

# Supplementary Materials

## Reduction-Triggered Paclitaxel Release Nano-Hybrid System Based on Core-Crosslinked Polymer Dots with a pH-Responsive Shell-Cleavable Colorimetric Biosensor

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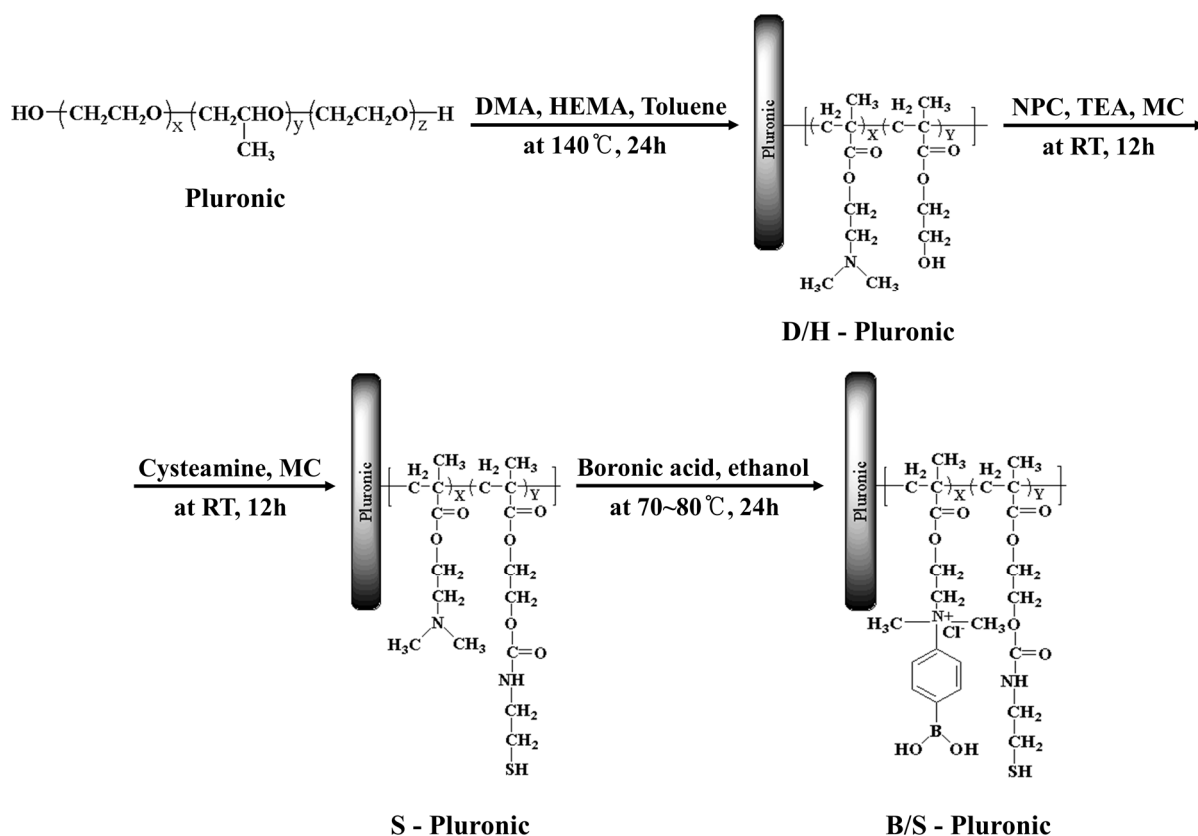
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Scheme S1. Synthesis of B/S Pluronic.

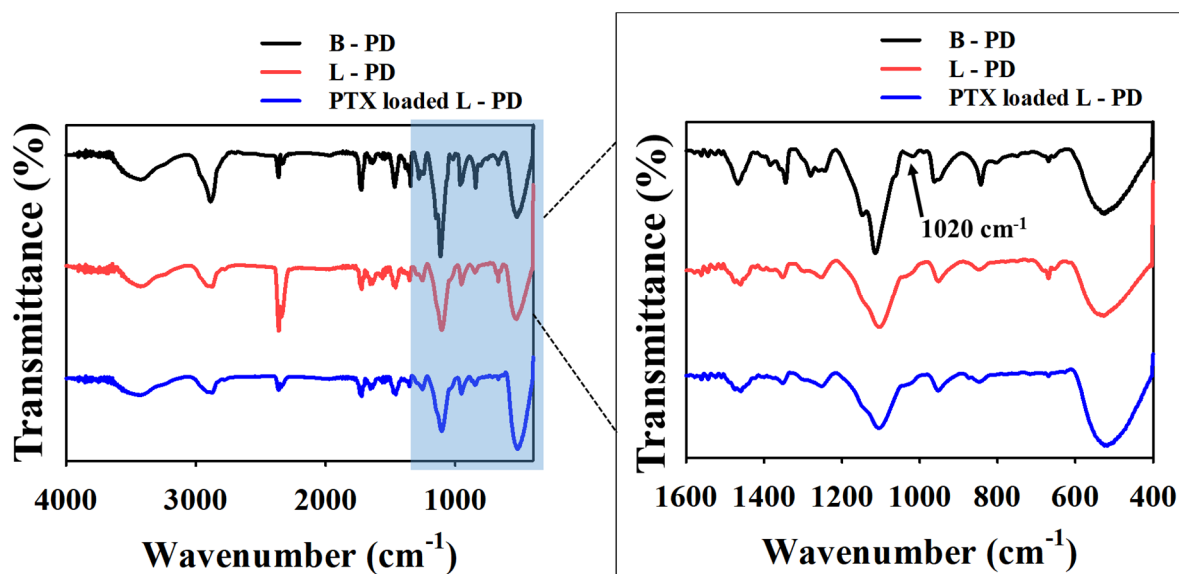


Figure S1. Fourier-transform Infrared (FT-IR) spectra of B-PD, L-PD, and PTX loaded L-PD.

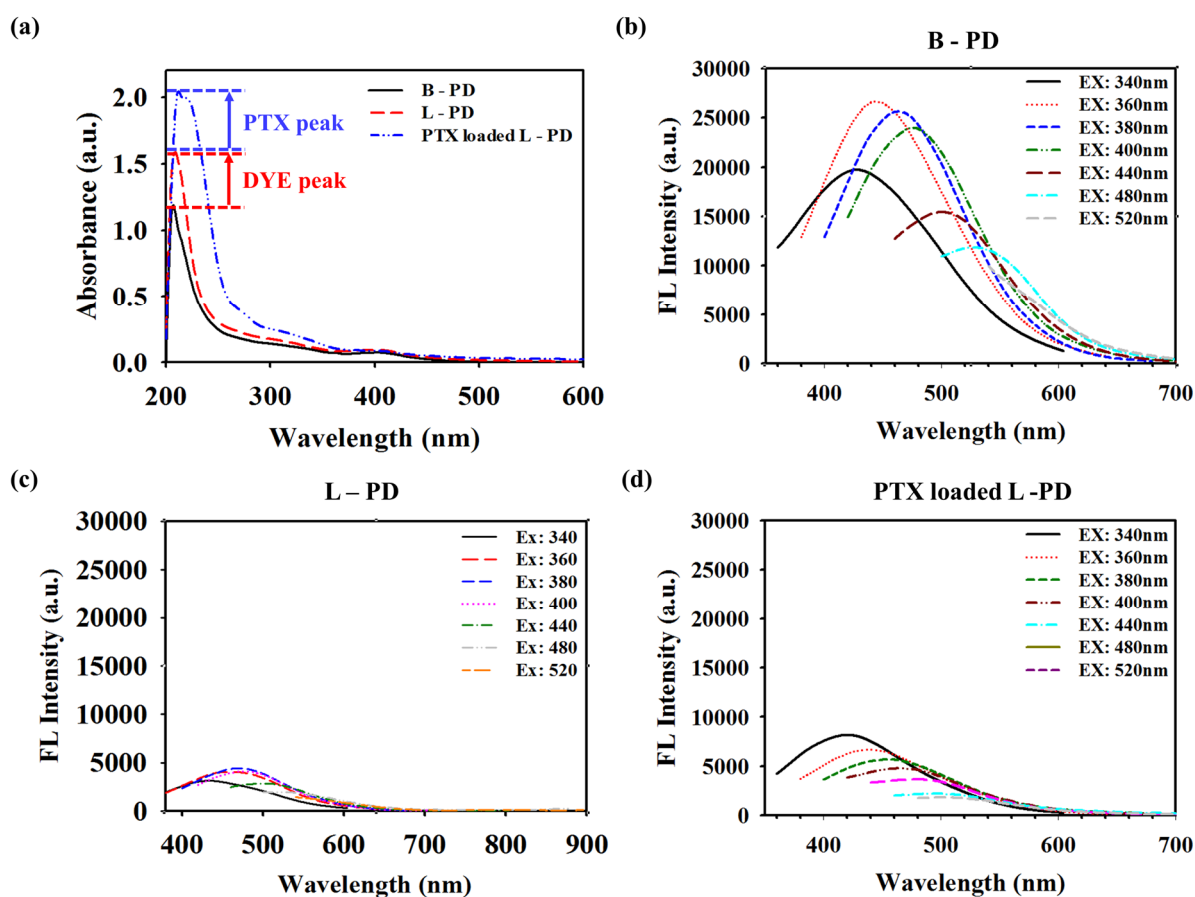


Figure S2. (a) UV-vis spectra of B-PD, L-PD, and PTX loaded L-PD (concentration 1 mg/mL). Photoluminescence spectra of (b) B-PD, (c) L-PD, and (d) PTX loaded L-PD.

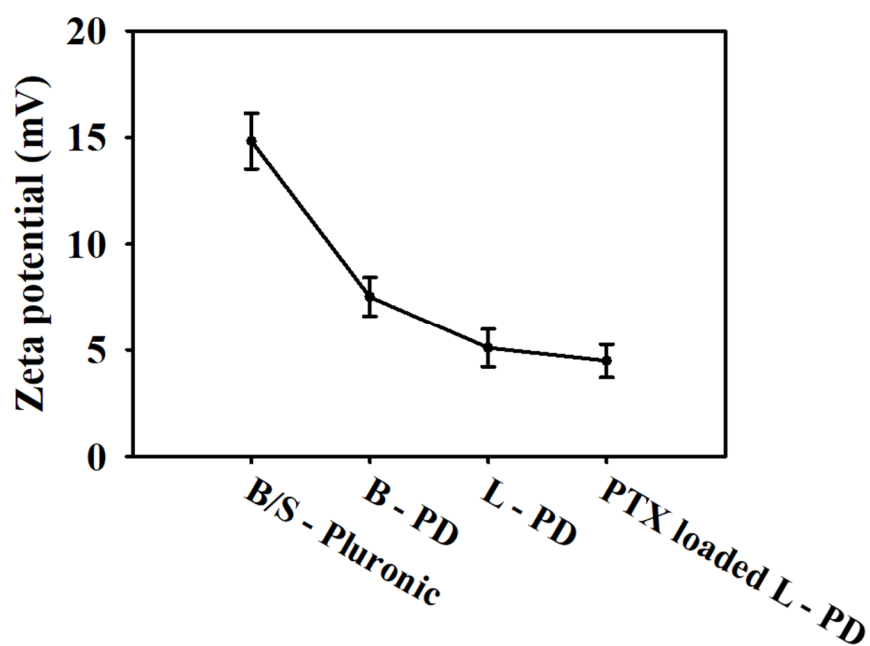


Figure S3. Zeta potentials of B/S-Pluronic, B-PD, L-PD, and PTX loaded L-PD in PBS pH 7.4 ( $n = 3$ ).

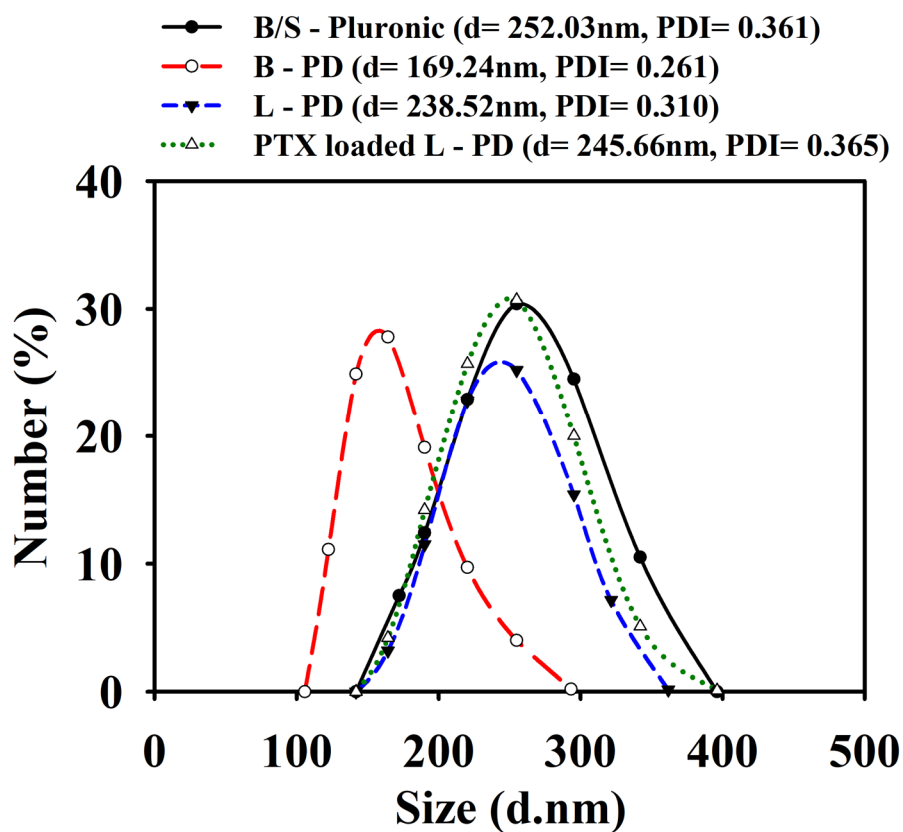
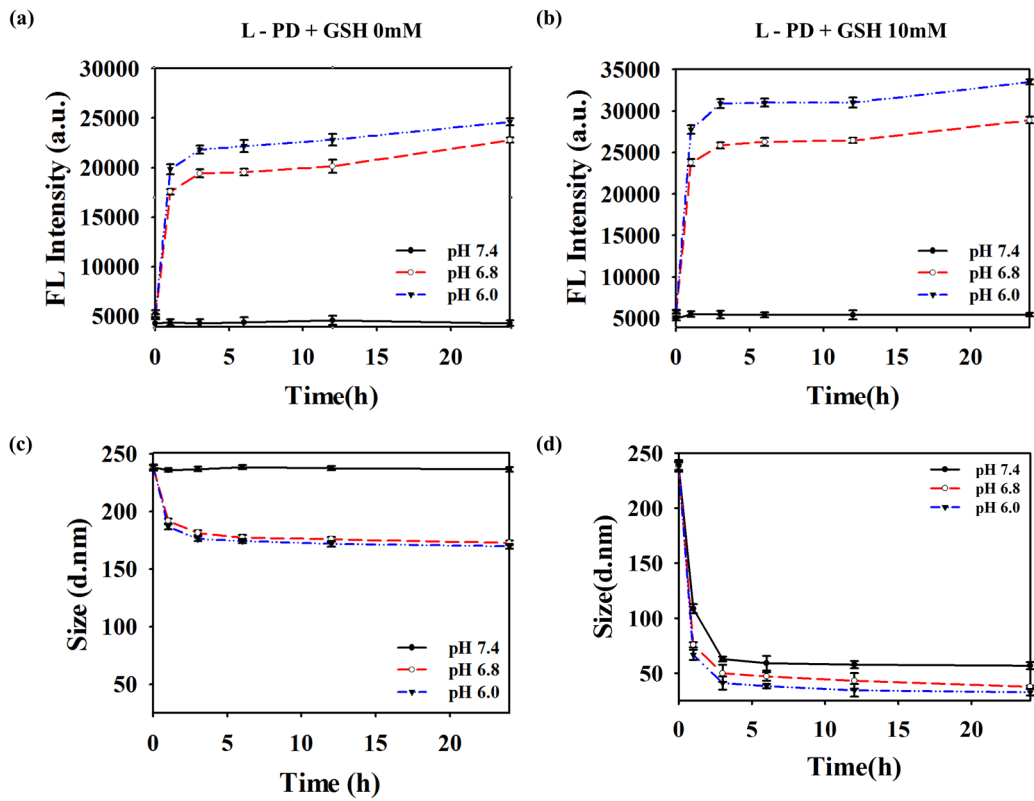
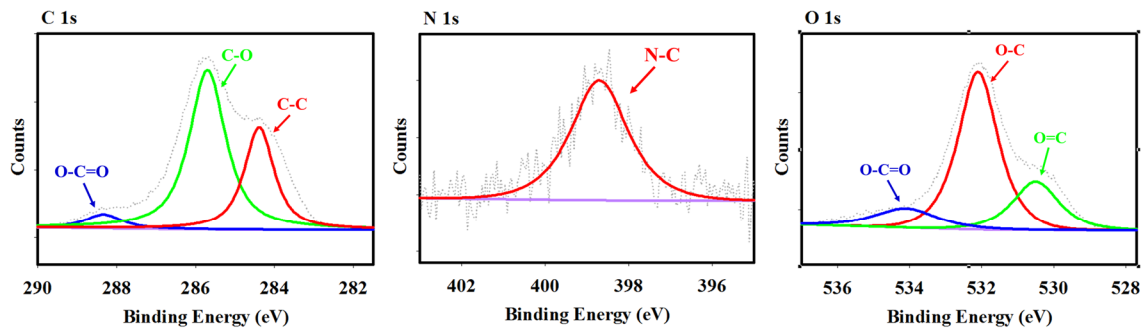


Figure S4. Average size distribution of of B/S-Pluronic, B-PD, L-PD, and PTX loaded L-PD in PBS solution pH 7.4 (Concentration: 0.5 mg/mL).

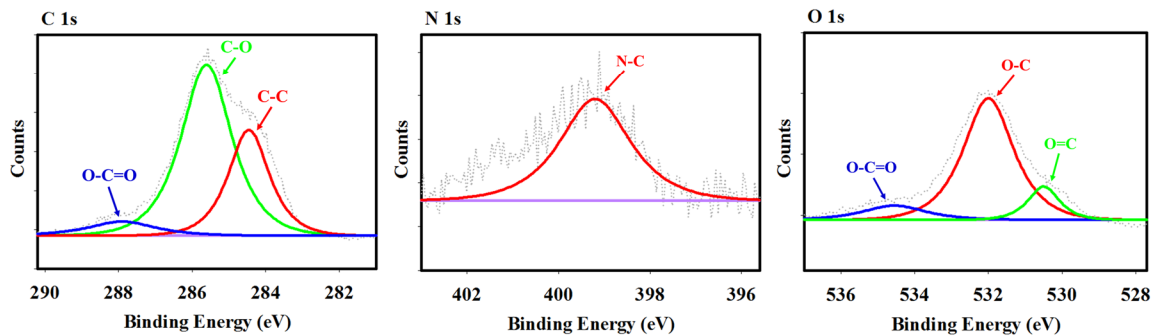


**Figure S5.** Luminescence intensity with excitation at  $\lambda = 360$  nm and (c,d) DLS measurements of L-PD at different GSH concentrations (0 and 10 mM GSH) and pH values (6.0, 6.8, and 7.4) over time ( $n = 3$ ).

**(a) PTX loaded L - PD**



**(b) PTX loaded L - PD after GSH and pH 6.8 treatment**



**Figure S6.** XPS narrow scan (C 1s, N 1s, and O 1s) of PTX loaded L-PD at pH 7.4 and 0 mM GSH (a) after treatment at pH 6.8 and 10 mM GSH (b).