

Supplementary Materials

Mesenchymal stromal cell-derived extracellular vesicles as engineered nanocarriers of HIV-1-derived angiogenic peptides

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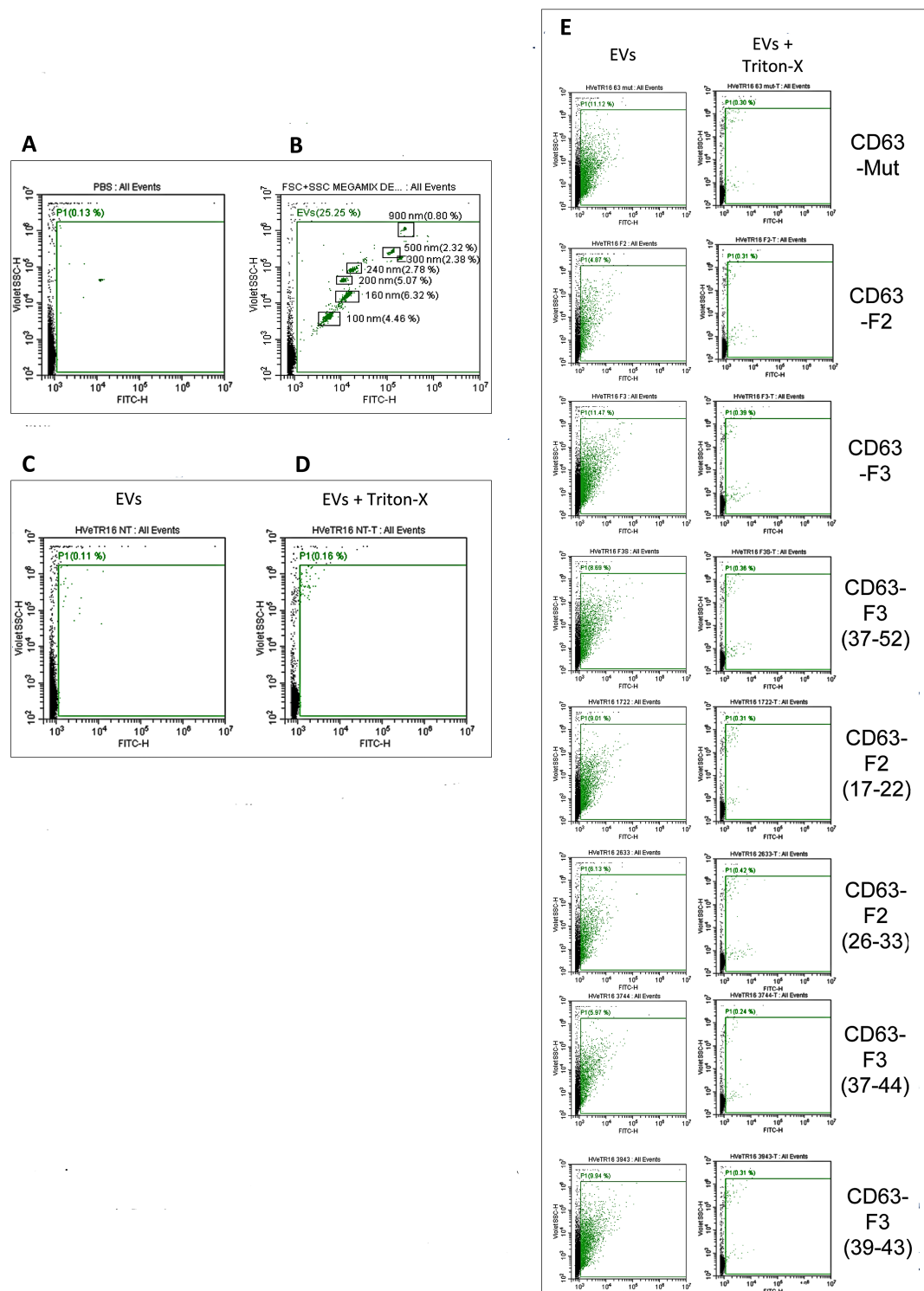
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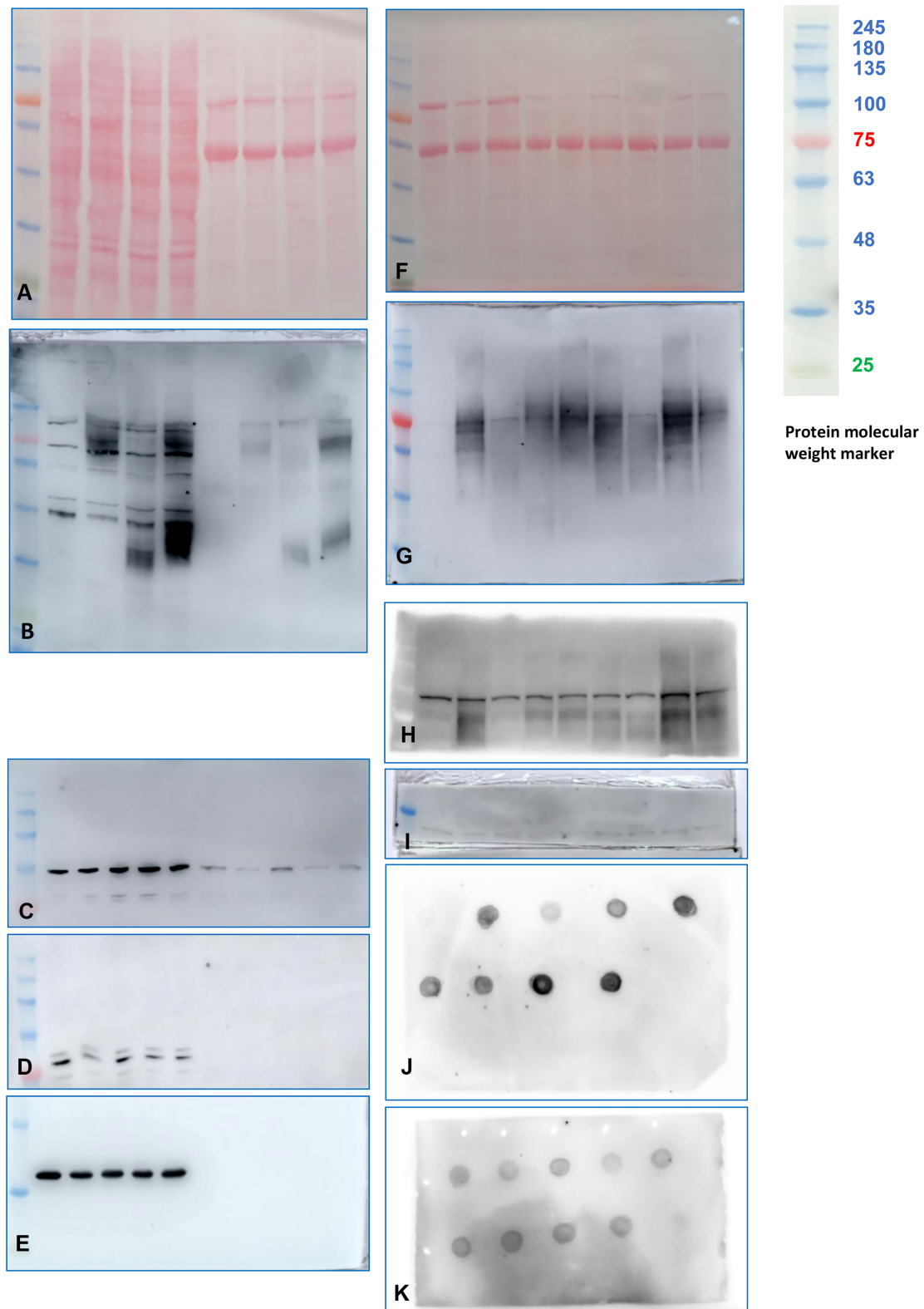
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Supplementary Figure 1. Gating strategy for extracellular vesicle (EV) detection by flow cytometry. (A) Dot plot of phosphate-buffered saline (PBS), used as the vehicle to dilute samples prior to analysis; (B) Dot plots obtained from a mixture of FITC-positive polystyrene beads, used for instrument calibration and gate definition; (C) Dot plot of EVs derived from untransfected canine MSCs under standard culture conditions; (D) Dot plot of EVs derived from untransfected canine MSCs following Triton X-100 treatment; (E) Representative flow cytometry dot plots of EV samples analyzed under standard conditions (left panel) and after Triton X-100 treatment (right panel). Samples were analyzed in the FITC channel to detect GFP-positive EVs carrying the CD63-p17-peptide construct. A total of 5×10^4 particles were acquired and analyzed for each run.



Supplementary Figure 2. Western blot and dot blot raw images. (A and B) Ponceau Red staining and GFP immunoblot from Figure 7 (transfected MSCs and derived EVs); (C–E) Alix immunoblot, Mitofilin immunoblot, and GAPDH immunoblot from Figure 7 (transfected MSCs and derived EVs); (F and G) Ponceau Red staining and GFP immunoblot from Figure 8, showing two independent experiments performed under the same conditions with EVs loaded with p17-derived peptides; (H–K) Alix immunoblot, SDCBP immunoblot, GFP dot blot, and CD81 dot blot from Figure 8 (EVs loaded with p17 peptides).