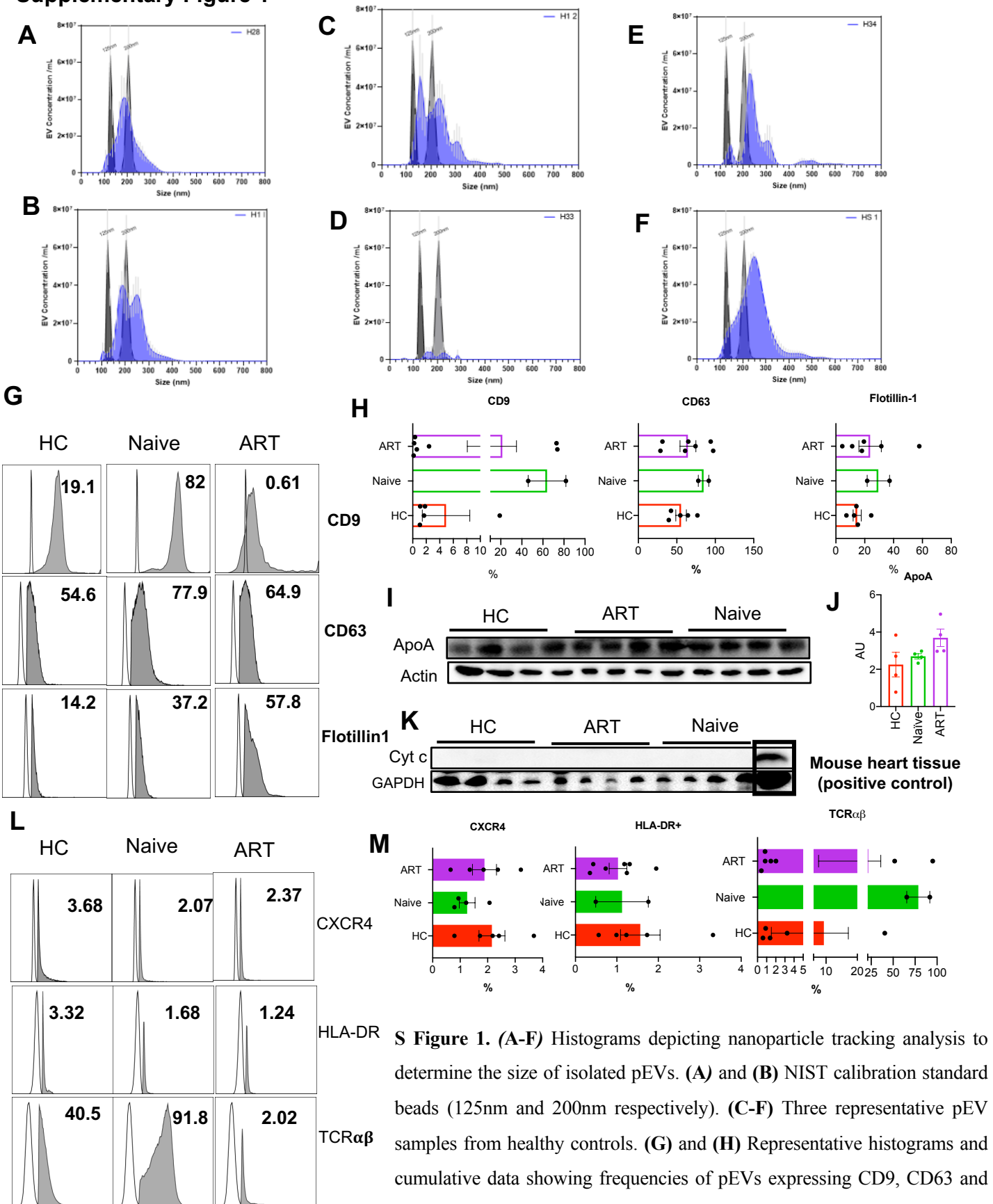
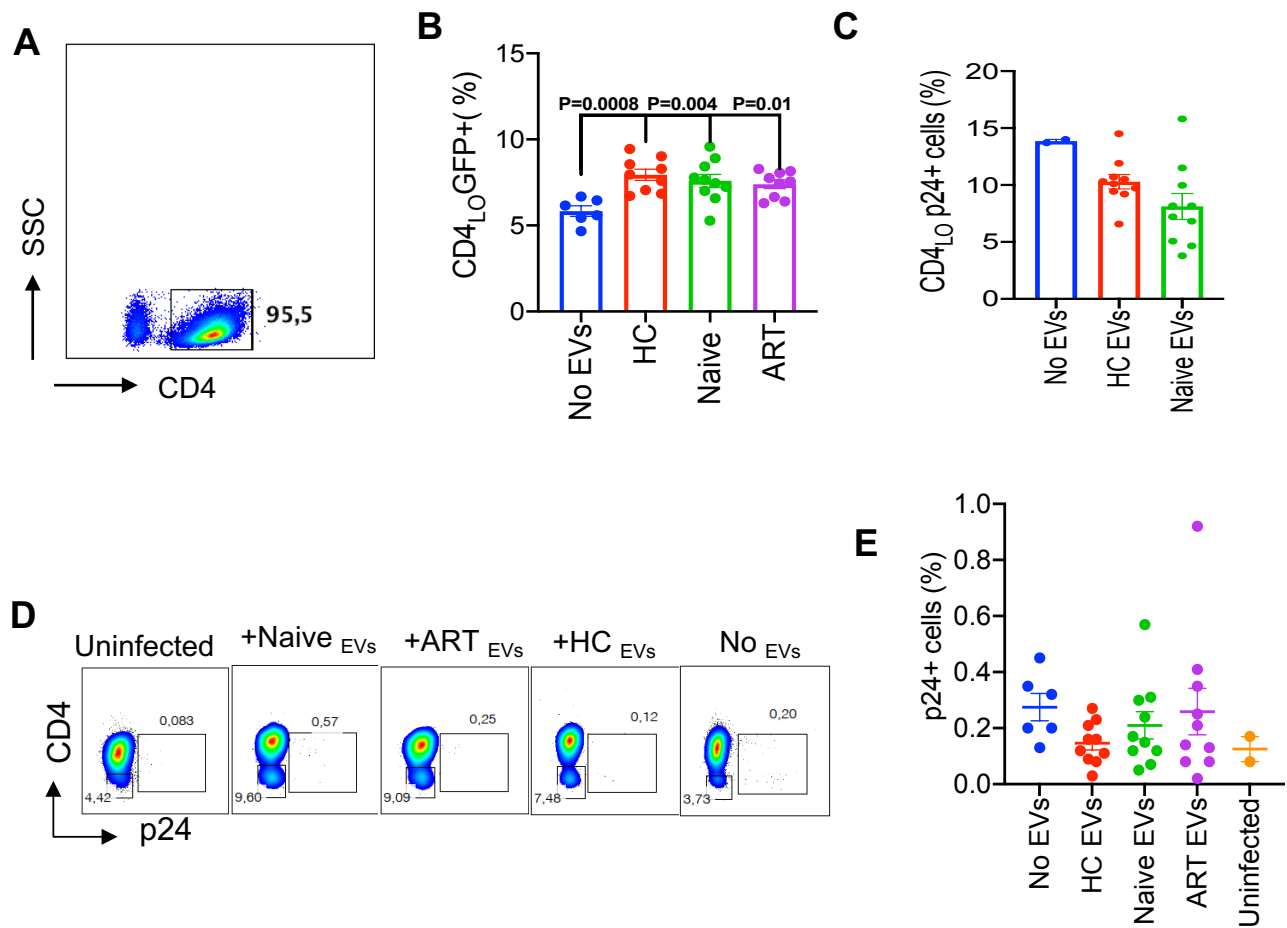


Supplementary Figure 1

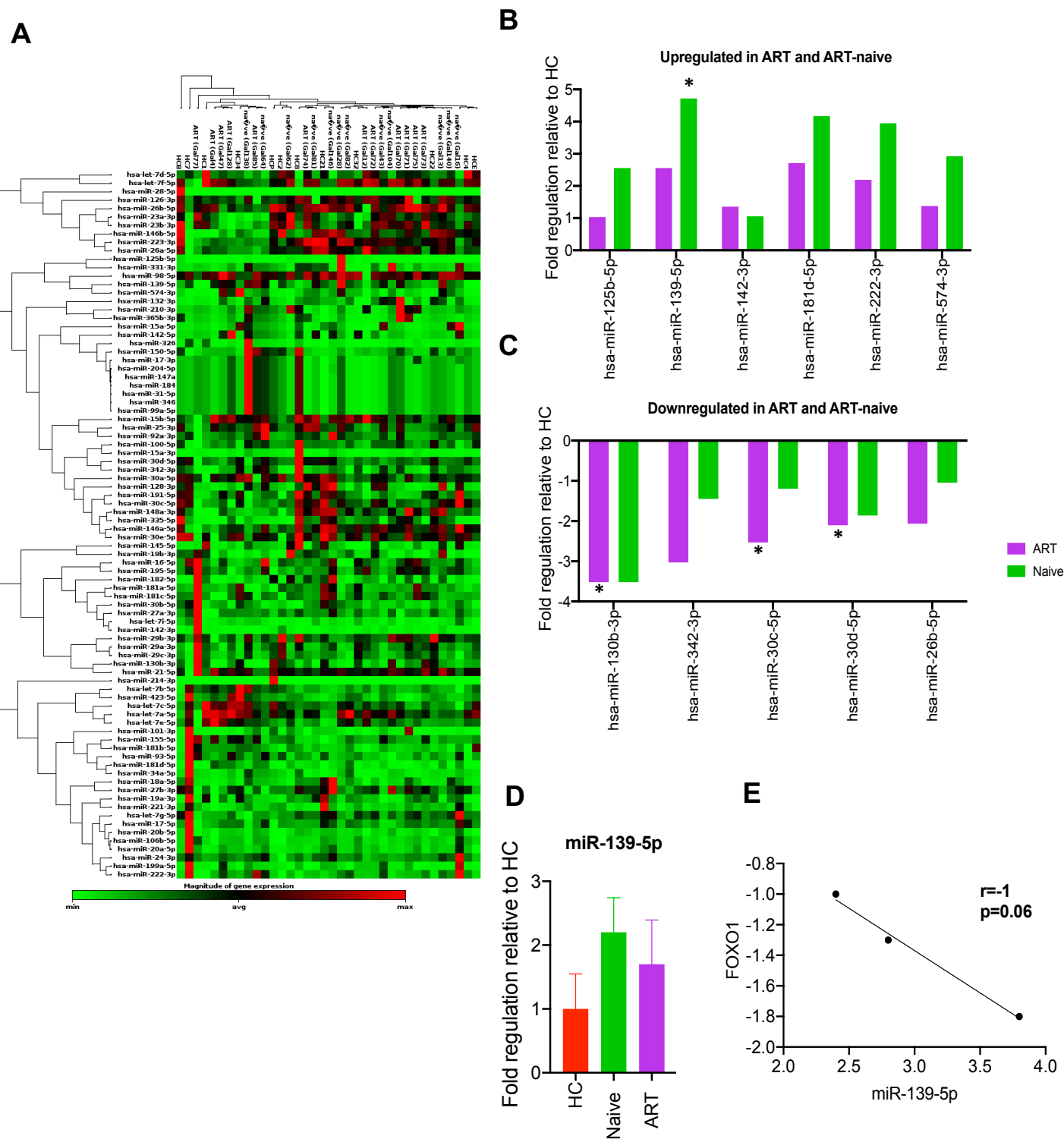


S Figure 1. (A-F) Histograms depicting nanoparticle tracking analysis to determine the size of isolated pEVs. (A) and (B) NIST calibration standard beads (125nm and 200nm respectively). (C-F) Three representative pEV samples from healthy controls. (G) and (H) Representative histograms and cumulative data showing frequencies of pEVs expressing CD9, CD63 and Flotillin-1 by the indicated pEVs (ART and HCs, 5 samples; ART-naïve, 2 samples). Clear histograms: unstained control. (I) and (J), Representative blots and cumulative data showing expression of Apolipoprotein A1 by the indicated pEVs (4 samples per group). Actin – loading control. Data from two experiments shown. (K) Representative blots showing expression of cytochrome c by indicated pEVs and positive control, GAPDH-loading control. (L) and (M), Representative histograms and cumulative data showing frequencies of pEVs expressing CXCR4, HLA-DR and TCRαβ by the indicated pEVs. (4 samples per group). Error bars indicate mean±SEM.

Supplementary Figure 2



S Figure 2. (A), Representative flow plot showing the purity of isolated CD4+ T cells. (B) Bar plots showing cumulative frequencies of CD4 GFP+ cells expressed by J-Lat 10.6 cells pre-incubated with the indicated pEVs and stimulated with anti-CD3 /CD28 for 72hrs. (C), Cumulative data of the frequencies of p24 expressed by activated CD4+ T cells infected with HIV-1 LAI virus followed by incubation with the indicated pEVs. (D) Representative plots of p24 expression by unstimulated CD4+ T cells pre-treated with the indicated pEVs and infected with HIV LAI virus. (E) Cumulative frequencies of p24+ expressed by unstimulated CD4+ T cells as described in (D). Data from 3 individual experiments shown. Data points represent individual samples within pEV groups. Error bars indicate mean±SEM. p-values were obtained from the Dunnett's multiple comparisons test.



S Figure 3. (A) Hierarchical clustering of miRNAs expressed by pEVs from HCs (H), HIV patients on ART (A), and HIV ART-naïve (N) patients. The heatmap lane for each group represents one pEV sample. (B) Fold expression of the indicated upregulated miRNAs by pEVs from HIV patients on ART and ART-naïve patients compared to HCs and (C), downregulated miRNAs. ** p-value= 0.003, *p-value=0.02. (D) Fold expression of miR-139-5p by HIV ART-naïve, and ART pEVs, relative to expression by pEVs from HCs (12 samples per group). Error bars indicate mean \pm SEM. Pearson correlation between the mean expression of FOXO1 (E) with miR-139-5p expressed by pEV-treated J-Lat 10.6 cells (n=4-5, per pEV group).