

Supporting Information

Hydrolysable core crosslinked particle for receptor-mediated pH-sensitive anticancer drug delivery

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Results

Table S1 Polymer properties including number average molecular weight (M_n), weight average molecular weight (M_w), polydispersity index (PDI), glass transition temperature (T_g) and degradation temperature (T_d) for copolymers.

Polymers	M_n (g mol ⁻¹)	M_w (g mol ⁻¹)	PDI	T_g (°C)	T_d (°C)
PPF	4400	10900	2.4	9.7	390.2
PPF-PLGA	13200	37400	2.8	38.8	275.8
PPF-PLGA-PEG	14400	32700	2.3	27.5	358.5
PPF-PLGA-PEG-FA	14900	33000	2.2	33.8	359.0

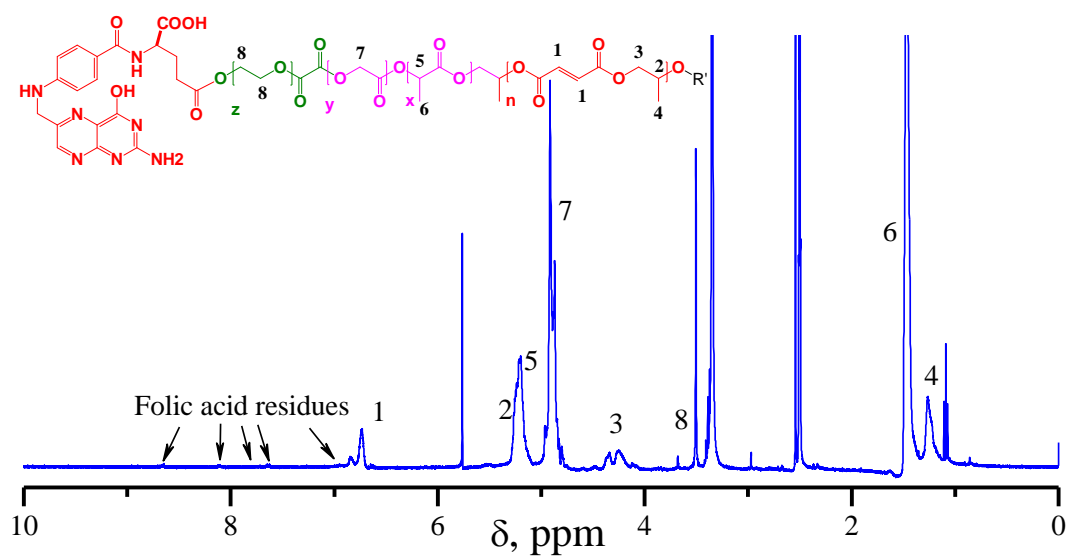


Fig. S1 The ¹H NMR spectrum of synthesized PPF-PLGA-PEG-FA copolymer in DMSO-*d*₆ solvents.

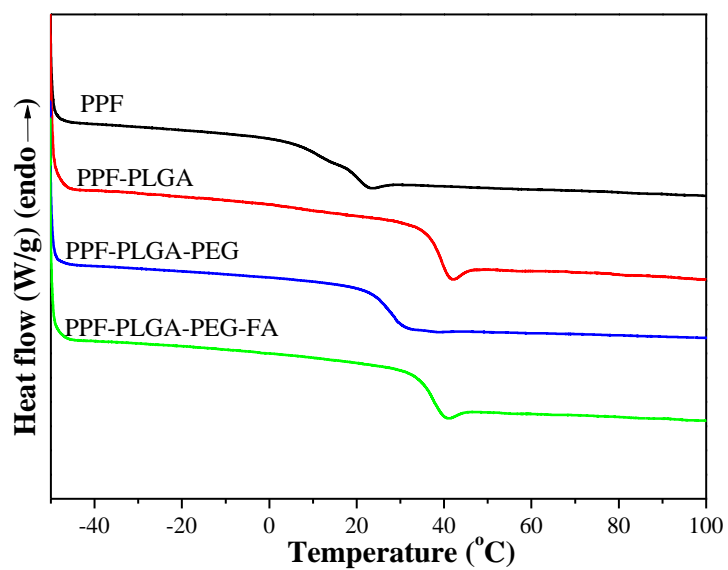


Fig. S2 DSC curves of copolymer chains determined at a heating rate of 5 °C min⁻¹.

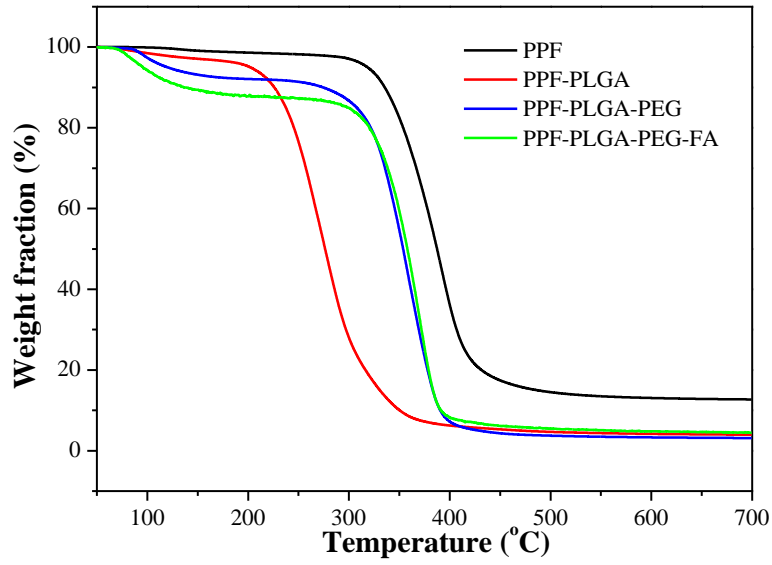


Fig. S3 TGA curves of copolymer chains determined from room temperature to 700 °C at a heating rate of 20 °C min⁻¹.

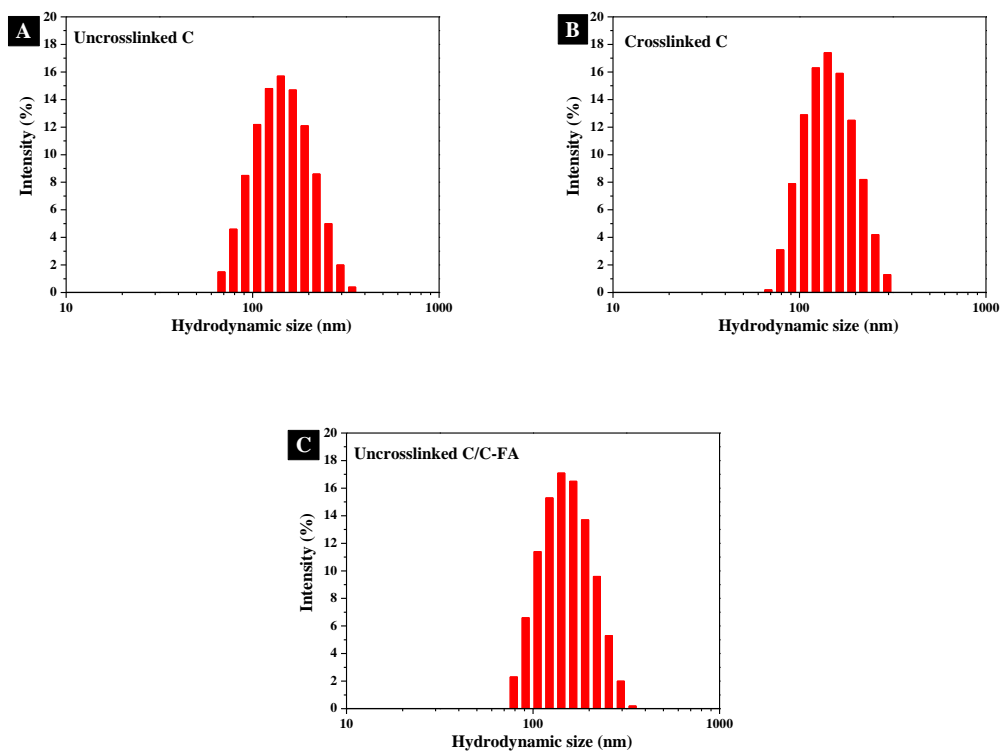


Fig. S4 Hydrodynamic size distributions of uncrosslinked C, crosslinked C, and uncrosslinked C/C-FA micelles.

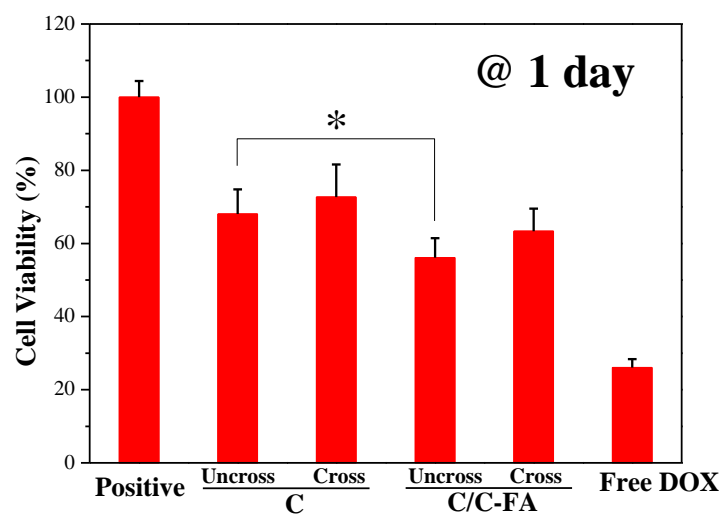


Fig. S5 HeLa cancer cell viabilities quantified at 1 days culture with DOX loaded micelles or free DOX at a concentration of $5 \mu\text{g mL}^{-1}$. * $p < 0.05$ analyzed by One-Way ANOVA test.

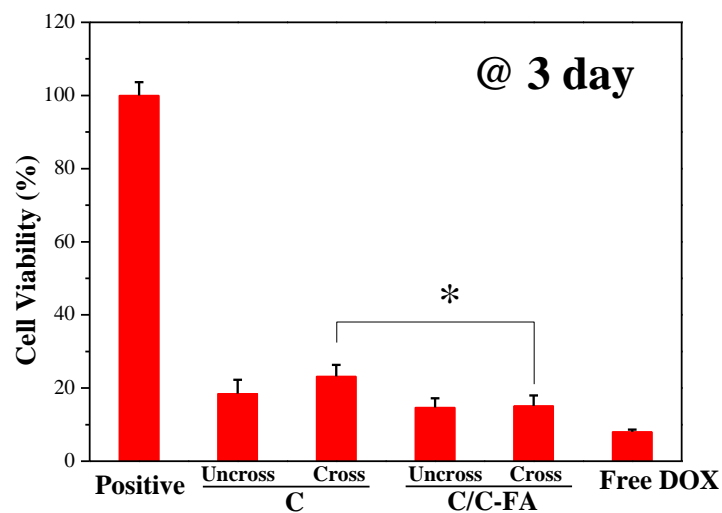


Fig. S6 HeLa cancer cell viabilities quantified at 3 days culture with DOX loaded micelles or free DOX at a concentration of $5 \mu\text{g mL}^{-1}$ DOX. This test is to confirm the trend determined in cell viability under varied DOX concentrations ($0.01\text{--}50 \mu\text{g mL}^{-1}$) and to substantiate the cell number changes observed by fluorescent microscope. * $p < 0.05$.