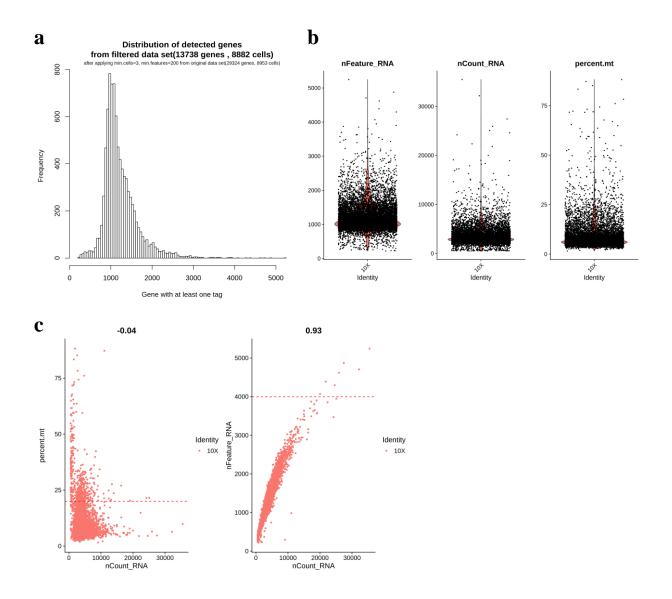
## Cellular heterogeneity of circulating CD4+CD8+ double-positive T cells characterized by single-cell RNA sequencing

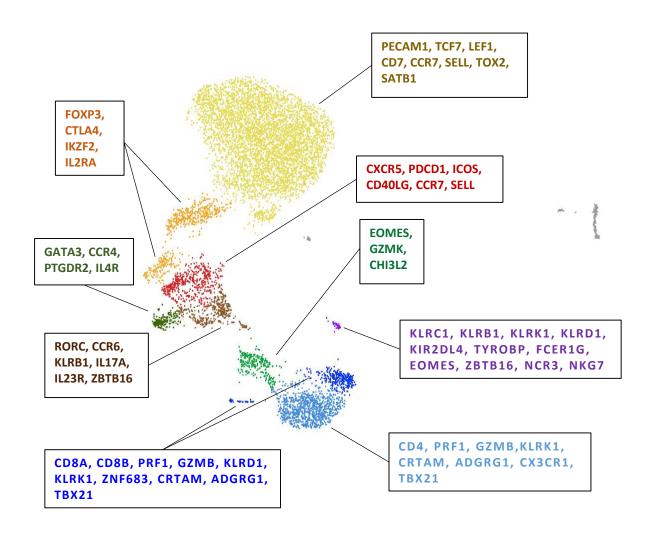
Sung Min Choi<sup>1</sup>, Hi Jung Park<sup>1</sup>, Eun A Choi<sup>1</sup>, Kyeong Cheon Jung<sup>2,3,4</sup>, and Jae II Lee<sup>2,5,\*</sup>

## **Supplementary Figure S1**



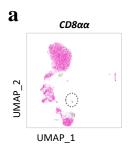
**S1.** Quality control result for scRNA-seq analysis. (a) The histogram showing the frequency of cells containing genes with at least one UMI after filtering out cells/features from original data set. (b) The violin plots representing the distribution of nGene/nUMI/percentage of mitochondrial gene for each cell. (c) The scatter plots representing relationships of mitochondrial percentage-molecule counts and genes-molecule counts for each cell.

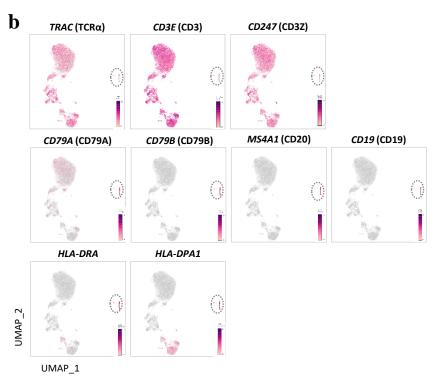
## **Supplementary Figure S2**



**S2.** Differential expression of genes that define heterogeneous clusters of CD4<sup>+</sup>CD8<sup>+</sup> DP T cells.

## **Supplementary Figure S3**





**S3.** (a) UMAP representing CD8 $\alpha\alpha$ . (b) UMAP representing T and B cell-associated genes.