

Supporting Information

Transcytosable Peptide-Paclitaxel Prodrug Nanoparticle for Targeted Treatment of Triple-Negative Breast Cancer

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TAR/NRP-1 $K_D = 3.397 \times 10^{-8} M$

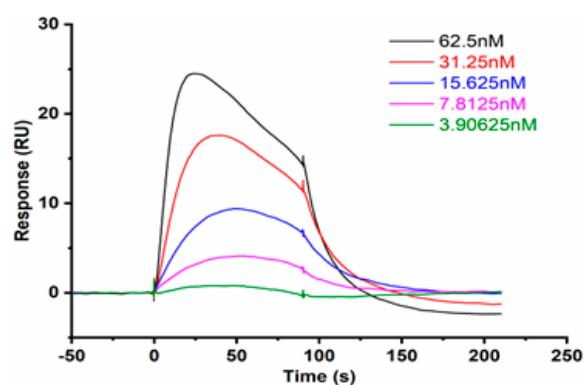


Figure S1. The binding curves for TAR peptide to the recombinant proteins NRP-1.

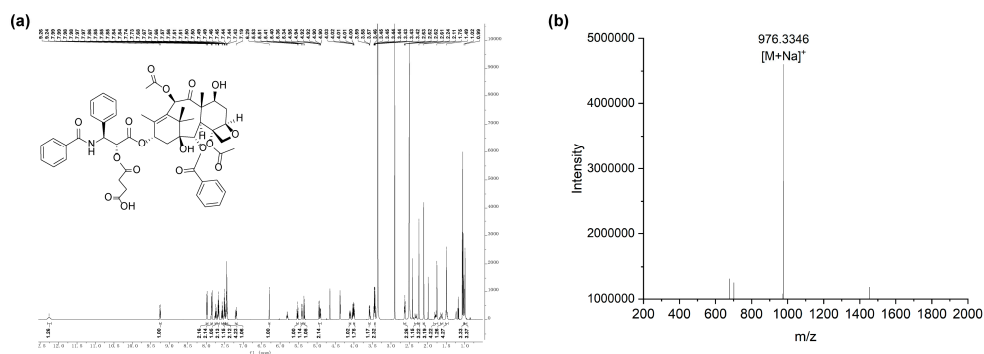


Figure S2. Characterization of PTX-SA. (a) The 1H -NMR spectrum of PTX-SA (600MHz, DMSO- d_6). (b) The Q-TOF HRMS spectrum of PTX-SA.

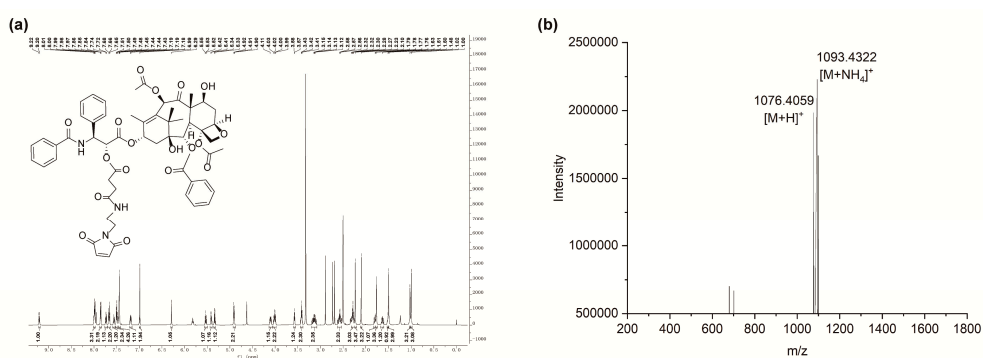


Figure S3. Characterization of PTX-SA-MAL. (a) The 1H -NMR spectrum of PTX-SA-MAL (600MHz, DMSO- d_6). (b) The Q-TOF HRMS spectrum of PTX-SA-MAL.

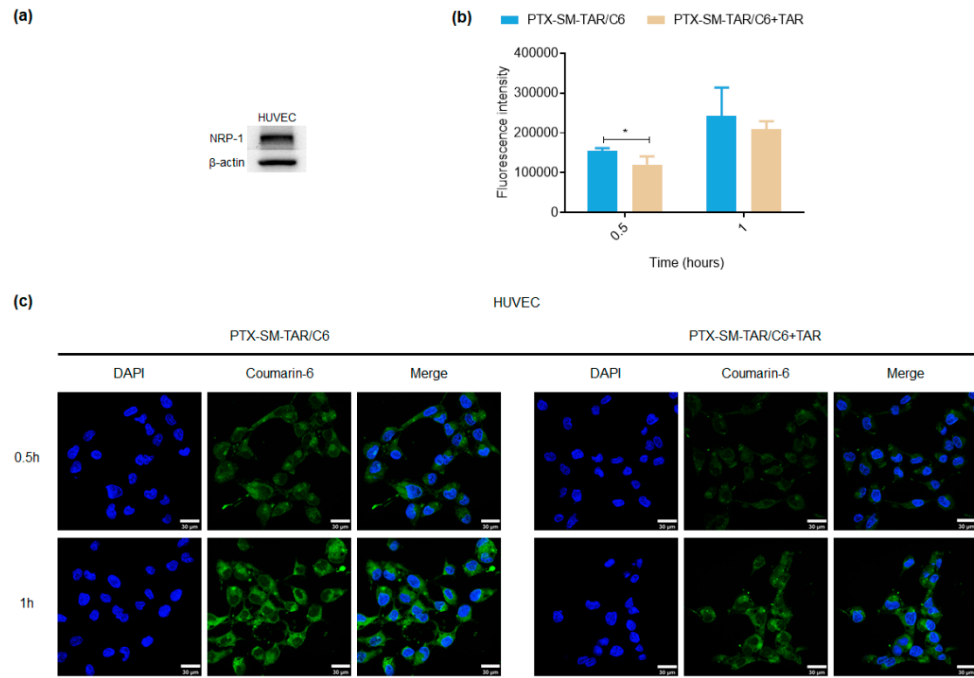


Figure S4. Cellular uptake of PTX-SM-TAR/C6 NPs in HUVEC cells. (a) Western blot analysis of NRP-1 expression in HUVEC cells. (b) Flow cytometry analysis of PTX-SM-TAR/C6 NPs and PTX-SM-TAR/C6 NPs plus TAR groups (mean \pm SEM, $n = 3$, * indicates $p < 0.05$). (c) Confocal images of HUVEC cells. The cell nuclei were stained with DAPI (blue), and the PTX-SM-TAR NPs were dyed with coumarin-6 (green). The scale bar is 30 μ m.

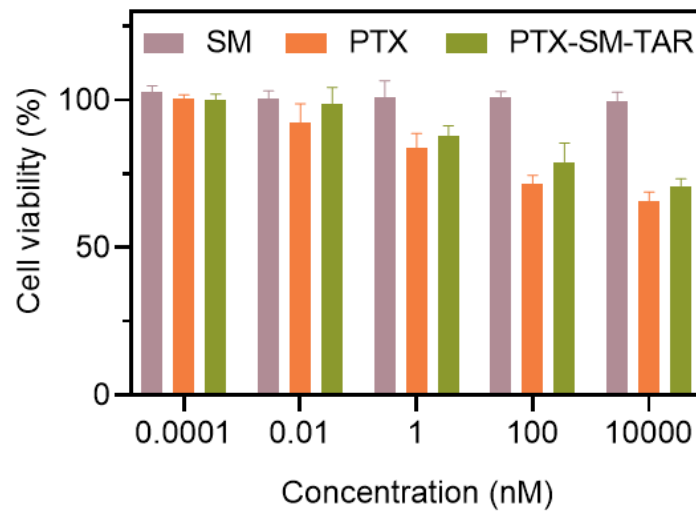


Figure S5. Cytotoxicity effect of SM, PTX, and PTX-SM-TAR NPs to EA.hy926 cells (mean \pm SEM, $n = 3$).