**Supporting Information:**

Bicomponent polymeric micelles as pH-responsive carrier



Figure S1. 1H-NMR spectra of Monomer DMA.

****

**Figure** S2 FT-IR spectera of the polymers( mPEG-PCL-PVBA and mPEG-PCL-PVBA) and bicomponent micelles.



Figure S3. XRD analysis results of DOX formulation: DOX powder, the physical mixture of mPEG-PCL-PDMA/mPEG-PCL-PVBA+DOX, blank micelle mPEG-PCL-PDMA/mPEG-PCL-PVBA, drug-loaded micelles mPEG-PCL-PDMA/mPEG-PCL-PVBA-DOX.





Figure S4. Determination of stability of drug loaded micelles under different dilution times by DLS: (A) mPEG-PCL-PDMA-DOX, (B) mPEG-PCL-PVBA-DOX, (C) mPEG-PCL-PDMA/mPEG-PCL-PVBA-DOX.



Figure S5. Plasma stability of drug loaded micelles at 37 ℃.



Figure S6. Storage stability of drug loaded micelles at 4 ℃.



Figure S7. Cytotoxicity of blank micelle (Culture with 48 h, n=3).

****

**(a)**

****

**(b)**

Figure S8Elution time of polymers on GPC: (a) mPEG-PCL-CTP, (b) mPEG-PCL-PVBA.