Supporting Information

Synergistically Enhanced Antimetastasis Effects by Honokiol-Loaded pH-Sensitive Polymer-Doxorubicin Conjugate Micelles

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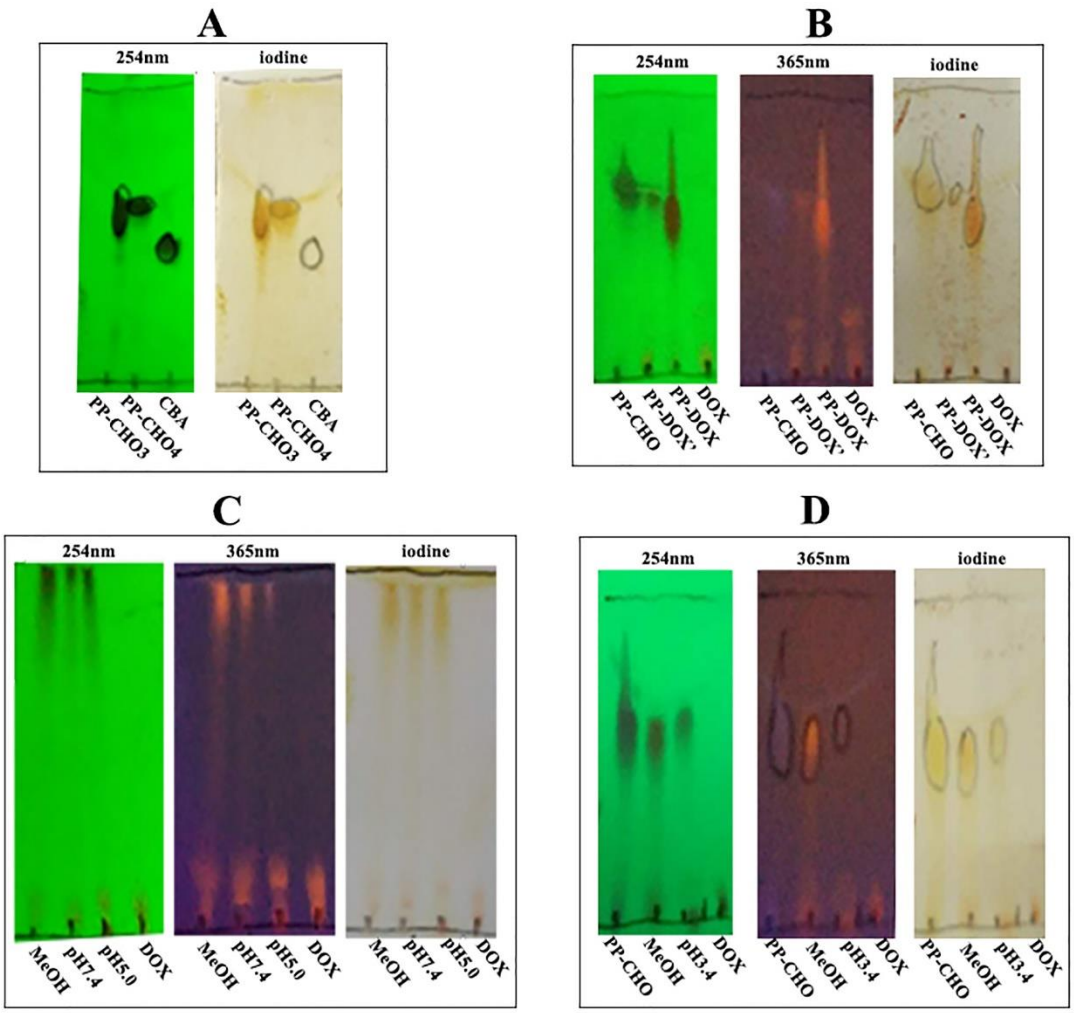

Figure S1. (A) Thin layer chromatograms (TLC) of PEOz-PLA-CHO purified in ether for three (PP-CHO3) and four (PP-CHO4) times and 4-Carboxybenzaldehyde (CBA). (B) TLC of PEOz-PLA-CHO (PP-CHO), PEOz-PLA-imi-DOX before (PP-DOX') and after (PP-DOX) applied to Sephadex LH-20 column, and DOX. PEOz-PLA-CHO and PEOz-PLA-imi-DOX were developed to be yellow spots by iodine. PEOz-PLA-CHO and CBA showed fluorescence quenching under 254 nm UV lamp, PEOz-PLA-imi-DOX and DOX showed fluorescence under 365 nm UV lamp. TLC of PEOz-PLA-imi-DOX following hydrolysis for 24 h at pH 5.0 and pH 7.4 (C), and 5 min at pH 3.4 (D). PEOz-PLA-imi-DOX was dissolved in methanol (MeOH) and buffer solution with different pH (ABS with pH 3.4 and 5.0, and PBS with pH 7.4).

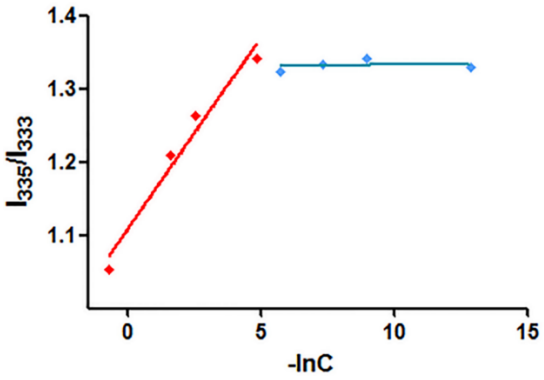

Figure S2. Plot of the ratio of fluorescence intensity at 335 nm to that at 333 from pyrene as a function of ln(1/C) for PEOz-PLA-imi-DOX in distilled water.

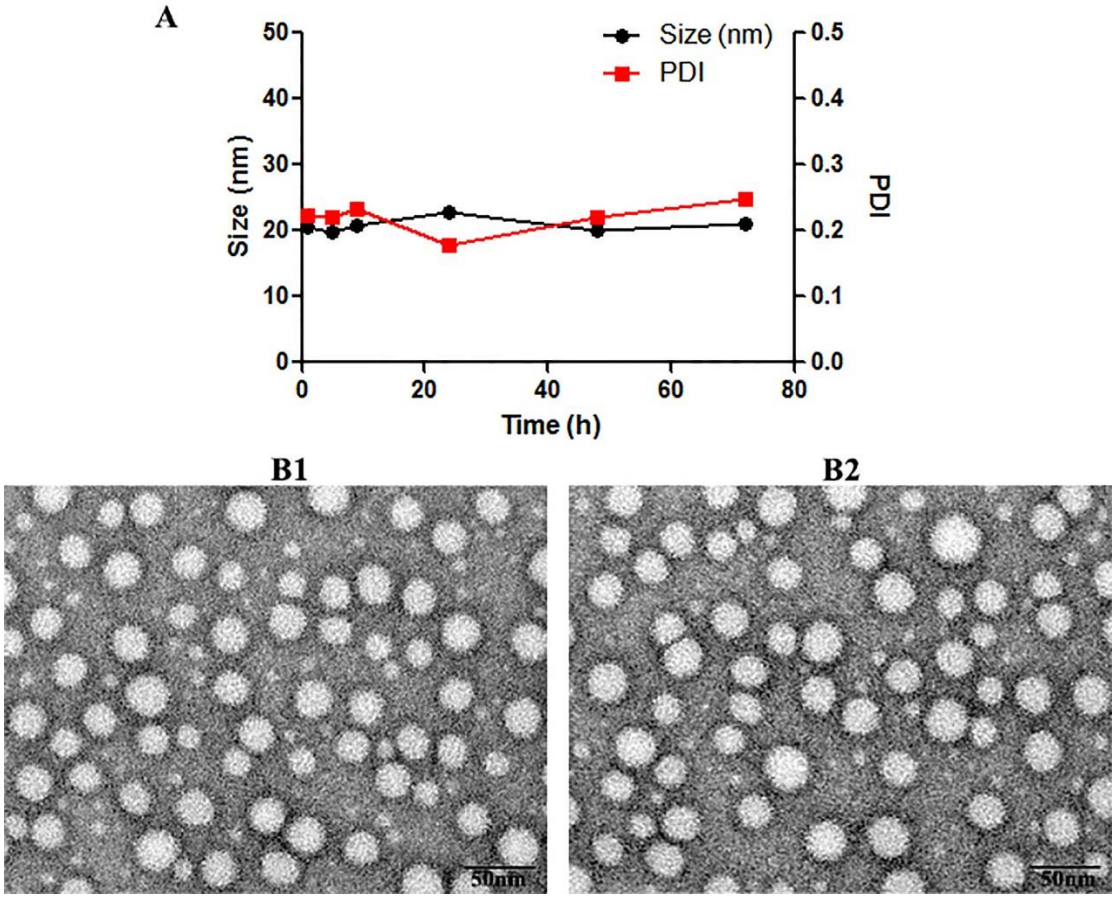

Figure S3. Changes in particle size and its distribution (A) and morphology (B) of HNK5/PP-DOX1-PM in PBS (pH 7.4) with time at 37°C. TEM images were obtained at 0 h (B1) and 72 h (B2).

Table S1. The Blood Routine Index of BABL/C Nude Mice Injected MDA-MB-231-Luc-GFP Cells After Treatment with Various Micellar Formulations.

Blood routine index	Saline	HNK5+DOX1/PP-PM	HNK5/PP-DOX1-PM
GR (10^9/L)	2.98 ± 0.93	3.36 ± 1.29	2.51 ± 1.53
GR% (%)	36.25 ± 11.32	54.74 ± 16.29	52.33 ± 10.24
HCT (%)	47.68 ± 1.20	40.40 ± 2.72	37.43 ± 5.68
HGB (g/L)	150.50 ± 5.24	125.20 ± 8.37	121.16 ± 18.40
LY (10^9/L)	4.78 ± 1.41	2.46 ± 1.04	1.78 ± 0.51
LY% (%)	57.48 ± 10.67	40.68 ± 15.46	42.26 ± 10.51
MCH (pg)	15.15 ± 0.54	14.48 ± 0.60	14.51 ± 0.54
MCHC (g/L)	315.50 ± 8.02	309.80 ± 9.62	323.83 ± 9.98
MCV (fL)	47.98 ± 2.08	46.66 ± 1.62	44.93 ± 1.45
MO (10^9/L)	0.51 ± 0.12	0.28 ± 0.08	0.23 ± 0.12
MO% (%)	6.27 ± 1.09	4.58 ± 1.31	5.40 ± 2.09
MPV (fL)	5.68 ± 1.05	4.94 ± 0.11	5.30 ± 0.11
PCT (%)	0.19 ± 0.09	0.26 ± 0.05	0.21 ± 0.05
PDW (fL)	13.62 ± 0.94	13.24 ± 0.29	13.86 ± 0.58
PLT (10^9/L)	371.83 ± 173.28	526.80 ± 100.77 [a,c]	399.50 ± 95.27[b]
RBC (10^{12}/L)	9.95 ± 0.60	8.64 ± 0.74	8.32 ± 1.22
RDW (%)	13.40 ± 1.13	13.08 ± 0.76	12.50 ± 0.23
WBC (10^9/L)	8.28 ± 1.38	6.10 ± 0.94	4.53 ± 2.06

[a] $p<0.001$,[b] $p>0.05$, vs saline;

[c] $p<0.001$, vs HNK5/PP-DOX1-PM.