

Supplementary Materials

NUPR1 packaged in extracellular vesicles promotes murine triple-negative breast cancer in a type 1 interferon-independent manner

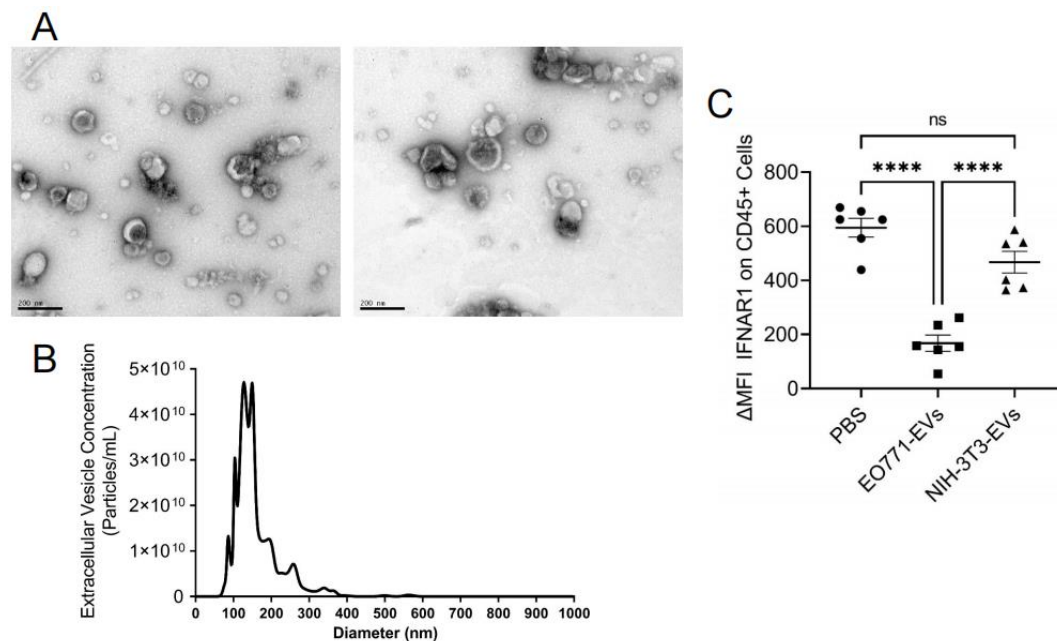
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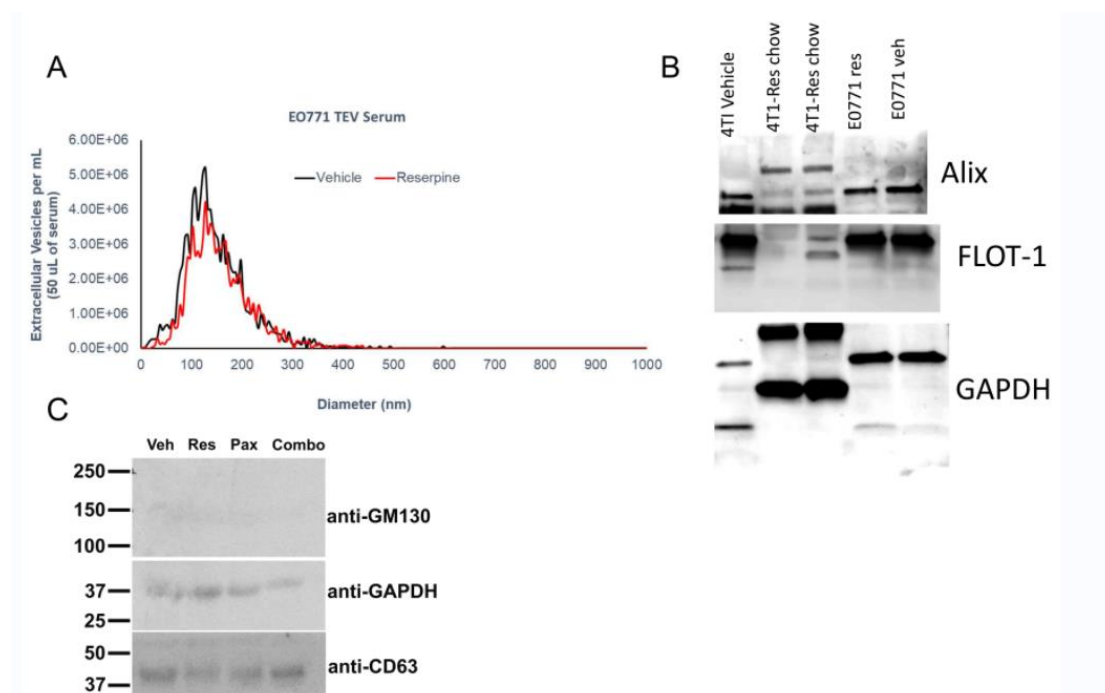
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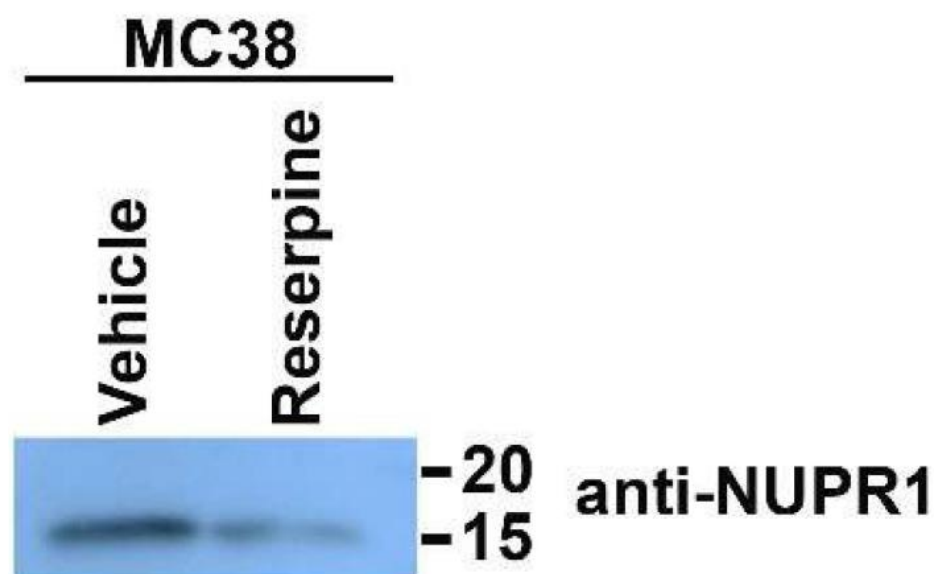


Supplemental Figure 1. EO771 cells release extracellular vesicles that downregulate

IFNAR1. (A) Transmission electron microscopy images of TEVs following isolation via ultracentrifugation. (B). Nanoparticle tracking analysis demonstrating TEV size distribution and concentration of size populations. (C). Flow cytometry analysis comparing change in mean fluorescent intensity (Δ MFI) of IFNAR1 in CD45+ cells from spleens following treatment with PBS, extracellular vesicles from EO771 (EO771-EVs), or extracellular vesicles from NIH-3T3 (NIH-3T3-EVs). Quantitative data are represented as mean \pm SEM; p values: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$, and ns for not significant from Student's t test (panel C)



Supplemental Figure 2. Characterization of TNBC TEVs isolated from tumor bearing mice. (A) Nanoparticle tracking analysis of EO771 TEVs isolated from the serum of WT mice bearing tumors of similar size receiving intravenous treatment with vehicle or 10 μ M reserpine. (B) Western blot analysis to compare EV biomarkers from TEV isolated from mice with similar size tumor receiving the designated treatment. (C) Western blot analysis of the EV biomarkers CD63 and GAPDH, and the non EV biomarker GM130 from TEV isolated from EO771 cell culture media after 24 hrs in vehicle, 10 μ M reserpine, 100 μ M paclitaxel, or both 10 μ M reserpine with 100 μ M paclitaxel.



Supplemental Figure 3. MC83-derived TEVs carry NUPR1. Western blot analysis for NUPR1 using 10 μ g of TEVs from MC38 cells treated with Vehicle or 10 μ M reserpine for 24 hrs.

Supplemental Table 1. Significant Gene Expression Changes Between TNBC and non-TNBC tissue. List of significant changes in gene expression between TNBC and adjacent normal tissue from the GSE58135 dataset generated by GEO2R. CH25H highlighted in yellow.

Supplemental Table 2. Significant Gene Expression Changes Between TNBC and normal mammary tissue following reduction mammoplasty. List of significant changes in gene expression between TNBC and normal tissue from the GSE58135 dataset generated by GEO2R. CH25H highlighted in yellow.