

Fig. S1 The formation of micelle determined by <sup>1</sup>H NMR spectroscopy. FOL-PEG-PCL copolymer was dissolved in two deuterated solvents, i.e. D<sub>2</sub>O and *d*-DMSO.

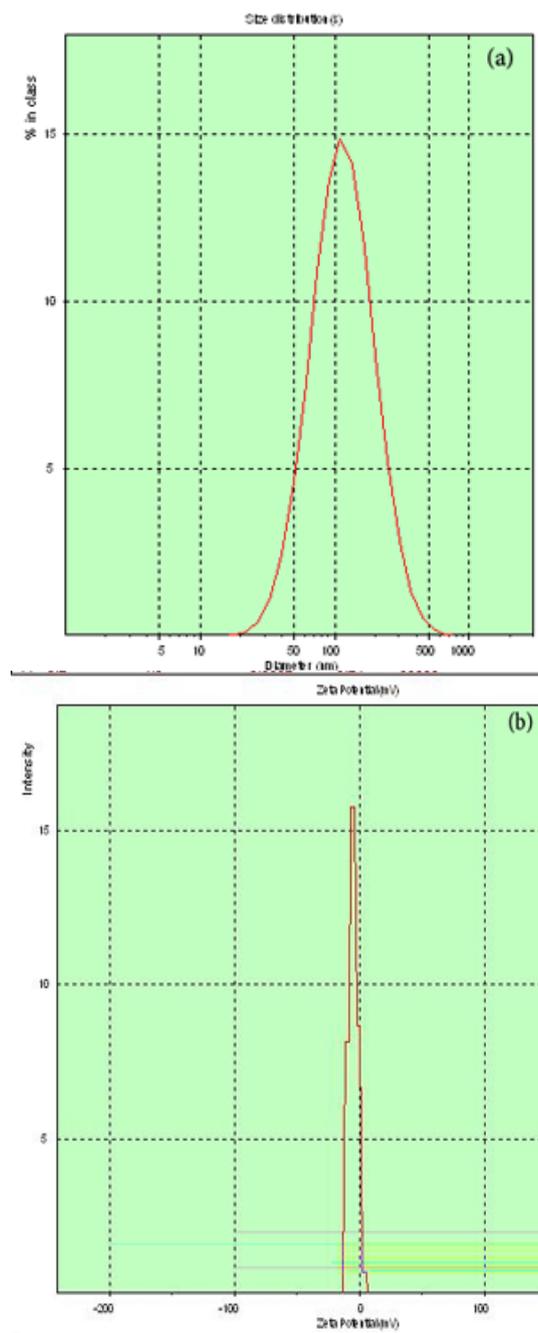


Fig. S2 The particle size distribution of star-shaped PCL-PEG-FOL micelle: size distribution (a) and zeta potential (b).

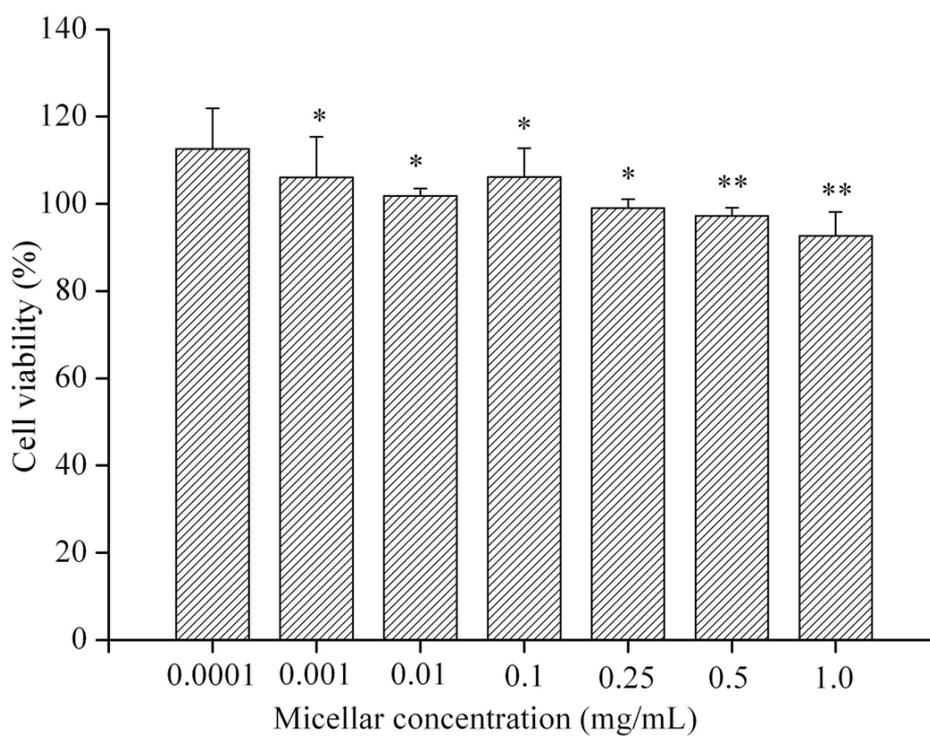


Fig. S3 The cytotoxicity of the star-shaped FOL-PEG-PCL micelle against MCF-7 cells. Data represents the mean  $\pm$  standard error of the mean of four measurements.