

Supplementary Information

Nanoprodrug of retinoic acid-modified paclitaxel

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¹H NMR data

¹H NMR (400 MHz, CDCl₃) δ 8.13 (d, J = 7.5 Hz, 2H), 7.81 - 7.33 (m, 13H), 7.15 - 7.01 (m, 1H), 6.97 (d, J = 8.3 Hz, 1H), 6.40 - 6.10 (m, 5H), 5.93 (s, 1H), 5.84 (s, 1H), 5.69 (d, J = 7.2 Hz, 1H), 5.54 (s, 1H), 4.98 (d, J = 9.2 Hz, 1H), 4.46 (s, 1H), 4.32 (d, J = 8.0 Hz, 1H), 4.20 (d, J = 7.7 Hz, 1H), 4.17 - 4.09 (m, 1H), 3.82 (d, J = 6.9 Hz, 1H), 2.93 (d, J = 30.5 Hz, 1H), 2.64 - 2.51 (m, 1H), 2.45 (d, J = 9.5 Hz, 3H), 2.40 - 2.28 (m, 3H), 2.23 (s, 3H), 2.00 (dd, J = 22.2, 9.8 Hz, 8H), 1.70 (d, J = 14.1 Hz, 6H), 1.31 - 1.20 (m, 10H), 1.14 (s, 4H), 1.03 (s, 6H).

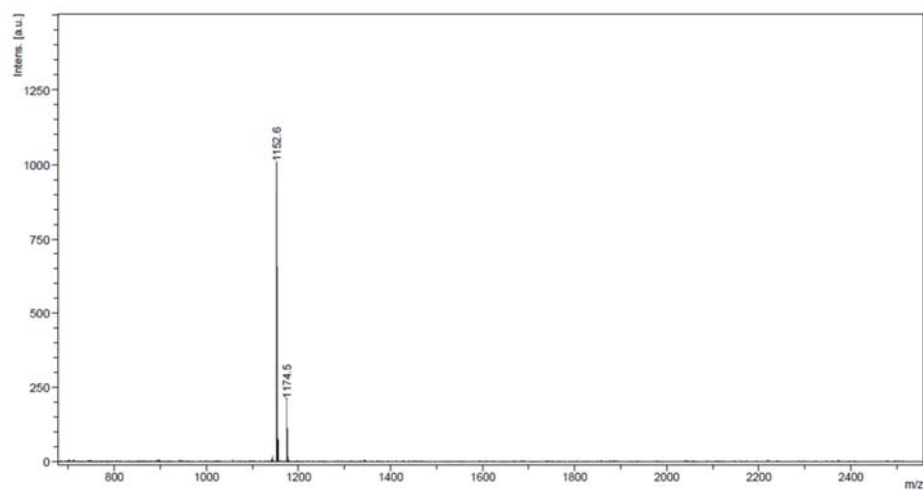


Fig. S1 MALDI-TOF MS spectrum of RA-PTX.

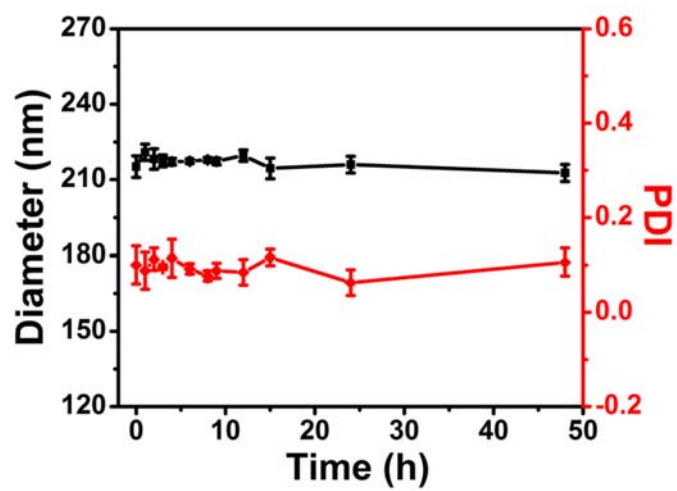


Fig. S2 Changes of the diameter and PDI of RA-PTX NPs incubated in PBS (pH 7.4) containing 10% FBS as a function of time measured by DLS.

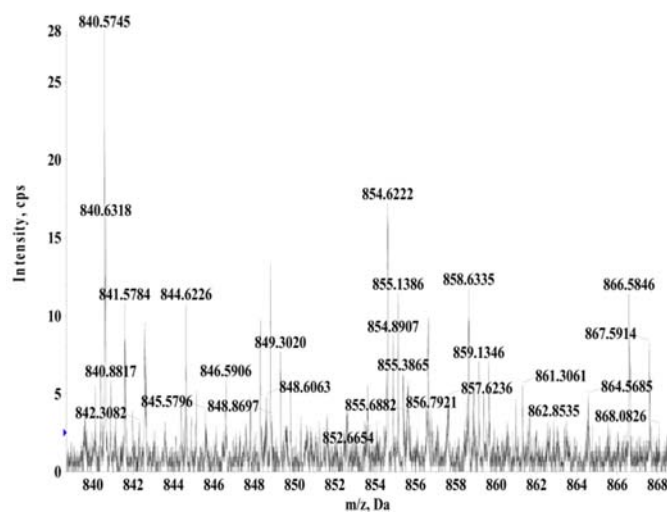


Fig. S3 Mass spectra of cell lysate of MCF-7 cells being incubated with RA-PTX NPs at 37 °C for 4 h.