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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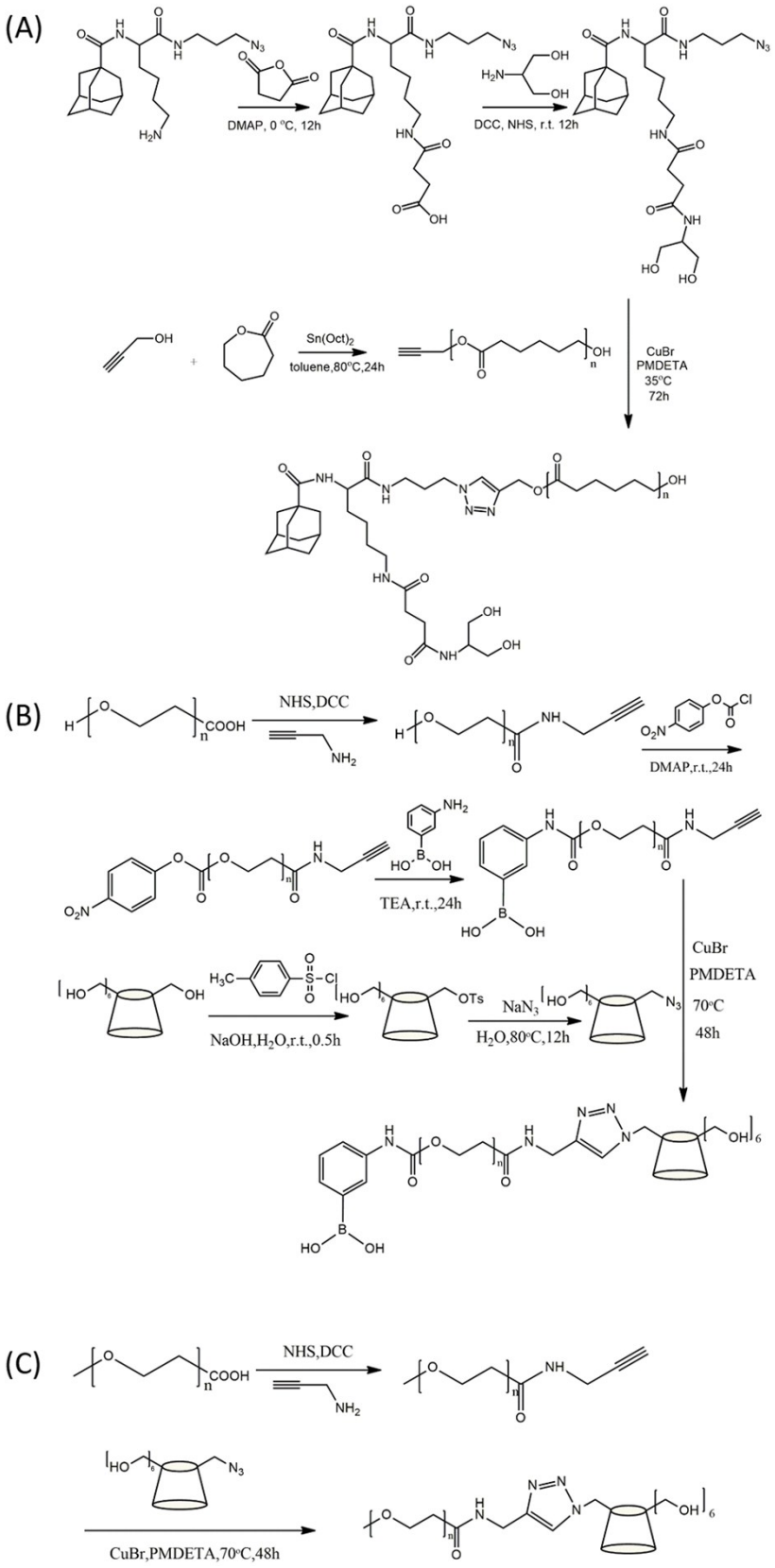

Figure S1. The synthesis route of Ad-lys(Diol)-PCL (A), PBA-PEG-CD (B) and PEG-CD (C).

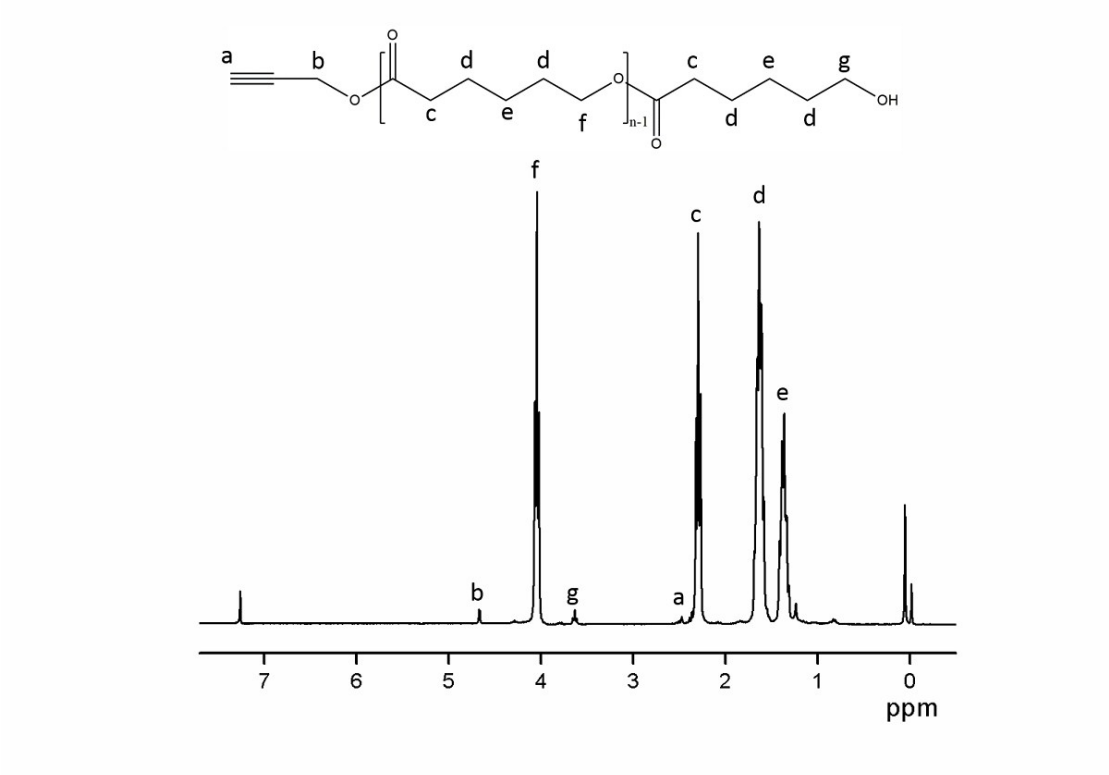

Figure S2. ^{1}H NMR spectra (300 MHz) of PCL-Alkyne.

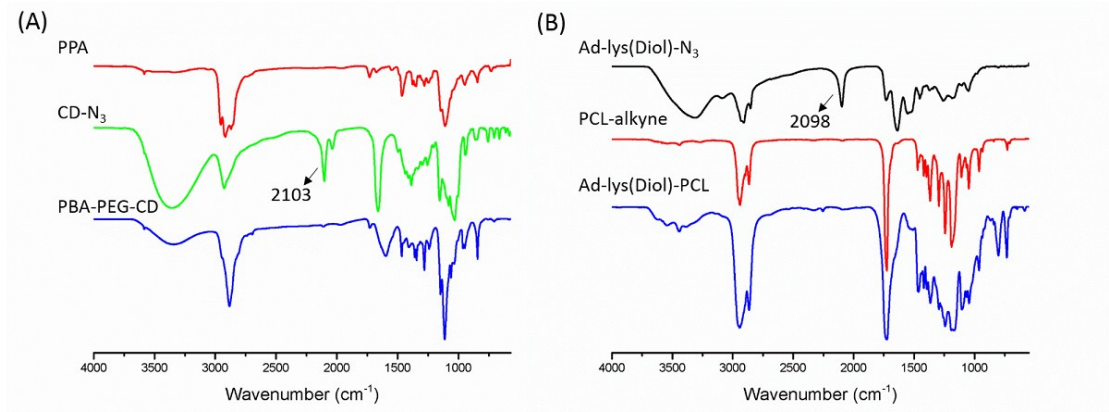

Figure S3. FT-IR spectra of (A) PPA, CD-N_3, PBA-PEG-CD and (B) Ad-lys(Diol)-N_3, PCL-alkyne and Ad-lys(Diol)-PCL.

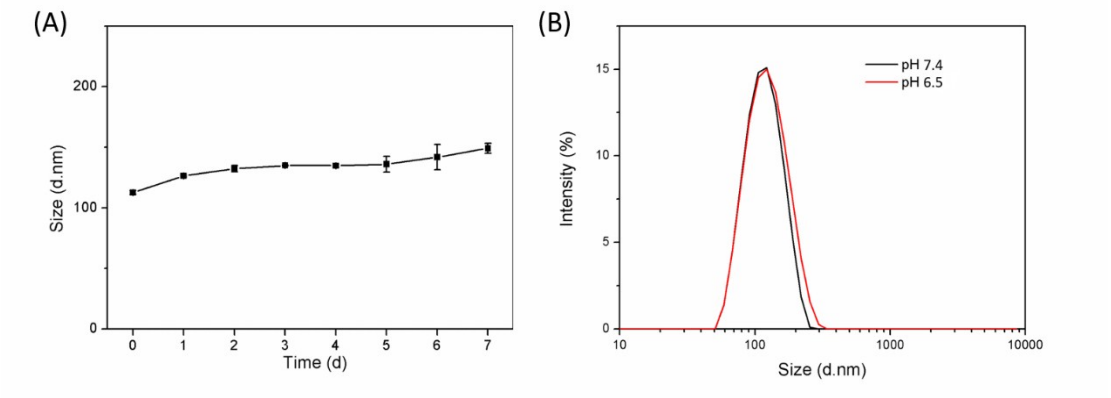

Figure S4. (A) The size change of PBA-PEG-CD/Ad-lys(Diol)-PCL in PBS (0.1 M, pH 7.4) solution for 7 days. (B) The size distribution profiles of PBA-PEG-CD/Ad-lys(Diol)-PCL at pH 7.4 and 6.5 determined by DLS.

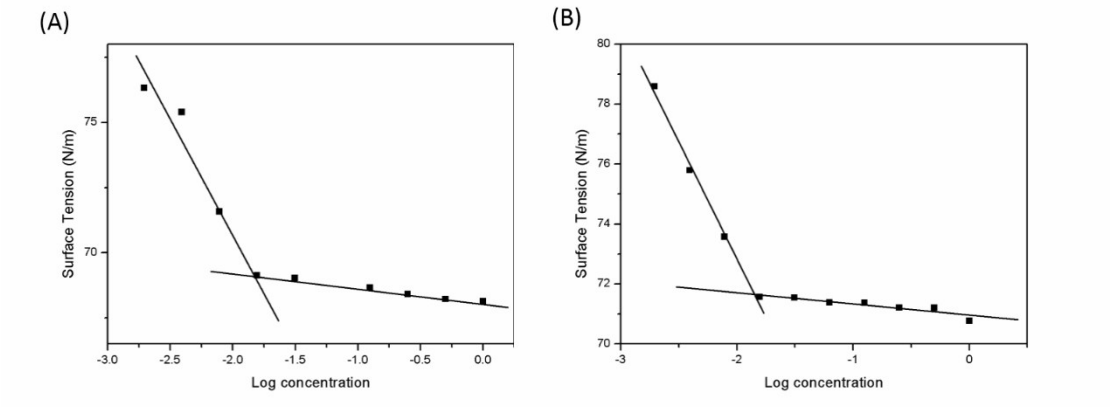

Figure S5. The CAC of PBA-PEG-CD/Ad-lys(Diol)-PCL (A) and PEG-CD/Ad-lys(Diol)-PCL (B).

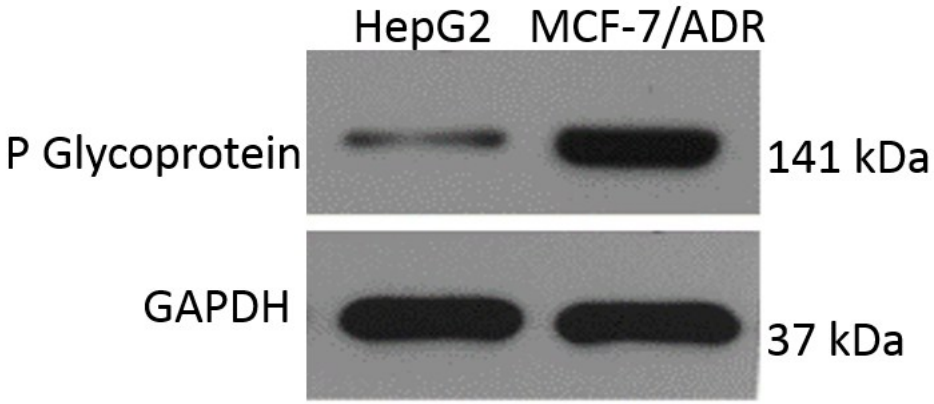

Figure. S6. Expression of P-glycoprotein (P-pg) in HepG2 and MCF-7/ADR cells. GAPDH was used as a control.

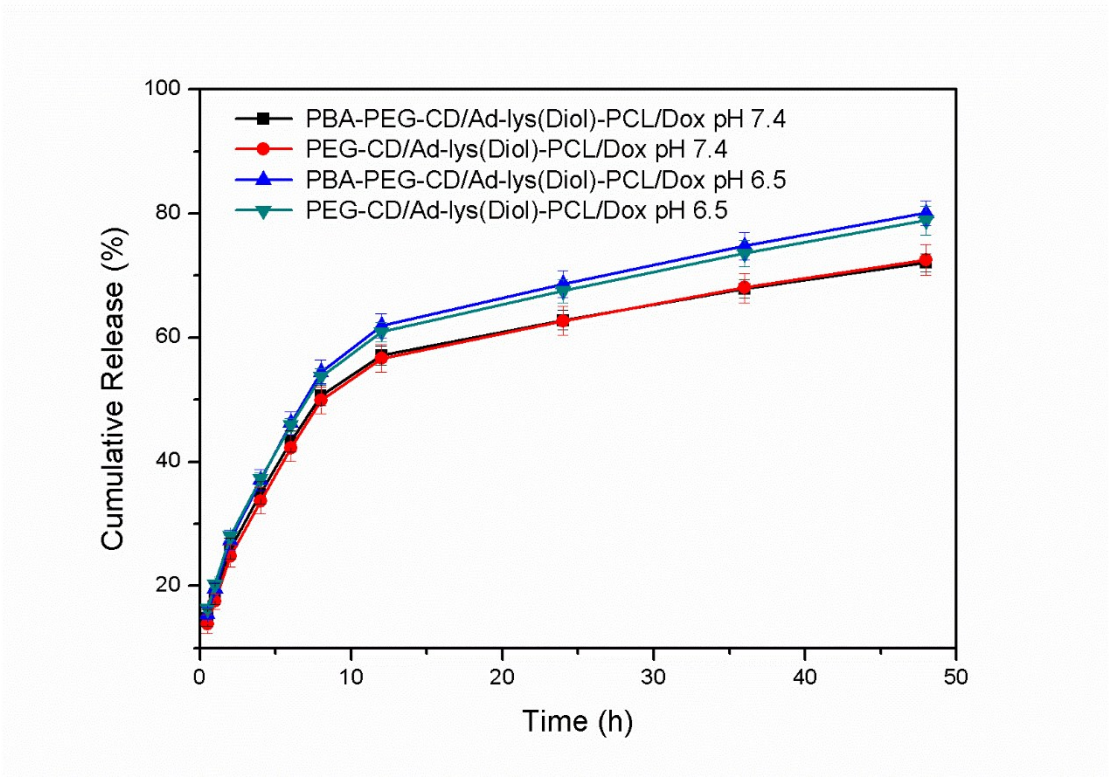

Figure S7. *In vitro* drug release of PBA-PEG-CD/Ad-lys(Diol)-PCL/Dox and PEG-CD/Ad-lys(Diol)-PCL/Dox at pH 7.4 and 6.5.