

Description of Additional Supplementary Files :

Supplementary Data File 1 (related to Fig. 3b)| List of common and unique ATAC-seq peaks in WT and *Il2ra*^{mut/mut} thymic and LN T_{reg} cells across gene organization.

Supplementary Data File 2 (related to Fig. 3d)| List of genes with unique peaks in WT versus *Il2ra*^{mut/mut} thymic and LN T_{reg} cells.

Supplementary Data File 3 (related to Fig. 3e and Sup Fig. 3d)| List of Biological Process Gene Ontology (BP-GO) from genes with unique peaks (OCRs) in WT versus *Il2ra*^{mut/mut} thymic and LN T_{reg} cells (all and 20kb from TSS).

Supplementary Data File 4 (related to Fig. 4c)| List of genes up and downregulated in WT versus *Il2ra*^{mut/mut} T_{reg} cells.

Supplementary Data File 5 (related to Fig. 4d and Sup Fig. 4d,e)| List of Biological Process Gene Ontology (BP-GO) from genes upregulated in *Il2ra*^{mut/mut} versus WT T_{reg} cells.

Supplementary Data File 6 (related to Fig. 4e,g)| List of differentially expressed genes in WT versus *Il2ra*^{mut/mut} LN T_{reg} cells compared to genes with unique peaks in WT and *Il2ra*^{mut/mut} T_{reg} cells within 500 bp from TSS.

Supplementary Data File 7 (related to Fig. 5d)| List of unique genes with (i) SATB1 peaks in WT SP CD4⁺ thymocytes, (ii) SATB1 peaks in *Il2ra*^{mut/mut} SP CD4⁺ thymocytes and (iii) common genes with unique SATB1 peaks in WT and *Il2ra*^{mut/mut} SP CD4⁺ thymocytes.

Supplementary Data File 8 (related to Fig. 5e,f)| BP-GO terms of unique genes with SATB1 peaks in WT and in *Il2ra*^{mut/mut} SP CD4⁺ thymocytes.