Road, Chengdu 610064, China

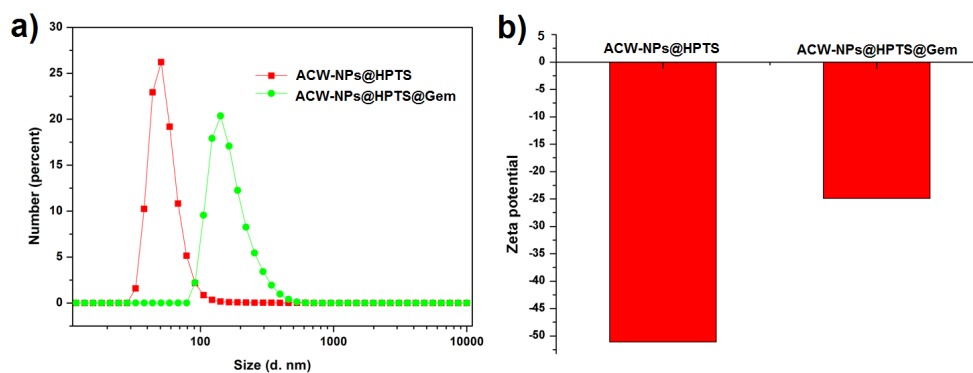
<sup>\*</sup> To whom correspondence should be addressed. S. Zhang, Phone: +86-28-85411109. Fax: +86-28-85411109. E-mail: szhang@scu.edu.cn



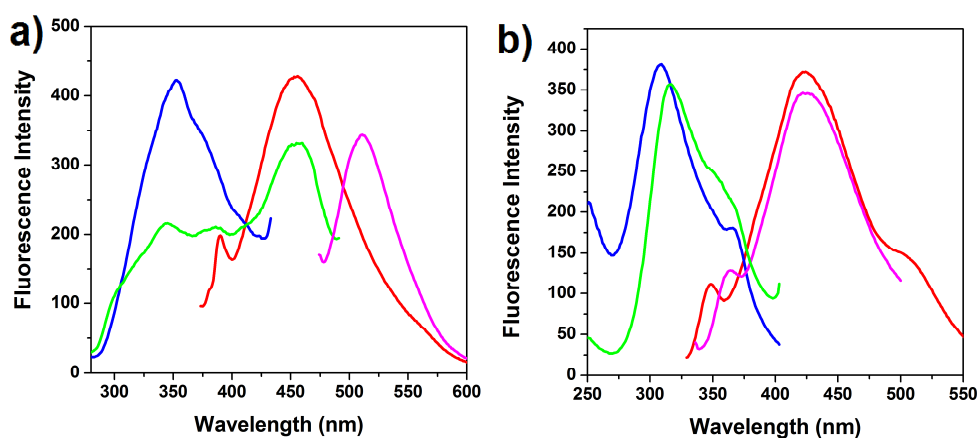
**Figure 1S.**  $^1\text{H}$  NMR of (a) compound **2**, (b) Interfacial cross-linked reverse micelles (ICRMs) and (c) acrylamide based cross-linked water-soluble nanoparticles (ACW-NPs).



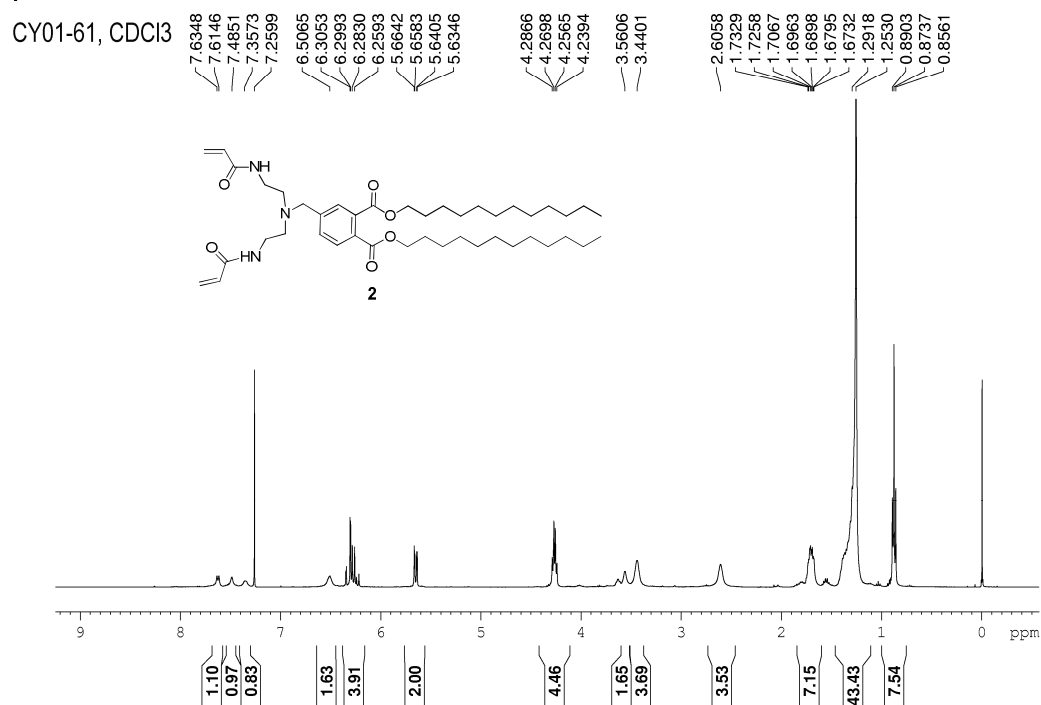
**Figure 2S.** Fluorescence spectra of ACW-NPs@HPTS (red) and ACW-NPs@HPTS@Gem (green). ( $E_x = 403 \text{ nm}$ ,  $E_m = 510 \text{ nm}$  [ **1** ] =  $0.02 \text{ M}$ , [HPTS] =  $0.03 \text{ M}$ ).



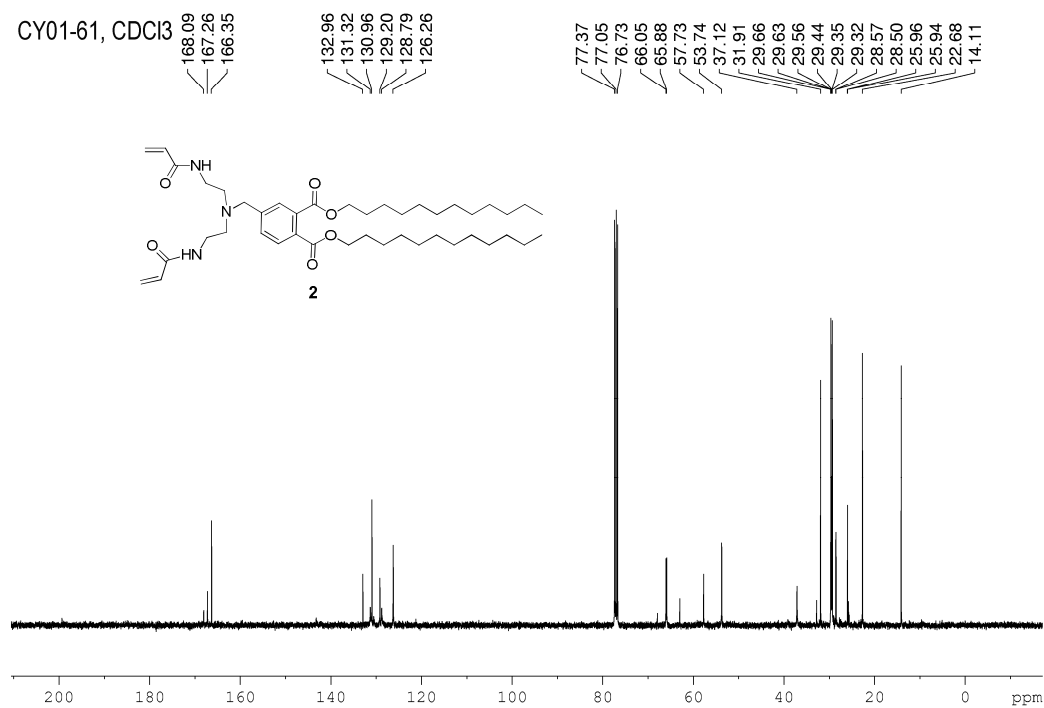
**Figure 35.** DLS (a) and Zeta potential (b) of ACW-NPs@HPTS and ACW-NPs@HPTS@Gem, respectively.



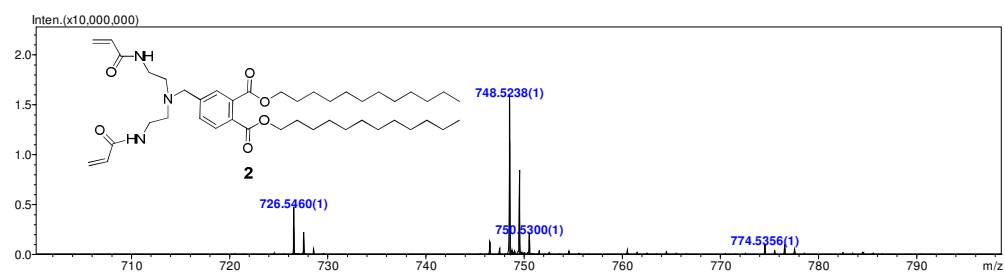
**Figure 45.** (a) The fluorescence spectra of ACW-NPs@1,5-EDANS (Ex = 353 nm) and ACW-NPs@DABCYL (Ex = 455 nm). ( $C_{1,5-EDANS} = C_{DABCYL} = 7.5 \times 10^{-4}$  mg/mL). (b) The fluorescence spectra of CuCl<sub>2</sub>/HCl destroyed ACW-NPs@1,5-EDANS&DABCYL (Ex = 309 nm, Em = 424 nm) and ACW-NPs@1,5-EDANS (Ex = 316 nm, Em = 423 nm) at pH ~6.0, respectively.



**Figure 5S.** <sup>1</sup>H NMR spectrum of compound **2** in CDCl<sub>3</sub>.



**Figure 6S.** <sup>13</sup>C NMR spectrum of compound **2** in CDCl<sub>3</sub>.



**Figure 7S.** Mass spectrum of compound **2**. HRMS: calcd. for C<sub>42</sub>H<sub>70</sub>NO<sub>4</sub><sup>+</sup> [M]<sup>+</sup>: 652.5299, found: 652.5288.