Electronic Supplementary Information

Design and Construction of A Self-Hided and pH-Reversed Targeting Drug Delivery Nanovehicles via Non-Covalent Interactions for Overcoming Drug Resistance

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Figure S1. The synthesis route of Ad-lys(Diol)-PCL (A), PBA-PEG-CD (B) and PEG-CD (C).
Figure S2. $^1$H NMR spectra (300 MHz) of PCL-Alkyne.

Figure S3. FT-IR spectra of (A) PPA, CD-N$_3$, PBA-PEG-CD and (B) Ad-lys(Diol)-N$_3$, PCL-alkyne and Ad-lys(Diol)-PCL.
Figure S4. (A) The size change of PBA-PEG-CD/Ad-lys(Diol)-PCL in PBS (0.1 M, pH 7.4) solution for 7 days. (B) The size distribution profiles of PBA-PEG-CD/Ad-lys(Diol)-PCL at pH 7.4 and 6.5 determined by DLS.

Figure S5. The CAC of PBA-PEG-CD/Ad-lys(Diol)-PCL (A) and PEG-CD/Ad-lys(Diol)-PCL (B).
Figure. S6. Expression of P-glycoprotein (P-pg) in HepG2 and MCF-7/ADR cells. GAPDH was used as a control.

Figure S7. *In vitro* drug release of PBA-PEG-CD/Ad-lys(Diol)-PCL/Dox and PEG-CD/Ad-lys(Diol)-PCL/Dox at pH 7.4 and 6.5.