Modulation of cell surface receptor expression by modified vaccinia virus Ankara in leukocytes of healthy and HIV-infected individuals

Supplementary materials

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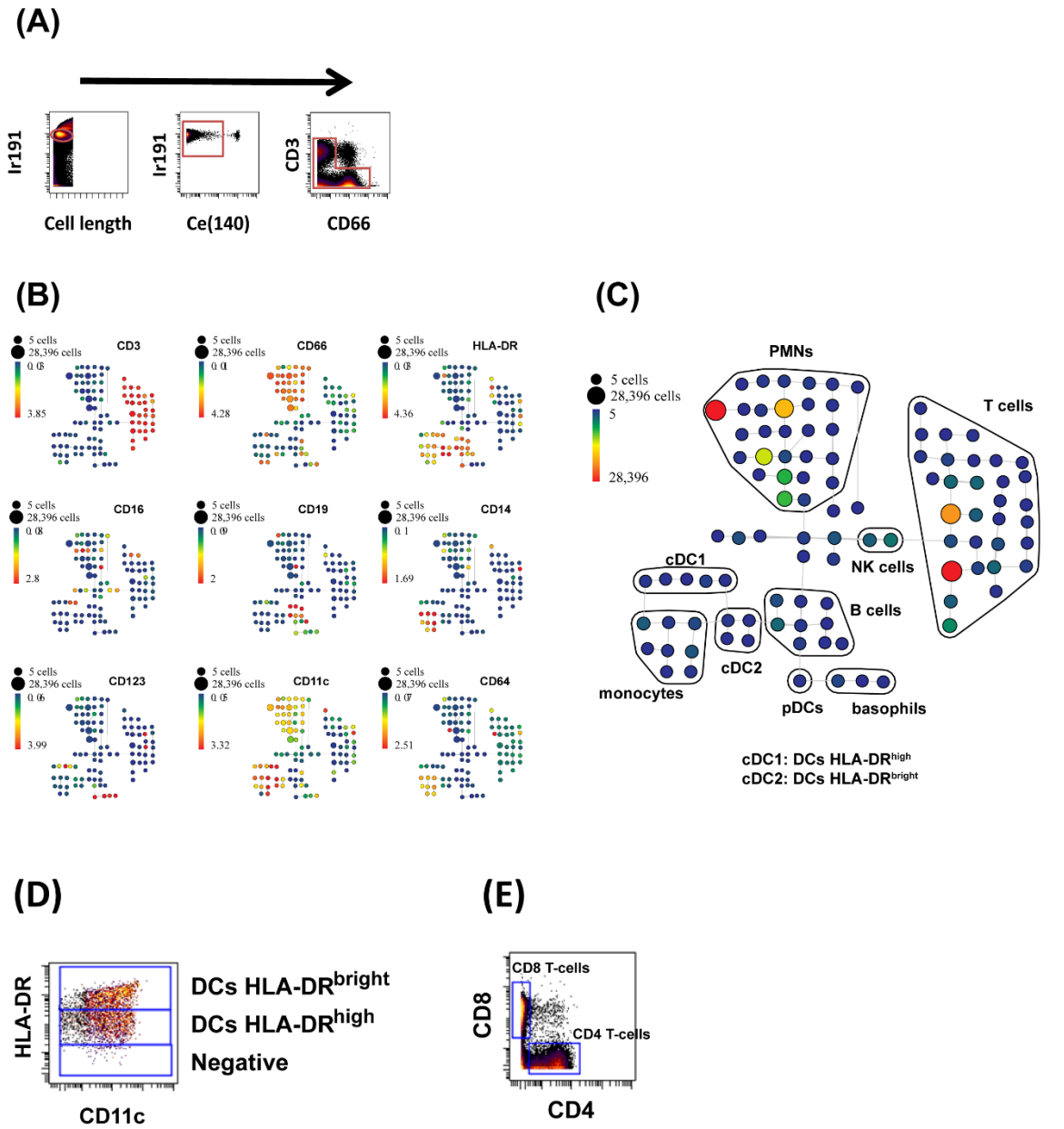
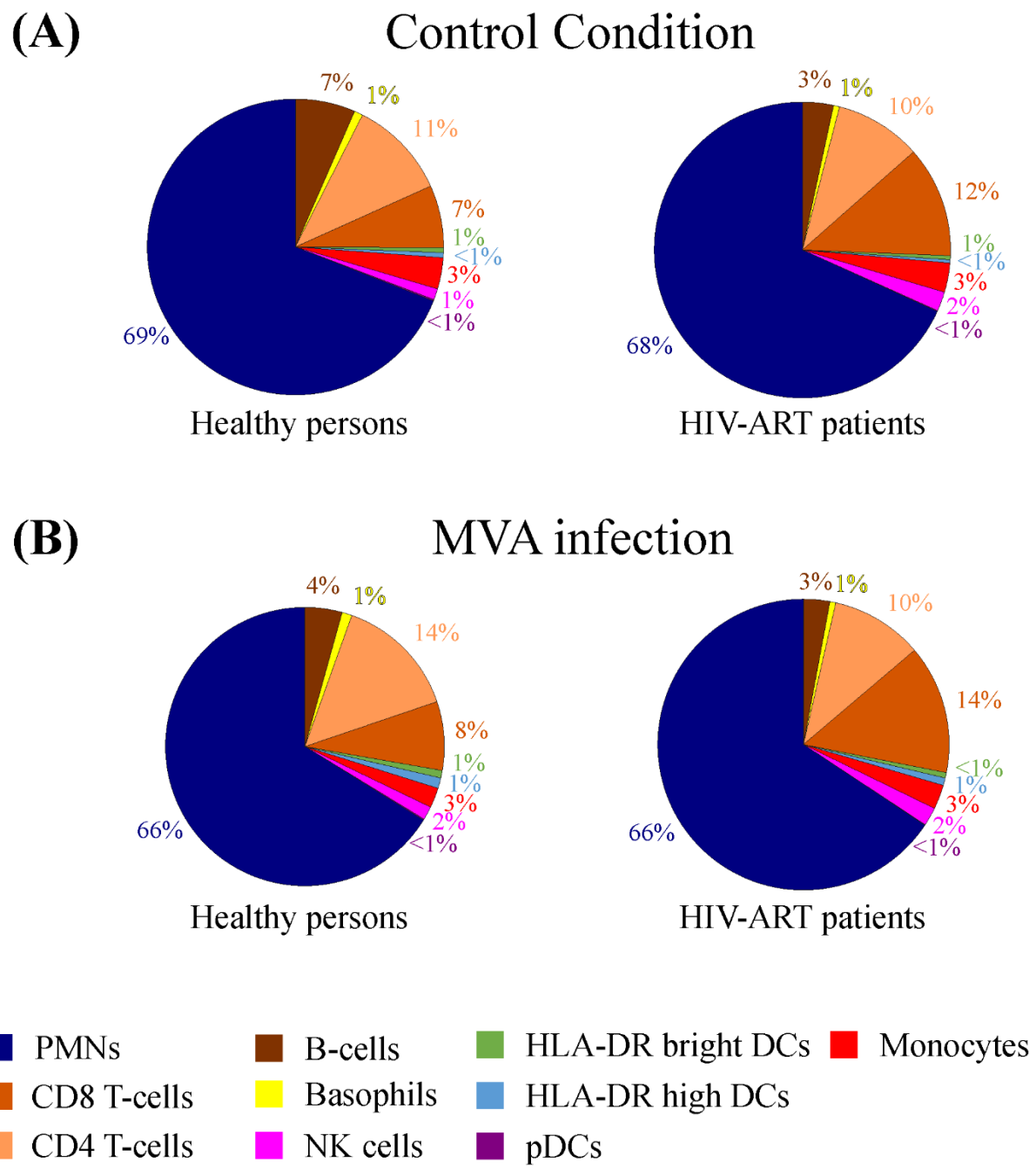


Supplementary Figure 1. Annotation of cell clusters identified by SPADE. (A) Samples were manually gated to exclude the EQTM Four-Element Calibration Beads, select singlets, and gate out nonspecific background generated by metal-conjugated Ab-binding eosinophils. (**B**) SPADE analysis was performed to identify 100 cell clusters using a 5% down-sampling parameter. Clustering was based on the levels of CD3, CD4, CD8, CD11c, CD14, CD16, CD19, CD32, CD64, CD66, CD123, HLA-DR, NKp80, and Perforin. The median expression of HLA-DR, CD3, CD11c, CD14, CD16, CD19, CD64, CD66, and CD123 were overlaid on the generated SPADE tree to annotate each cluster. **(C)** Eight leukocyte populations were identified based on the median expression of these specific markers. Granulocytes were designated as $CD66^{+}$, T-cells as $CD3^{+}$, NK cells as $HLA\text{-}DR^{-}$ $CD16^{+}$, basophils as $HLA\text{-}DR^{-}$ $CD123^{+}$, B-cell as $HLA\text{-}DR^{+}$ $CD19^{+}$, monocytes as $HLA\text{-}DR^{+}$ $CD14^{+/-}$ $CD64^{+}$, conventional dendritic cells (cDC) as $HLA\text{-}DR^{+}$ CD11c+ $CD14^{-}$ $CD64^{-}$, and plasmacytoid dendritic cells (pDC) as $HLA\text{-}DR^{+}$ $CD123^{+}$. Thereafter, each of these eight cell populations was independently and computationally isolated. (**D**) Conventional dendritic cells were divided into two categories based on their HLA-DR levels: $HLA\text{-}DR^{high}$ DCs and $HLA\text{-}DR^{bright}$ DCs. (**E**) T-cells were divided into two categories based on their CD4/CD8 expression.



Supplementary Figure 2. Percentages of each cell type isolated from healthy persons and HIV-ART patients. Each pie chart represents the percentages of leukocyte populations isolated from the SPADE analysis for the whole set of healthy persons and HIV-ART patients in control condition (**A**) and after infection with MVA (**B**).