



**Figure S1. Sequential gating to identify specific EV subsets**

Large and small EVs purified from HIV-infected (n = 17) and uninfected (n = 8) patients' plasma were incubated with DiD and subsequently labeled with anti-C45, CD8, and CD4-FITC antibodies. A gate, including events from 100 to 1000 nm in diameter based on the beads (FSC-PMT-H) and positive fluorescent events, was used to detect EVs and portrayed in an SSC/FSC-PMT graph. Total DiD+ events are detected in the 100 to 1000 nm gate, and the quantity of FITC+ EVs is determined in the DiD+ EVs gate. A Buffer only (0.22- $\mu$ m filtered pore size membrane PBS) was used to determine the background signal. Then each antibody and dye were incubated in PBS in the absence of an EV sample and acquired to determine any particle signal arising from reagents. **(A)** Shows the scatter intensity of buffer (filtered 0.22- $\mu$ m pore size membrane PBS) alone, and **(B)** similar results with the addition of the lipophilic dye carbocyanine DiD to buffer only (no EVs). **(C)** Shows an example of a gating strategy with buffer only and with FITC-conjugated antibodies added (no EVs added). **(D)** Shows the gating strategy applied to an EV sample (patient 02). **(E)** Presents a pooling result of large EVs; upper panel shows DiD total EVs, CD45, CD8, and CD4 EVs for control patients (HIV uninfected n = 8) and lower panel for HIV-infected patients (n = 17). **(F)** Presents similar results for small EVs.