Electronic Supplementary Information (ESI)

Fibril-shaped aggregates of doxorubicin with poly-L-lysine and its derivative

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Supplementary Figures and Table

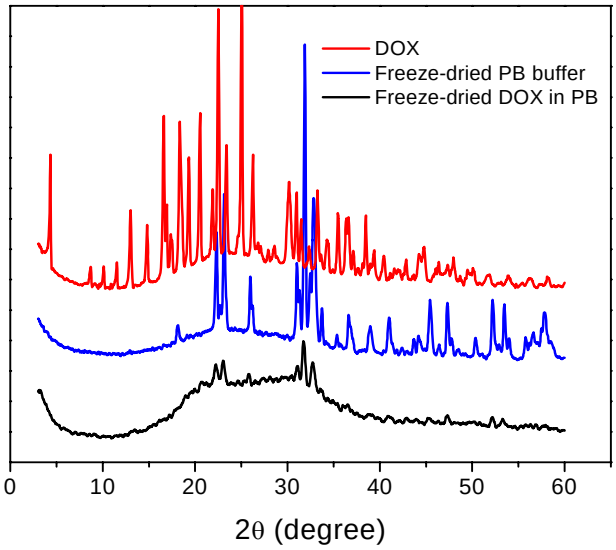
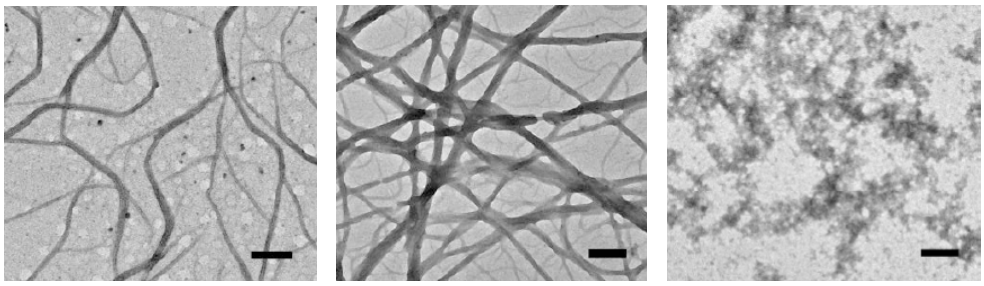


Figure S1 X-ray diffraction of freeze-dried water solution of DOX (red line), PB buffer (blue line) and buffer solution of DOX (black line). Before freeze-dry, the concentration of PB buffer and DOX is 10 mM and 300 μg/mL (0.5 mM) respectively.



(a) (b) (c)

Figure S2 TEM images of PLL/DOX complexes (1/1, w/w) in 10 mM PB buffer at pH 5.0 (a), 7.4 (b) and 10.0 (c). The concentration of DOX is 300 μg/mL (0.5 mM). Scale bars represent 200 nm.

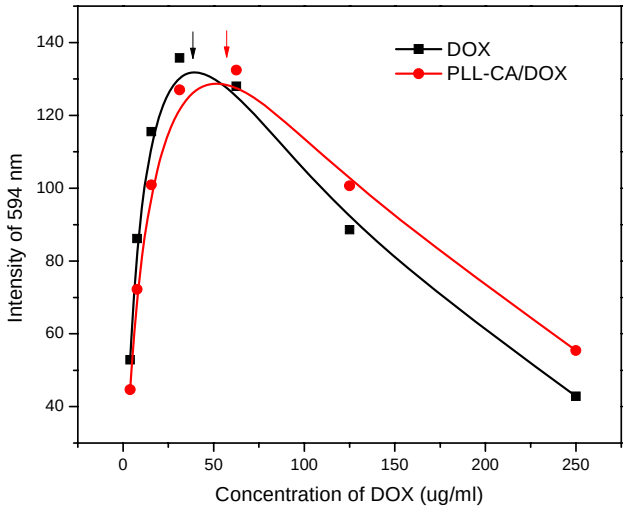


Figure S3 Fluorescence intensity of DOX and PLL-CA/DOX as a function of drug concentration in PB buffer (10 mM, pH 7.4). The weight ratio of PLL-CA/DOX was 1:0.5, and the excitation wavelength was 485 nm.

Supplementary Table

Table S1. Average width and length of PLL-CA/DOX aggregates measured from TEM images

PLL-CA / DOX (w/w)	Width / nm	Length / nm
1:0.33	240±4	525±30
1:0.5	204±14	554±24
1:0.75	100±9	615±42
1:1	93±7	Fibril
1:3	54±4	Fibril