

Supporting Information

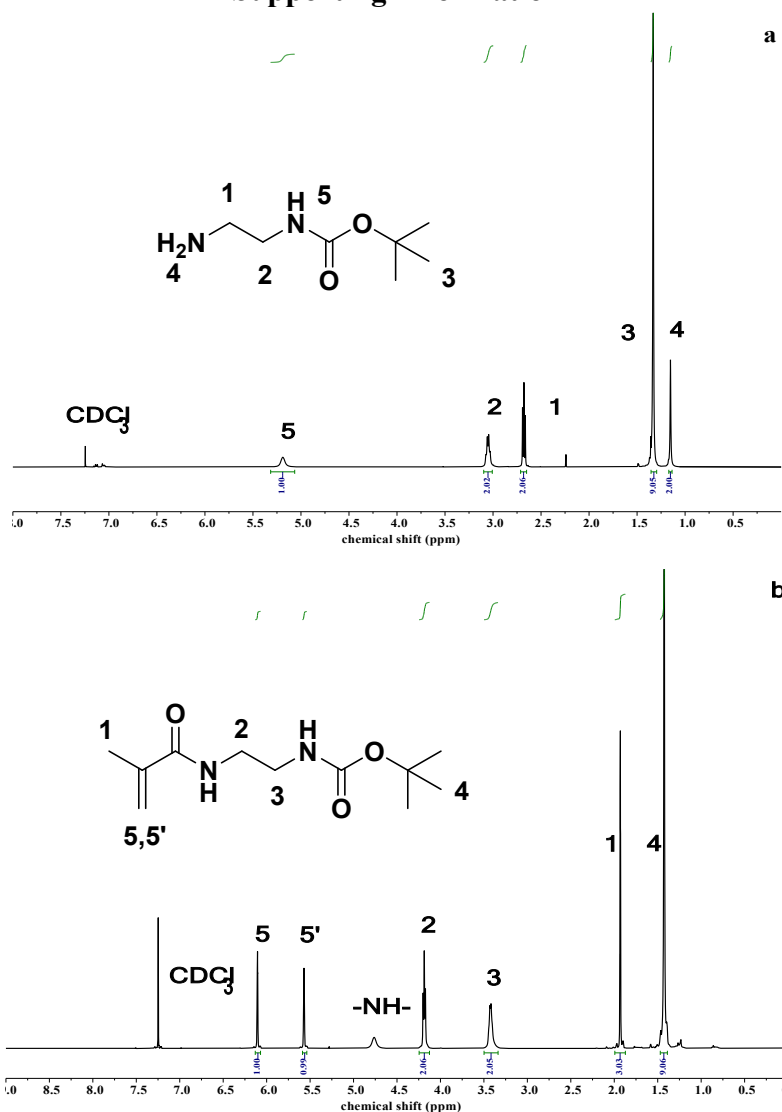


Fig. S1. ^1H NMR spectrum of BocEDA (a) and Boc-AEMA (b).

LJIE-4 #39 RT: 0.31 AV: 1 NL: 4.06E6
T: FTMS + p ESI Full ms [100.0000-1000.0000]

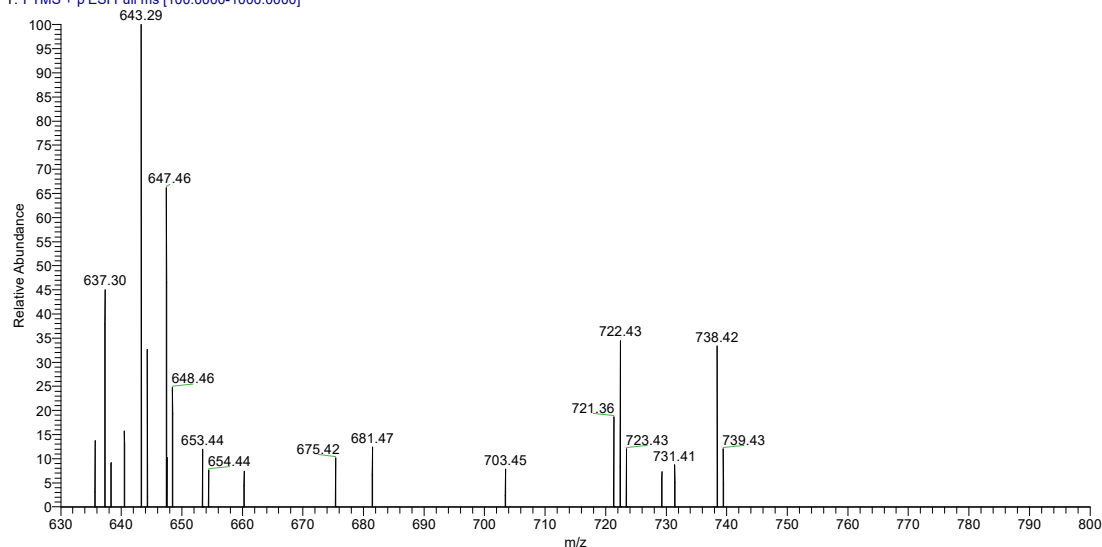


Fig. S2. The ESI-MS spectrum of the prodrug monomer MH-DOX.

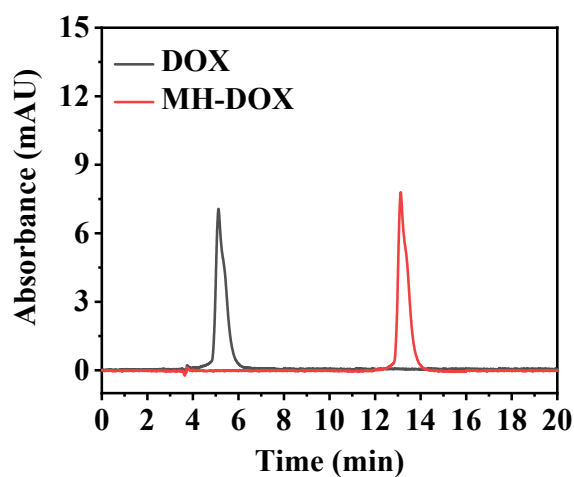


Fig. S3. Representative HPLC chromatograms of DOX and MH-DOX.

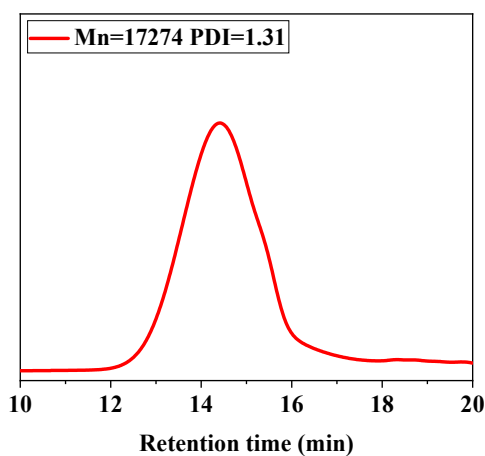


Fig. S4. GPC trace of the pH-responsive HBPP in DMF at 37 °C.

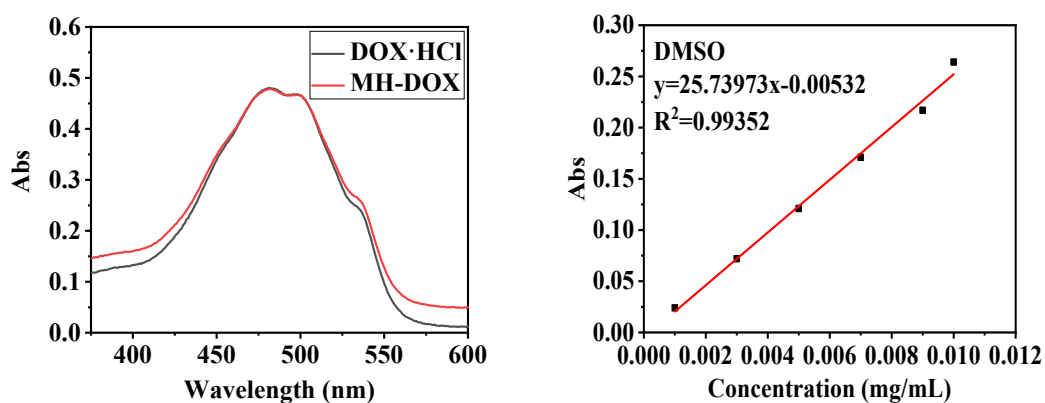


Fig. S5. UV-vis spectra of DOX·HCl (3.44×10^{-5} mmol/mL) and MH-DOX (3.44×10^{-5} mmol/mL) in DMSO and calibration curves of DOX·HCl in DMSO.

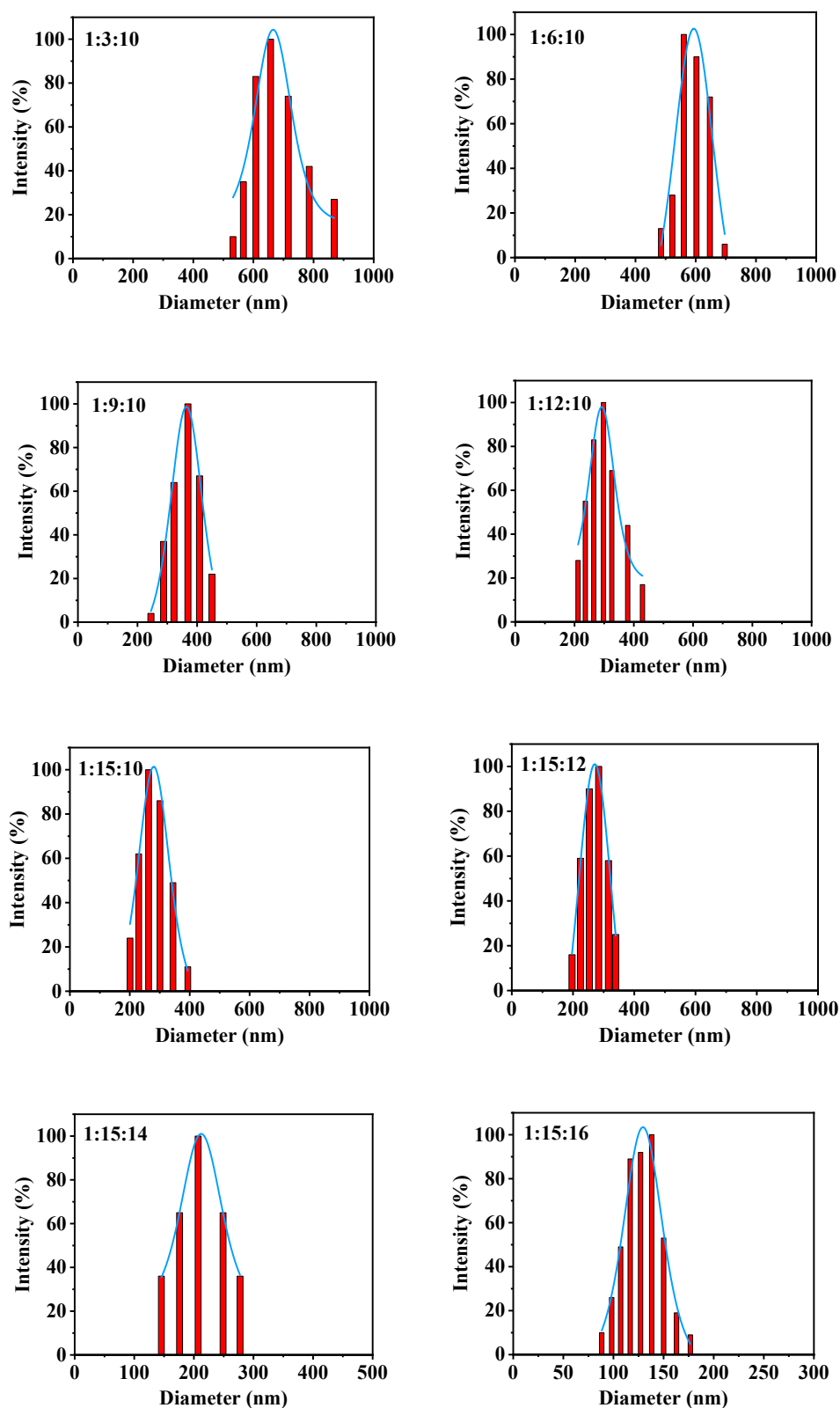


Fig. S6. DLS results of the HBPP micelles synthesized with different CMS: MH-DOX: PEGMA feeding ratios in water (0.01 mg/mL).

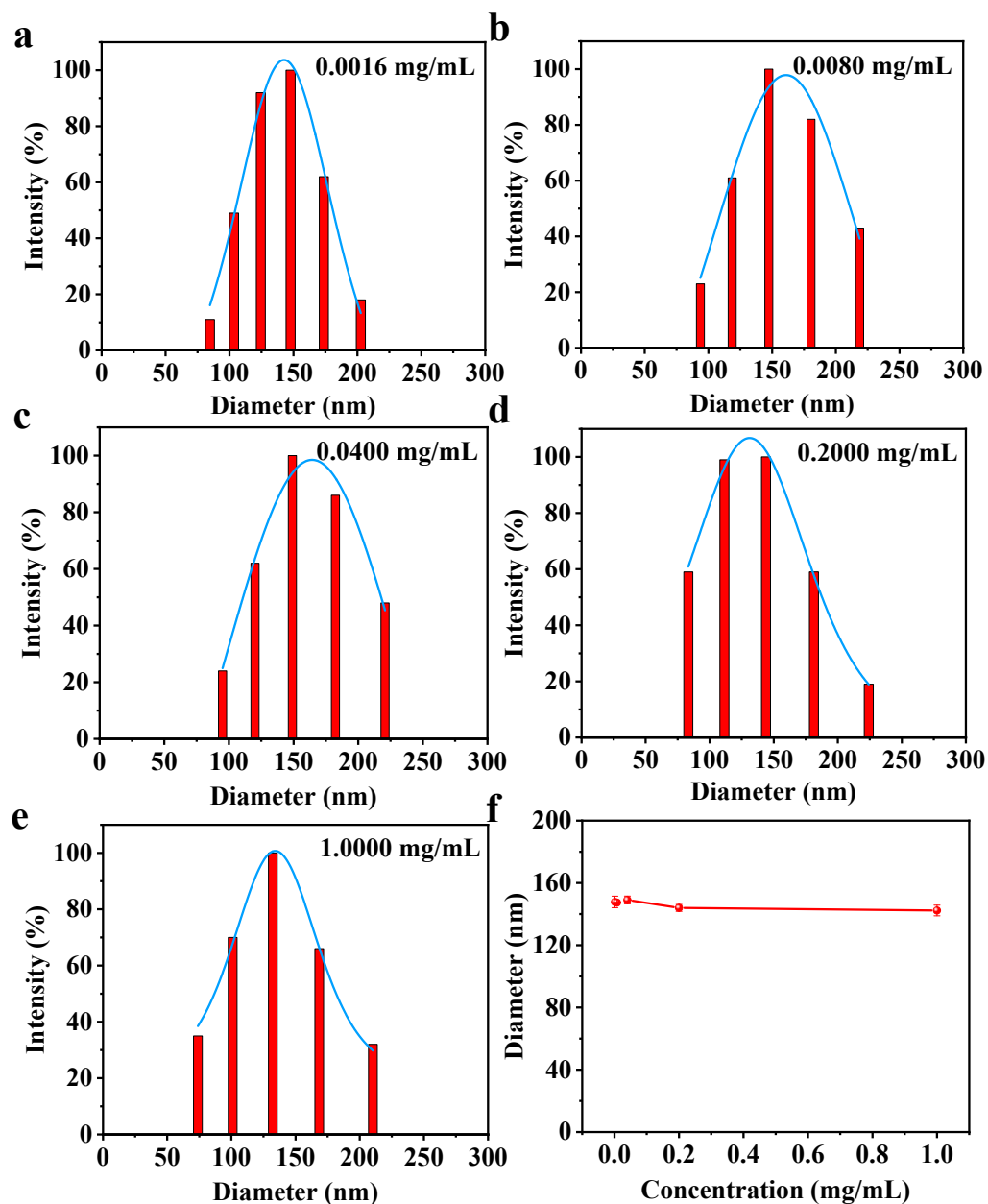


Fig. S7. Typical hydrodynamic diameter and distribution of the pH-responsive HBPP in pH 7.4 + 10% BSA at 37 °C with different concentrations for five days (a-e). The impact of concentration on the size in pH 7.4 + 10% BSA (f). Values are expressed as mean $\pm$ SD (n = 3).

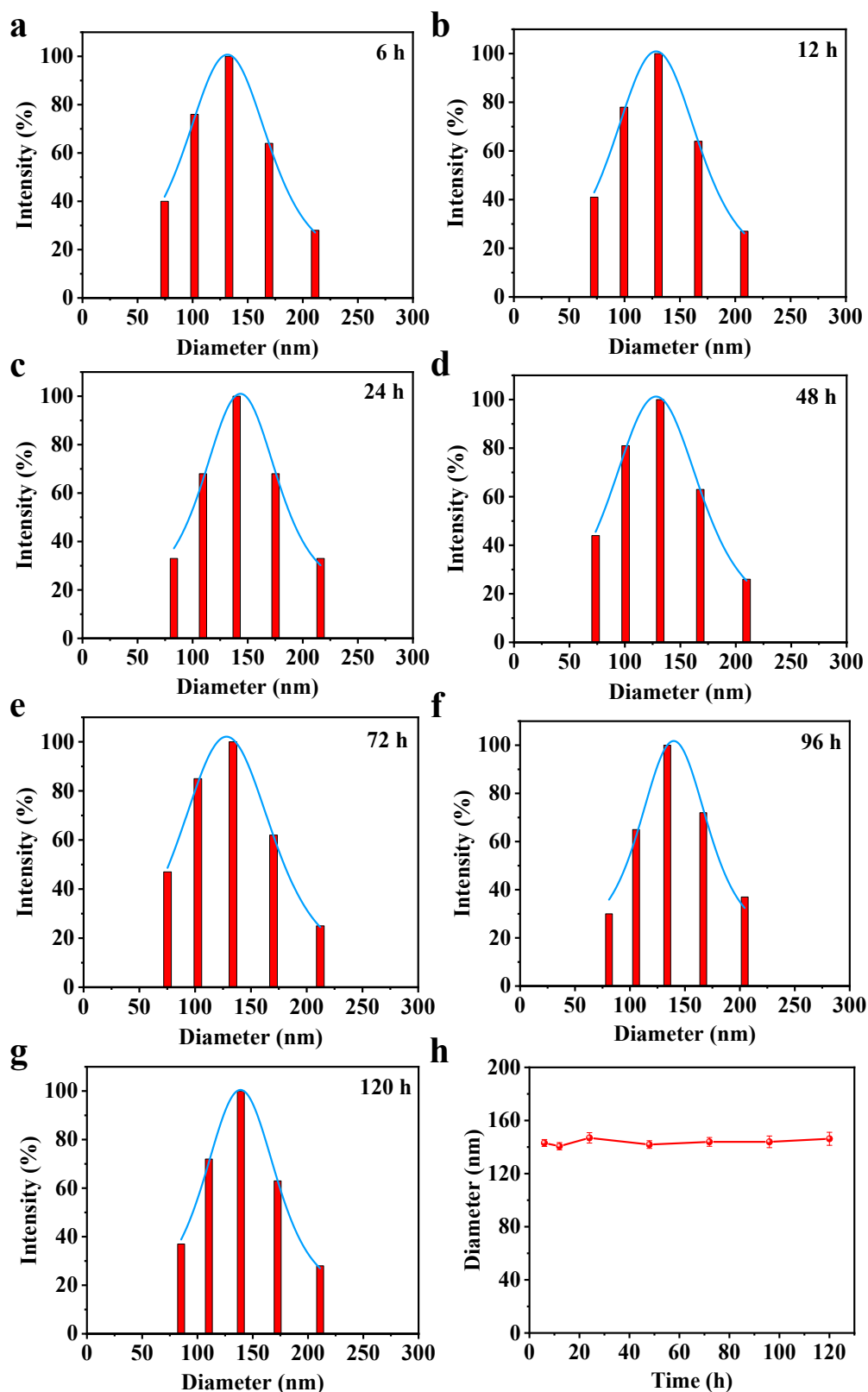


Fig. S8. Typical hydrodynamic diameter and distribution of the pH-responsive HBPP in pH 7.4 + 10% BSA at 37 °C for different times with 0.1 mg/mL (a-g). The changes of hydrodynamic sizes of the pH-responsive HBPP over time in pH 7.4 + 10% BSA medium (h). Values are expressed as mean $\pm$ SD (n = 3).

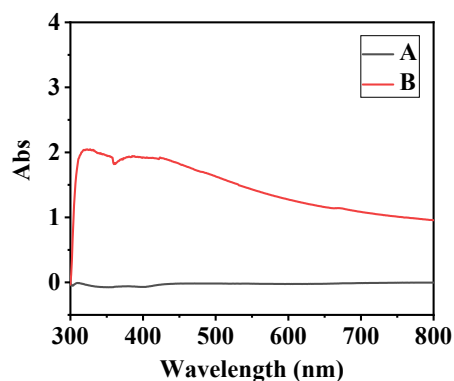


Fig. S9. UV-vis spectra of pH-responsive HBPP unimolecular micelles in pH 7.4 + 10% BSA (0.005 mg/mL) for five days (B) and the supernatant (A).

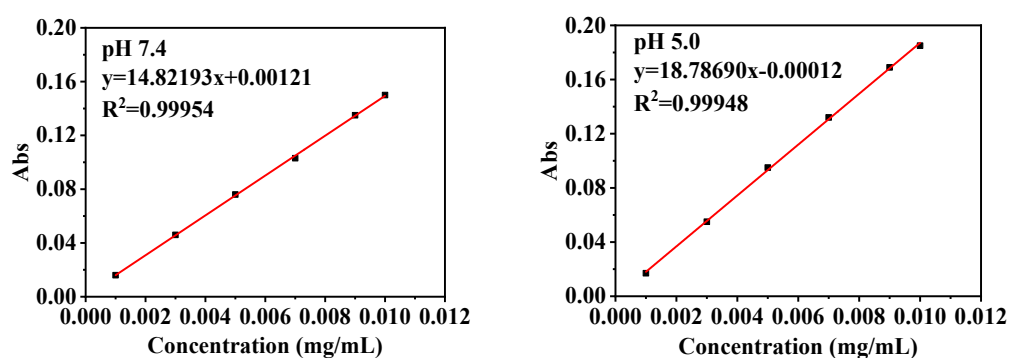


Fig. S10. Calibration curves of DOX·HCl in different buffer solutions.

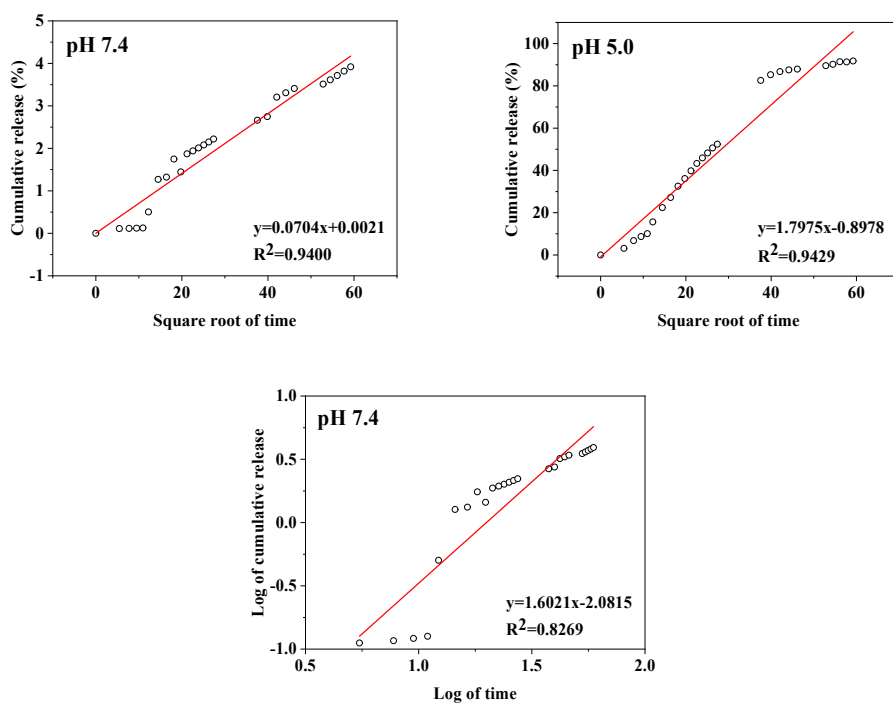


Fig. S11. Fitted plots of the DOX release from the pH-responsive HBPP unimolecular micelles in different media with Higuchi and Korsmeyer-Peppas models.