## Robust fluorescent amphiphilic polymer micelle for drug carrier application

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**Figure S1.** <sup>1</sup>H-NMR spectrum of DPBT in DMSO-d<sub>6</sub> and DPBT-PCL, DPBT-PCL-Br, DPBT-PCL-*b*-POEGMA in CDCl<sub>3</sub>.



Figure S2. UV-vis absorption and FL spectrum of DPOA and DPOA/DOX ( $C_{DPOA} = 20 \ \mu g \cdot m L^{-1}$ ).

![](_page_3_Figure_0.jpeg)

Figure S3. Infrared Spectroscopy of DPOA.

![](_page_4_Figure_0.jpeg)

**Figure S4.** Digital photographs of micelles DPOA (a, b) and DPOA/DOX (c, d); under daylight (a,c) and UV lamp (b,d) ( $C_{DPOA} = 20 \ \mu g \cdot mL^{-1}$ ).

![](_page_5_Figure_0.jpeg)

**Figure S5.** The calibration curve of UV-vis absorption intensity at 495 nm versus the concentration of DOX in DMSO.

LC (%) = (mass of DOX in the sample)/(mass of sample)  $\times$  100%

LE (%) = (mass of DOX in the sample)/(mass of DOX in feed)  $\times$  100%