

# **Tumor Signal Amplification and Immune Decoy Strategy Using Bacterial Membrane-Coated Nanoparticles for Immunotherapy**

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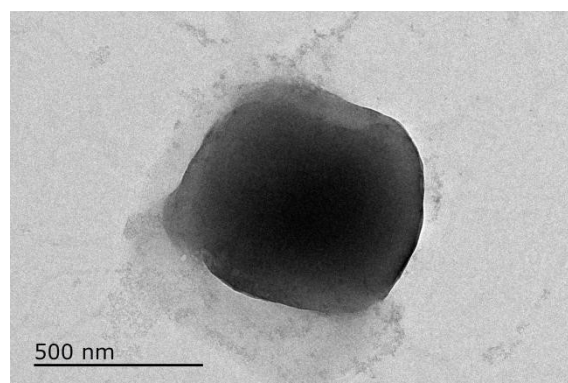
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Abbreviation	Full name
PF	PEG-PCL-5-Fu
PFS	PEG-PCL-5-Fu-SPIO
PFE	PEG-PCL-5-Fu@ Escherichia coli membrane
PFSE	PEG-PCL-5-Fu-SPIO@Escherichia coli membrane

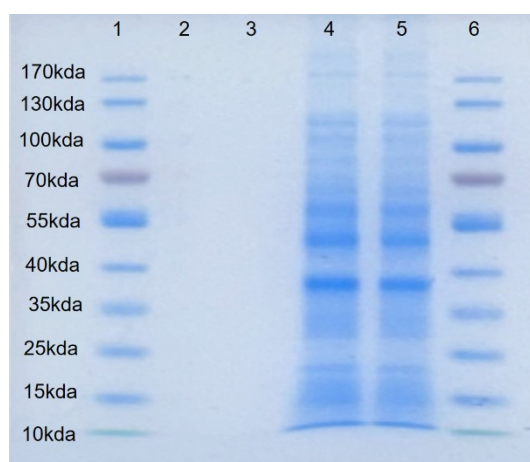
Table S1 A full name for different nanomedicine groups

Abbreviation	Full name
PP	PEG-PCL
PPS	PEG-PCL-SPIO
PPE	PEG-PCL@ Escherichia coli membrane
PPSE	PEG-PCL-SPIO@ Escherichia coli membrane

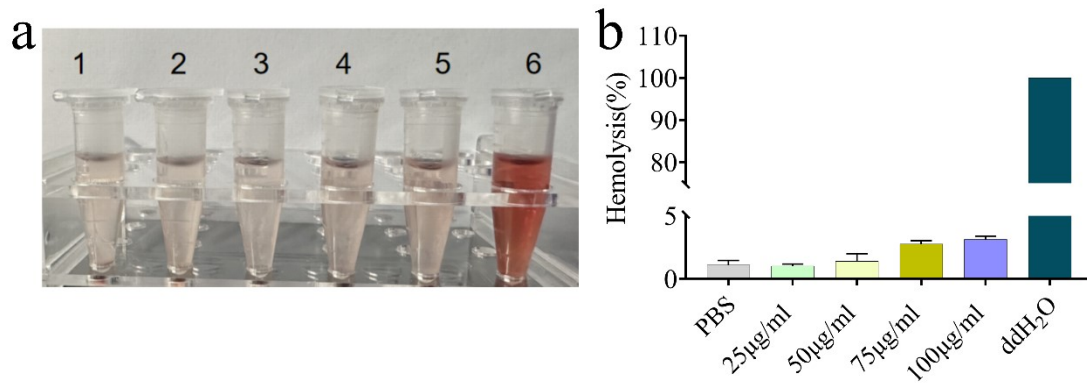
Table S2 The full name of different nano material groups



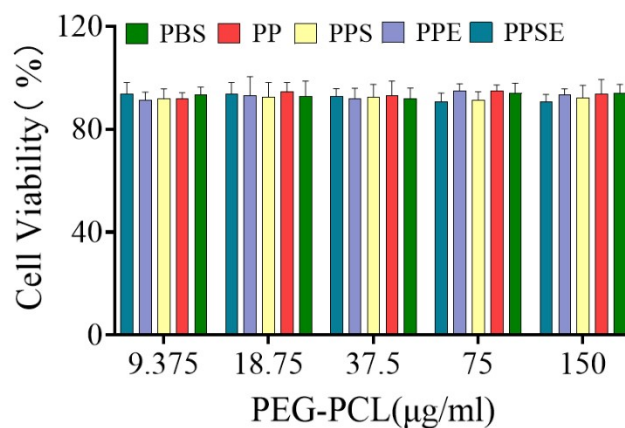
**Figure S1.** TEM images of EcM. The scale bar is 500 nm.



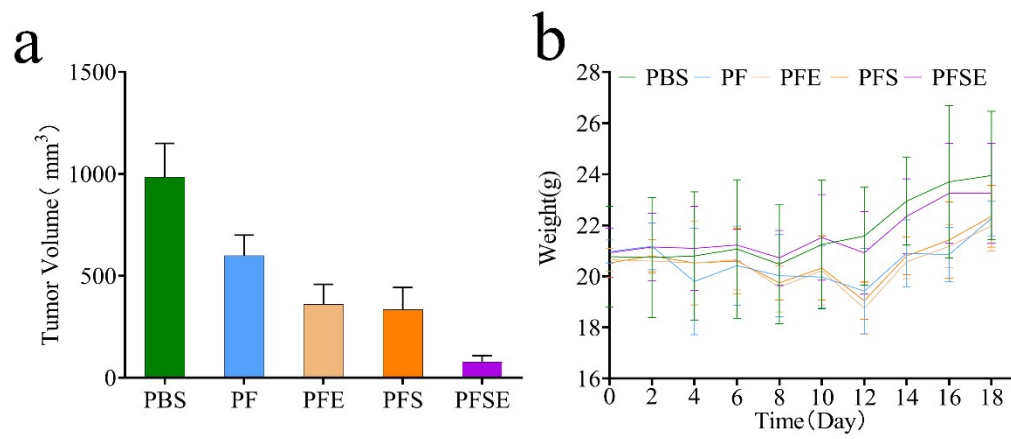
**Figure S2.** Coomassie Brilliant Blue staining of PF, PFS, EcM, and PFSE samples. Lane: 1 - marker, 2 - PF, 3 - PFS, 4 -EcM, 5 - PFSE, 6 - marker. Distinct bands indicate the presence of EcM.



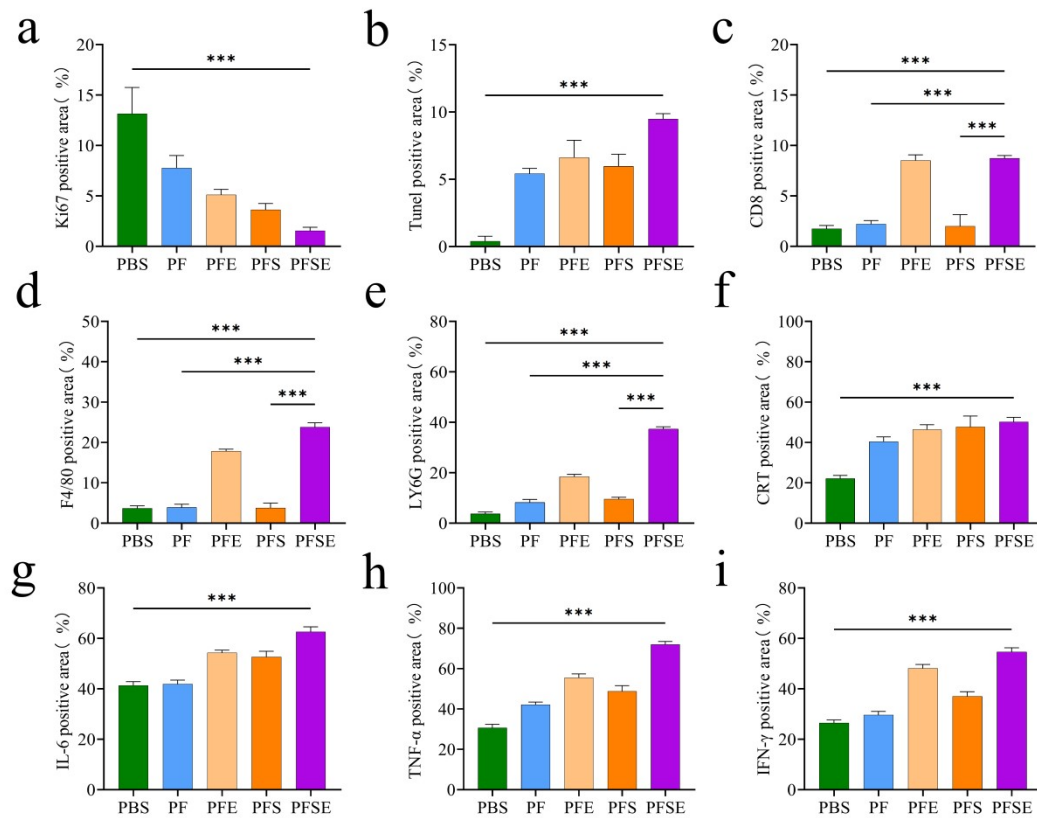
**Figure S3.** Hemolytic assay of PFSE. (a) The corresponding supernatant samples (1 - PBS, 2 - PFSE (25μg/ml), 3 - PFSE (50 μg/ml), 4 - PFSE (75 μg/ml), 5 - PFSE (100 μg/ml), 6 - ddH<sub>2</sub>O). (b) Quantitative analysis of the hemolysis assay at an absorbance of PFSE.



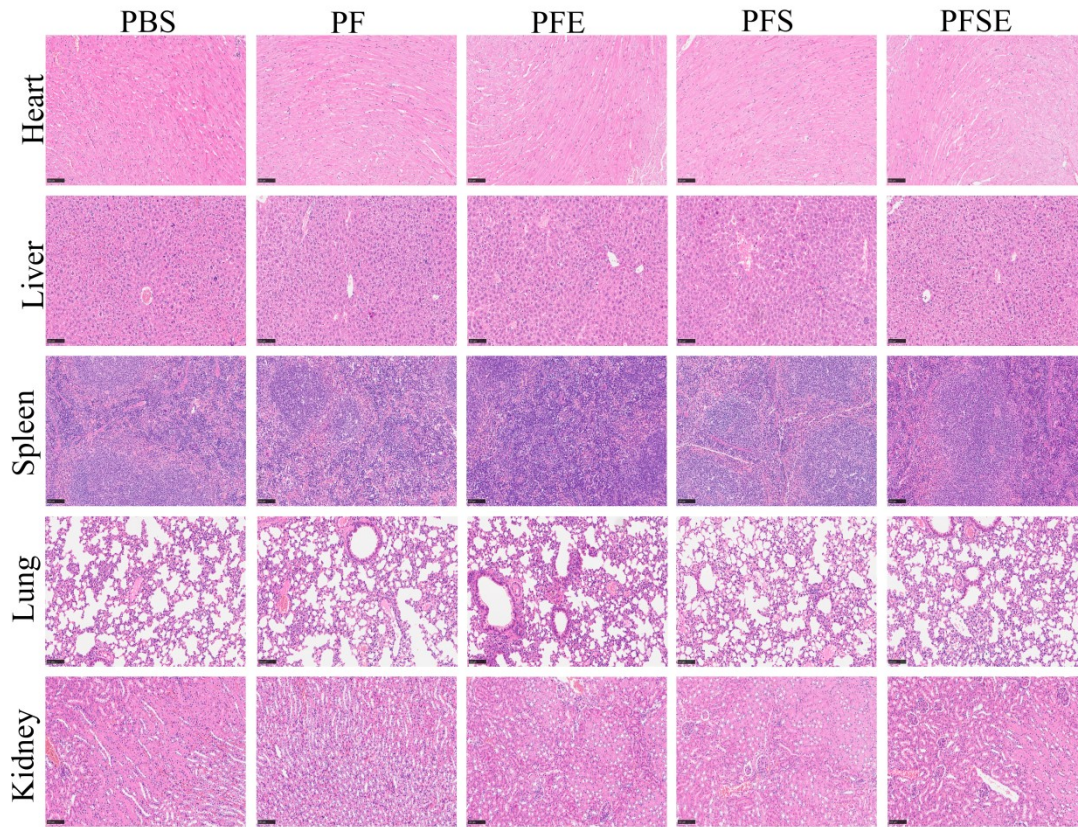
**Figure S4.** Focuses on the effects of PEG-PCL carrier concentration on 3T3 cell survival to explore its biosafety. The cell viability of 3T3 cells after incubation with PBS, PP, PPS, PPE and PPSE containing PEG-PCL at different concentrations for 24 h.



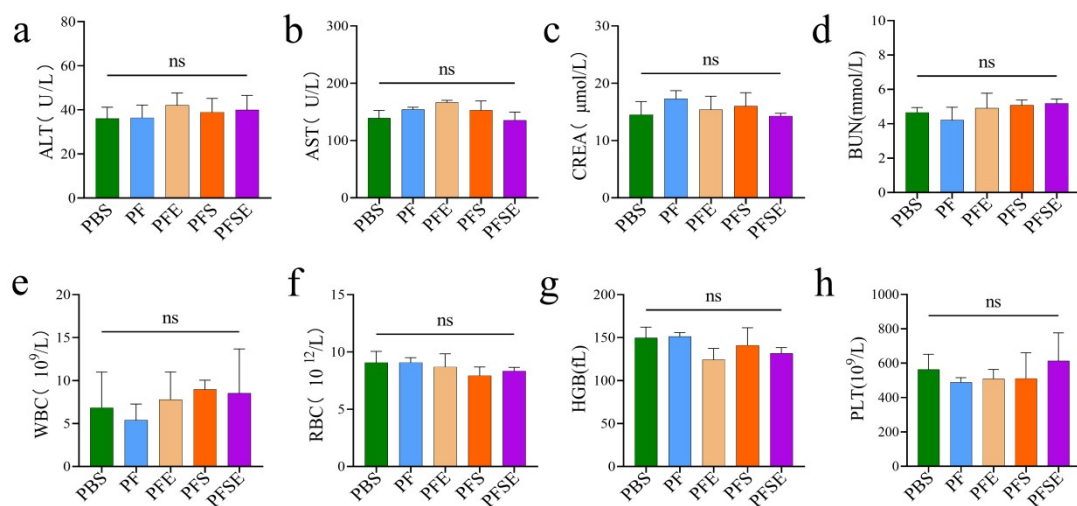
**Figure S5.** (a) Mean tumor volume in the PBS, PF, PFE, PFS, and PFSE groups. (b) Changes in body weight over the treatment period.



**Figure S6.** Fluorescence semi-quantitative of immunohistochemical staining images in the different groups.



**Figure S7.** *In vivo* biocompatibility evaluation. HE staining images of major organs excised on day 18 post-treatment. The scale bars are 100  $\mu$ m.



**Figure S8.** Biochemical and blood routine indices across different treatment groups. (a) Alanine Aminotransferase (ALT). (b) Aspartate Aminotransferase (AST). (c) Creatinine (CREA). (d) Blood Urea Nitrogen (BUN). (e) White Blood Cell (WBC)



count. (f) Red Blood Cell (RBC) count. (g) Hemoglobin (HGB). (h) Platelet (PLT) count.

Western blot image

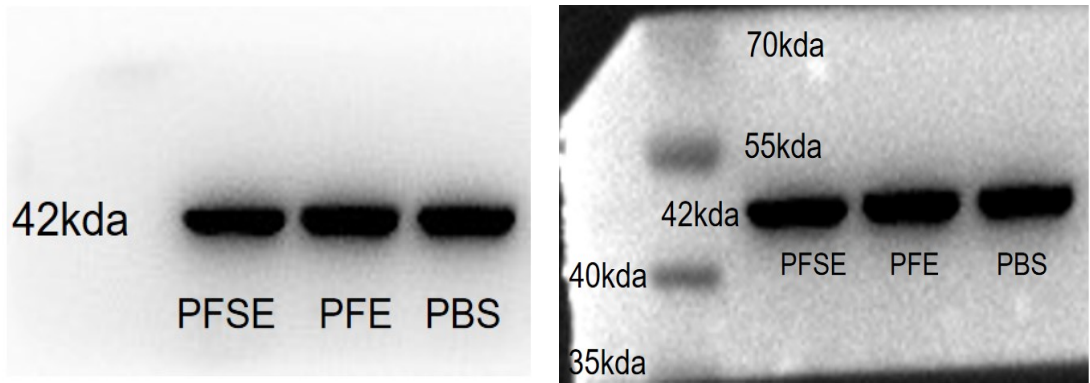


Image of actin

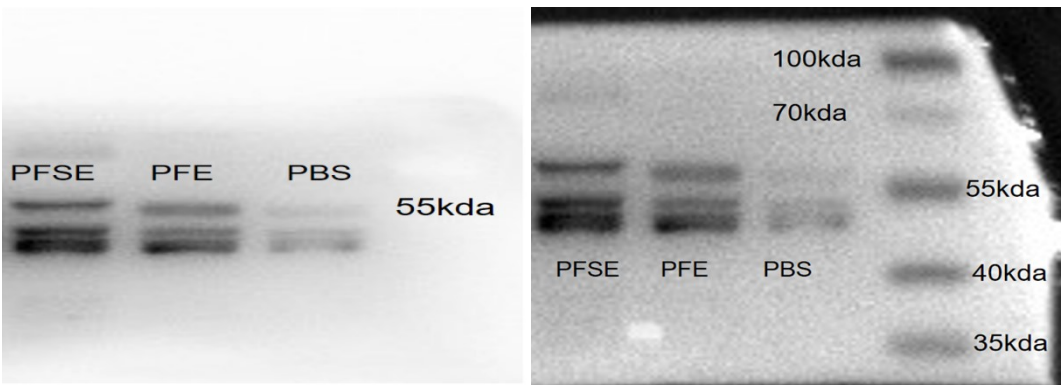


Image of calreticulin