

Description of Additional Supplementary Files

Supplementary Data 1. Highly variable genes used for PCA analysis after removal of *Cd4*, *Cd8a*, and *Cd8b1* (excel file).

Supplementary Data 2. Differential gene expression of sorted thymocyte subsets (excel file).

Supplementary Data 3. Genes that are transiently up-or downregulated in selection intermediates (activation) or differentially expressed between CD4 and CD8 SP (lineage identity) identified by bulk RNA-seq (excel file).

Supplementary Data 4. Differential gene expression between selection intermediates classified by coreceptor status (excel file).