

Figure S1 The preference of TCR V-J pairing in CD8⁺ T cells of healthy donors.

(A & B) Heat maps of TCR α - β V-J pairs in naïve **(A)** and memory **(B)** CD8⁺ T cells.

The percentages of V-J pairs were calculated as medians. Colour density indicates the relative expression level, from 0 to over 0.1%.

(C) Similar distribution of V-J pairing profiles presented in CD8⁺ T cell subsets. The grey bar indicates the median frequency of V-J pairing in α - and β -chains from different CD8⁺ T cell subsets.

(D) Distributions of V-J pairing frequency of naïve CD8⁺ T cell subsets in four representative individuals.

The V-J pairs with similar percentage distributions among different T cell subsets **(C)** or different individuals **(D)** are highlighted in grey.

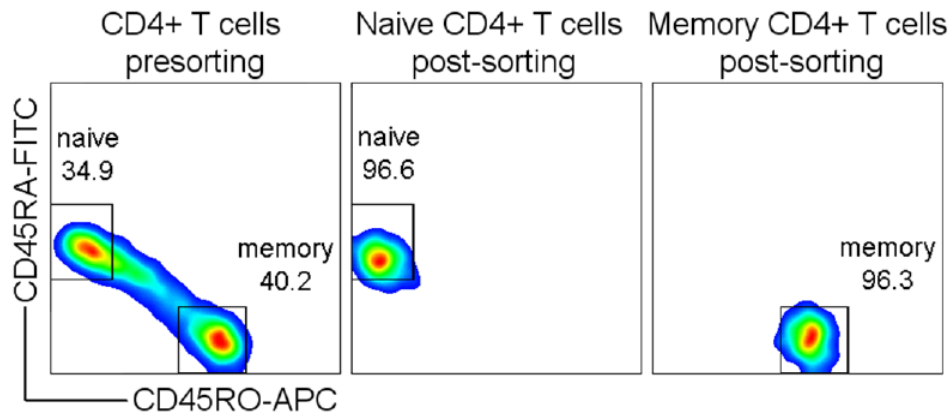


Figure S2 The purity of sorted Naïve and memory CD4+ T cells of one the healthy donor by flow cytometry before and after sorting.

The subsets of unsorted CD4⁺ T cells (left), the purity of post-sorting naïve (middle) and memory (right) CD4⁺ T cells from one healthy donor is shown by FACS graph.