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Supplemental information

Farnesylthiosalicylic acid-derivatized

PEI-based nanocomplex

for improved tumor vaccination

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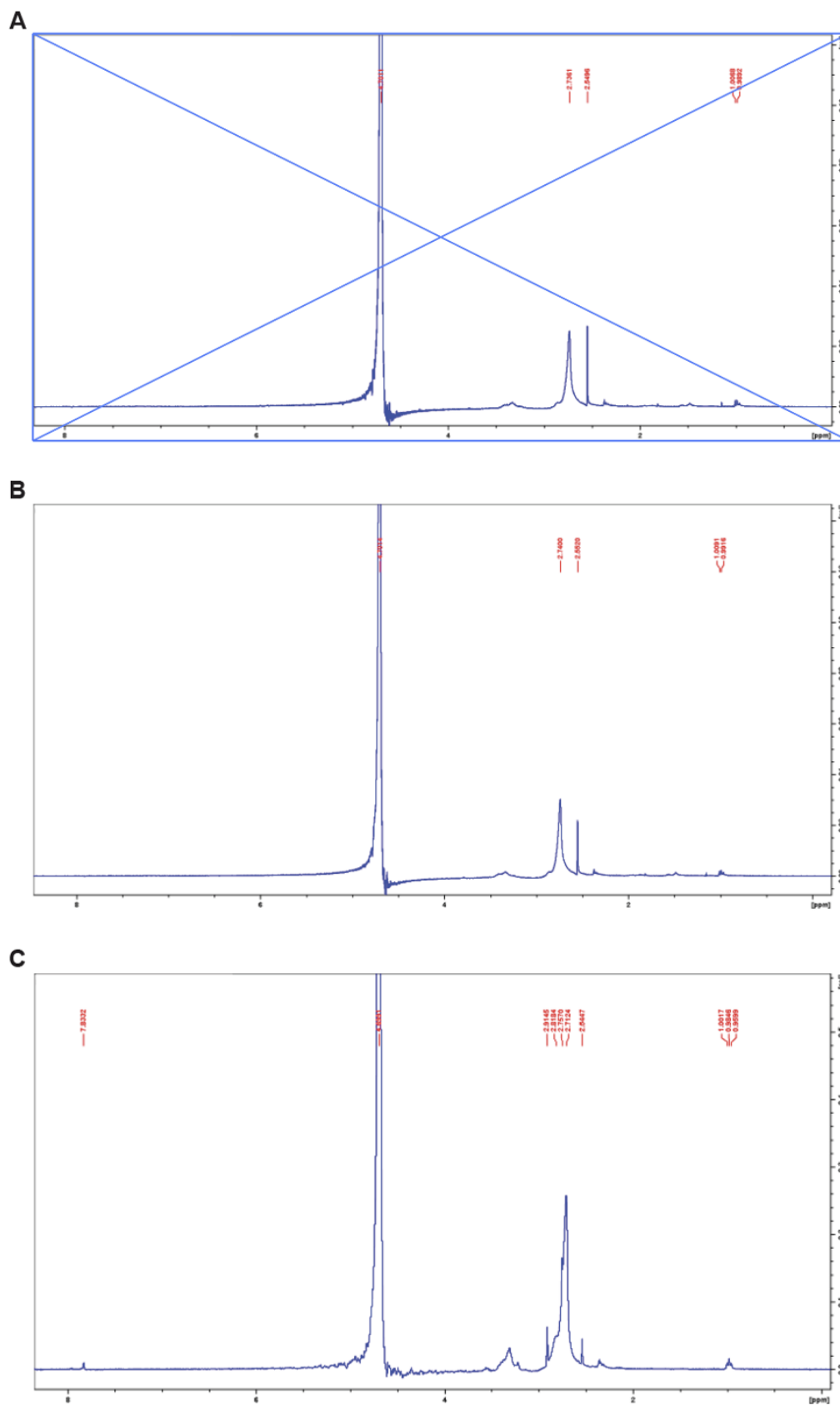


Fig. S1. ^1H nuclear magnetic resonance (NMR) spectra. (A) FTS-PEI (5% FTS, PEI $M_w = 25\text{k Da}$). (B)

FTS-PEI (1% FTS, PEI $M_w = 25\text{k Da}$). (C) FTS-PEI (1% FTS, PEI $M_w = 2.5\text{k Da}$).

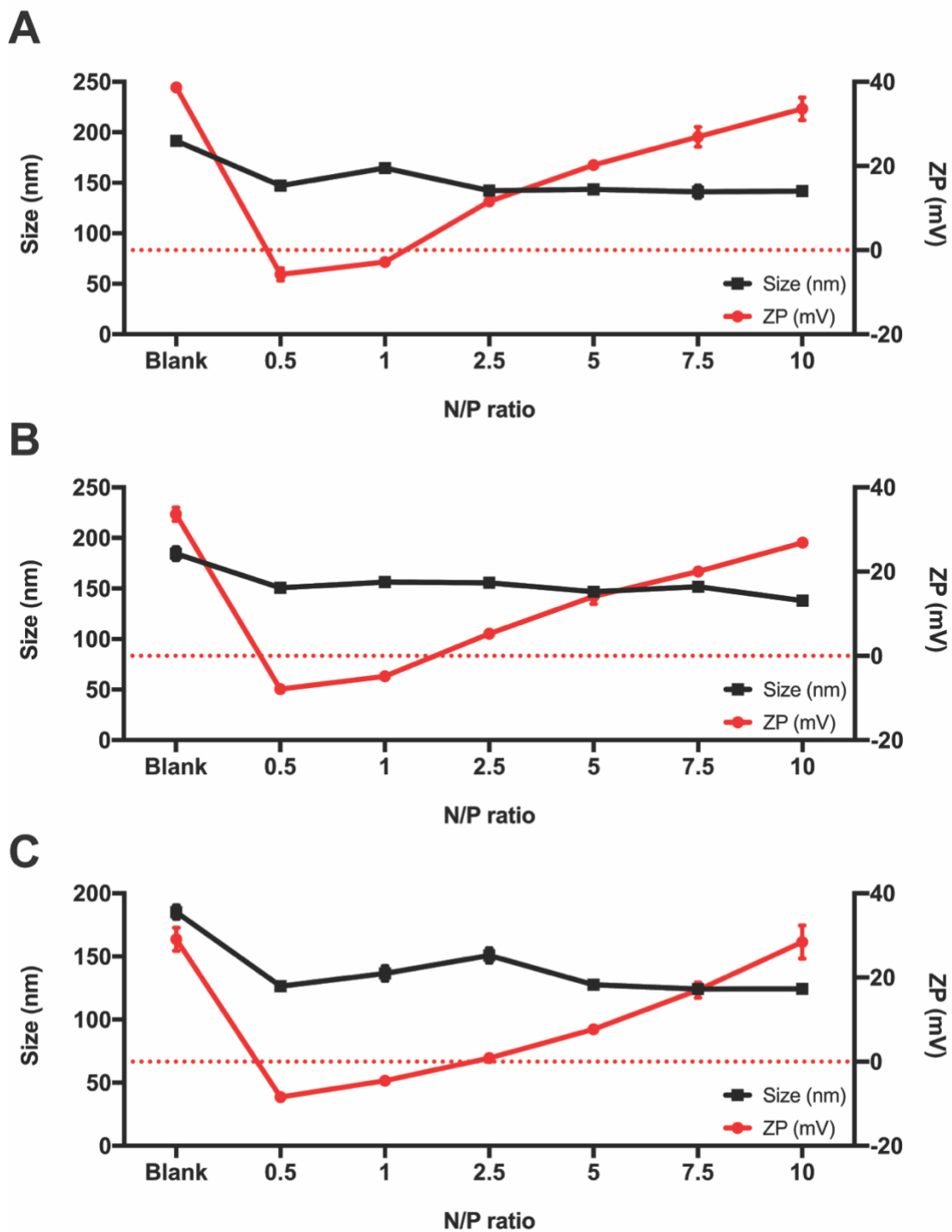


Fig. S2. The hydrodynamic sizes and zeta potentials. (A) FTS-PEI micelles (5% FTS, PEI MW = 25k Da) and pGFP/FTS-PEI nanocomplexes formed at various N/P ratios. (B) FTS-PEI micelles (1% FTS, PEI MW = 25k Da) and pGFP/FTS-PEI nanocomplexes formed at various N/P ratios. (C) FTS-PEI micelles (1% FTS, PEI MW = 2.5k Da) and pGFP/FTS-PEI nanocomplexes formed at various N/P ratios.

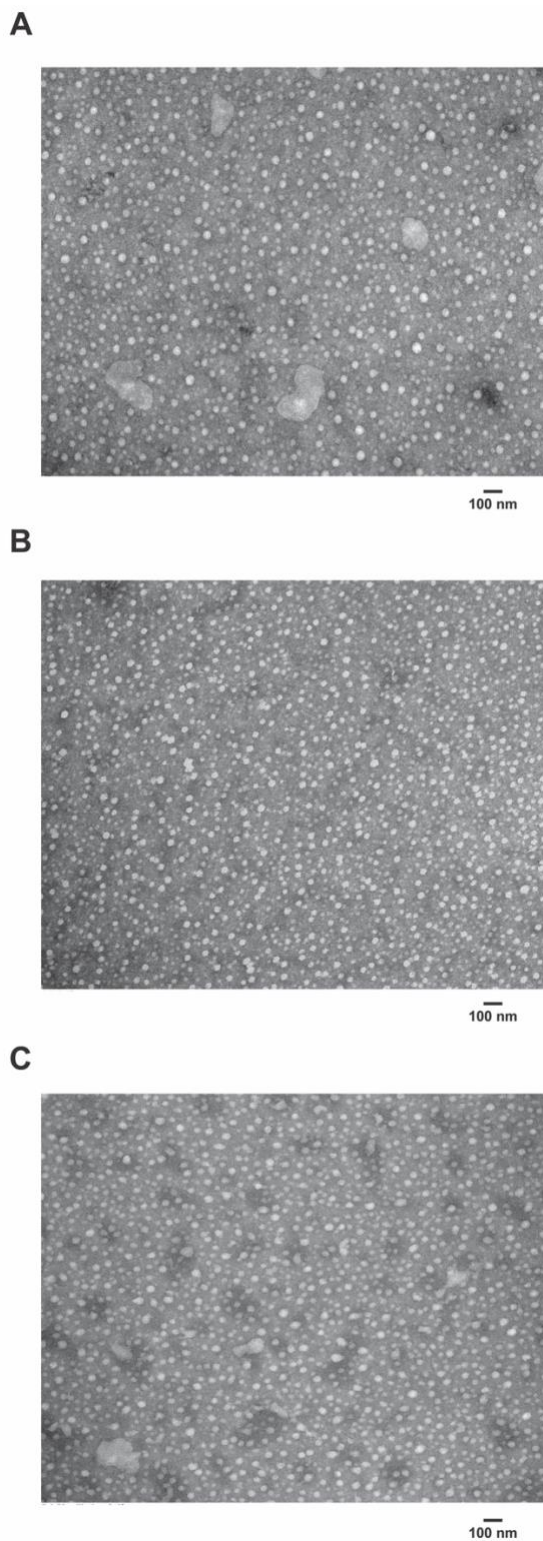


Fig. S3. Morphology of micelles and DNA/polymer nanocomplexes examined by TEM. Scale bar, 100 nm. **(A)** Blank FTS-PEI micelles (5% FTS, PEI MW = 2.5k Da). **(B)** pGFP/FTS-PEI nanocomplexes at a N/P ratio of 1/1. **(C)** pGFP/FTS-PEI nanocomplexes at a N/P ratio of 5/1.

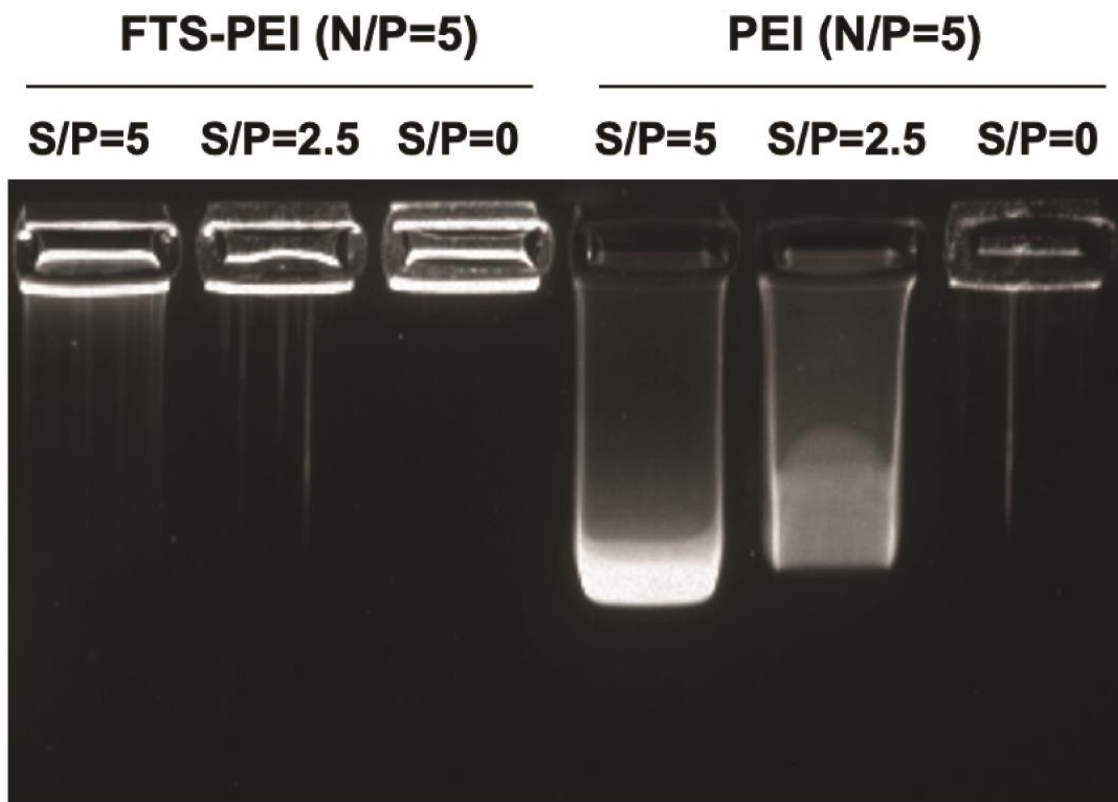


Fig. S4. Gel electrophoresis assay of DNA displacement from pGFP/FTS-PEI nanocomplexes (N/P = 5) by dextran sulphate at various S/P ratios.

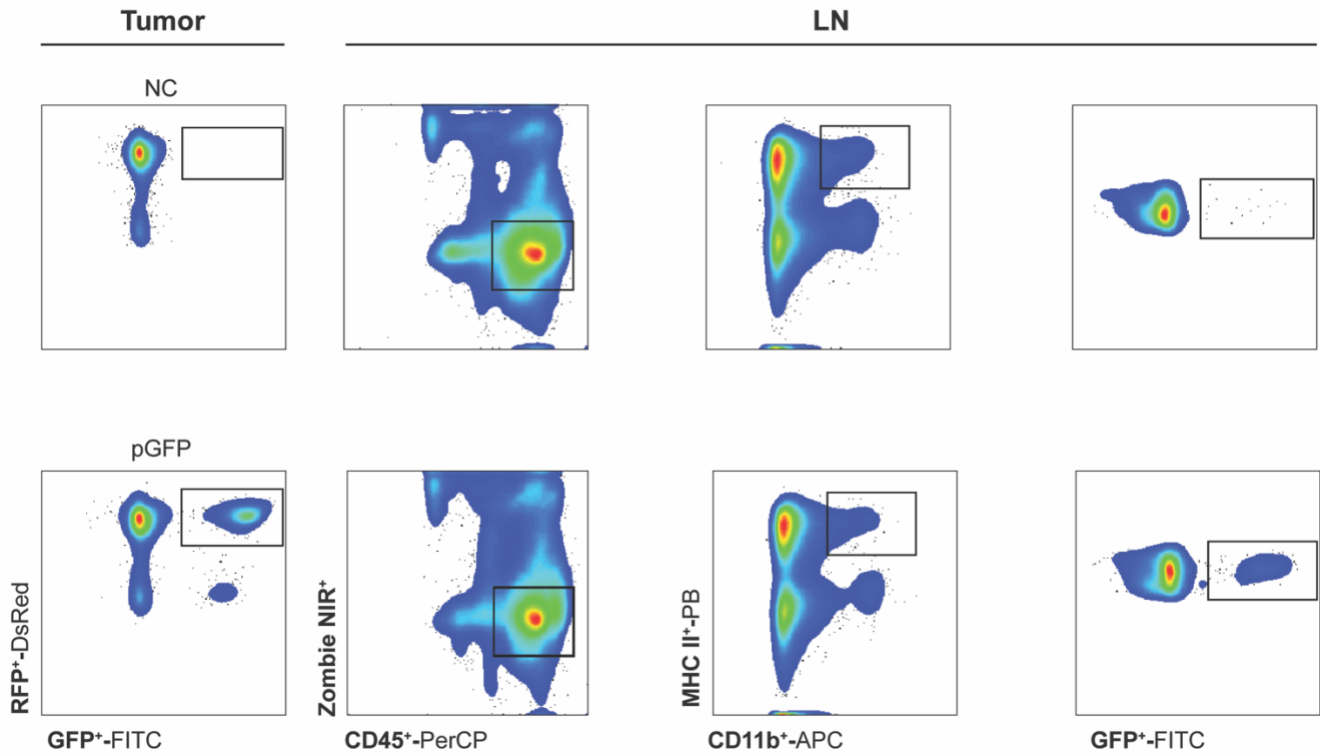


Fig. S5. Gating strategy of tumor cells and DCs. Tumor cells were first gated under Zombie NIR⁻ & CD45⁻ cell population and further characterized by tdTomato⁺ expression. DCs were first gated under Zombie NIR⁻ & CD45⁺ cells as myeloid cell population and then further characterized by using Gr-1⁻, CD11b⁺ & MHCII⁺ gating.