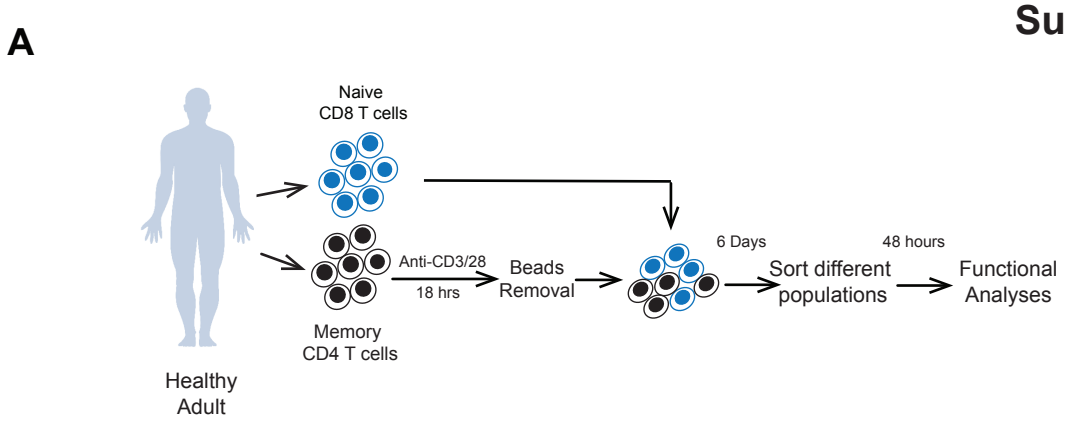
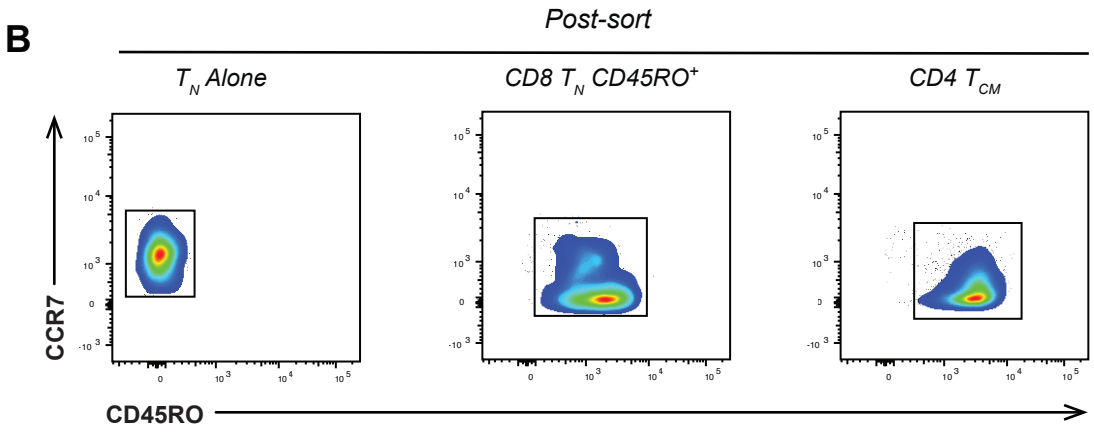
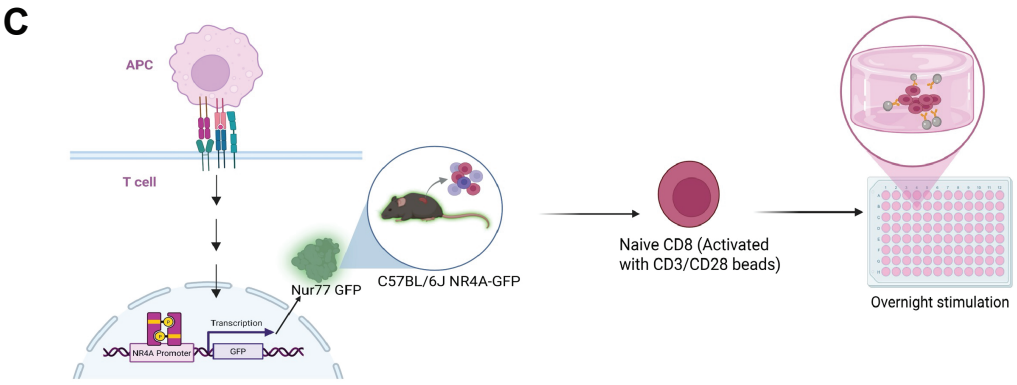
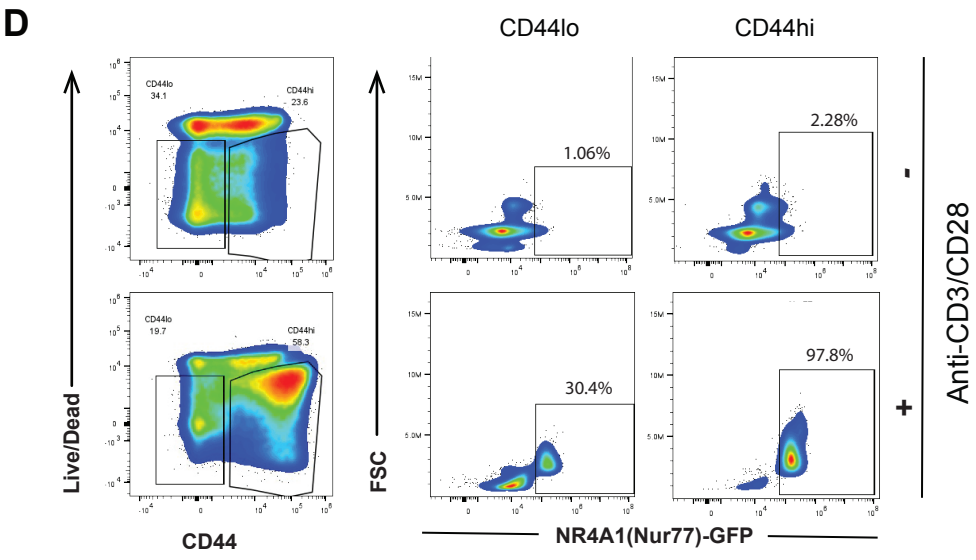
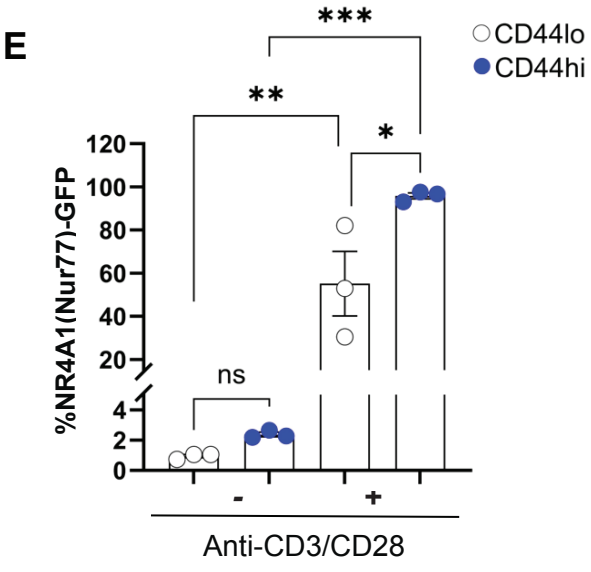
Suppl. Figure 1





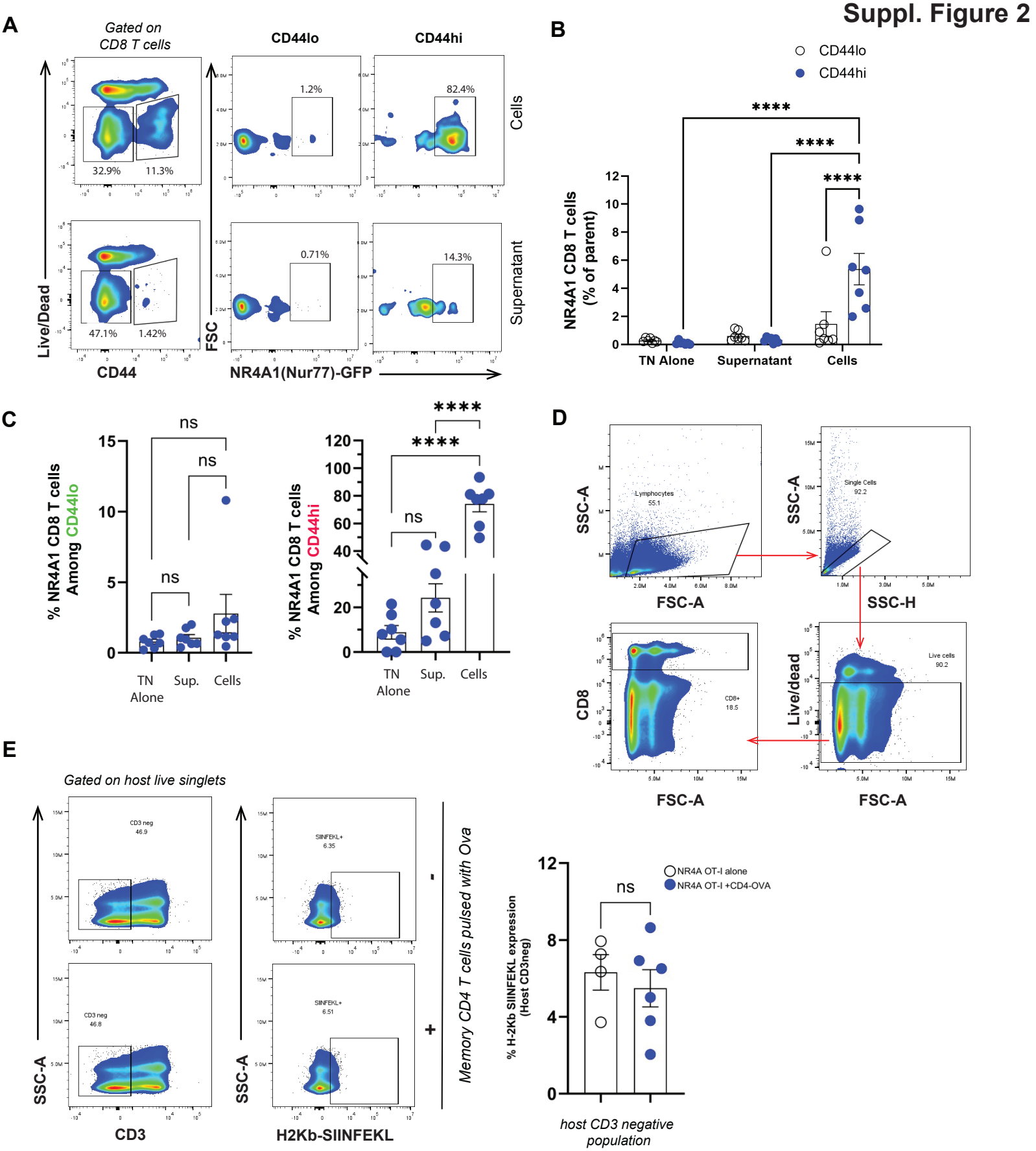






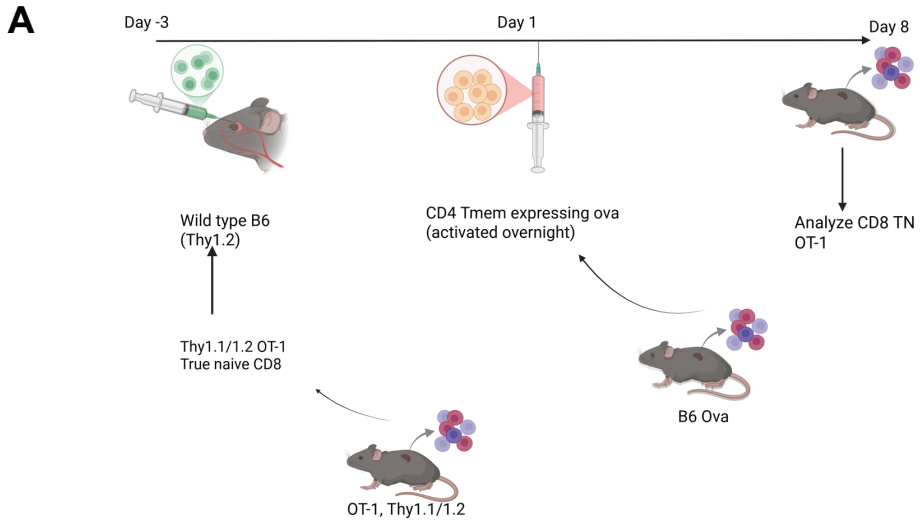
Supplementary Figure 1 (a) Experimental schematic diagram of *in vitro* co-culture model followed by functional analyses **(b)** Post-sort flow plots for three populations: T_N cells cultured alone, T_N CD45RO$^+$ cells, and CD4 T_{CM} sorted from the co-culture conditions **(c)** Experimental schematic design of *in vitro* stimulation of naive CD8 T cells from Nur77^{GFP} mice using anti-CD3/CD28 coated beads followed by phenotypic analyses **(d)** Representative flow plots and **(e)** Bar graph showing percent of CD44hi and CD44lo expressing NR4A1 (Nur77)-GFP.

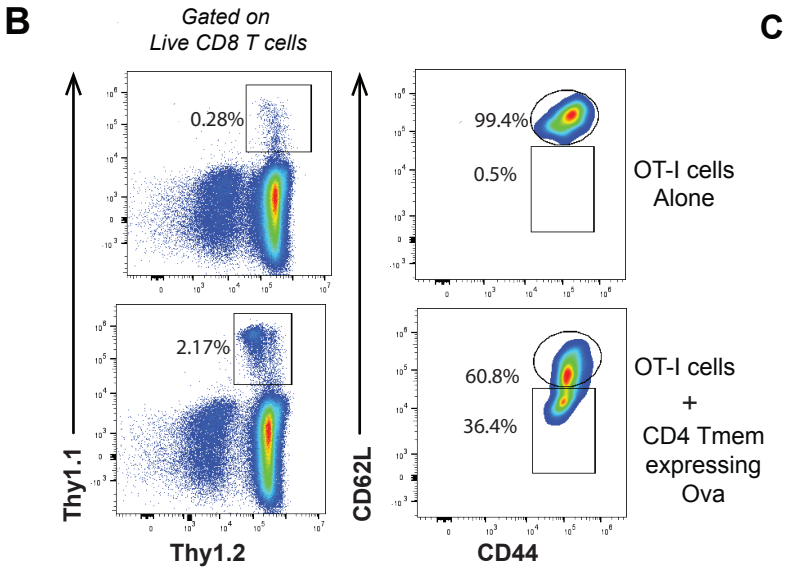
Suppl. Figure 2

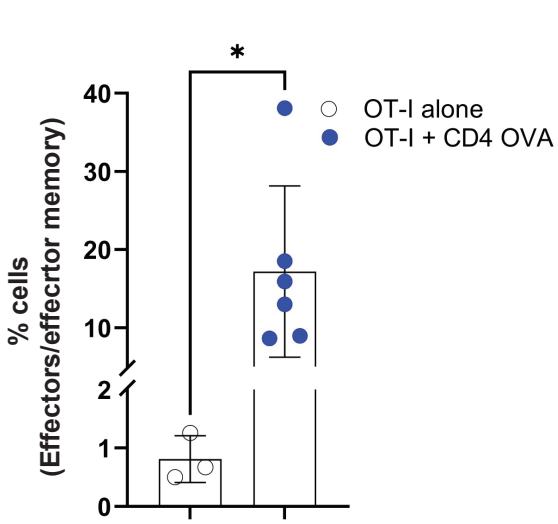


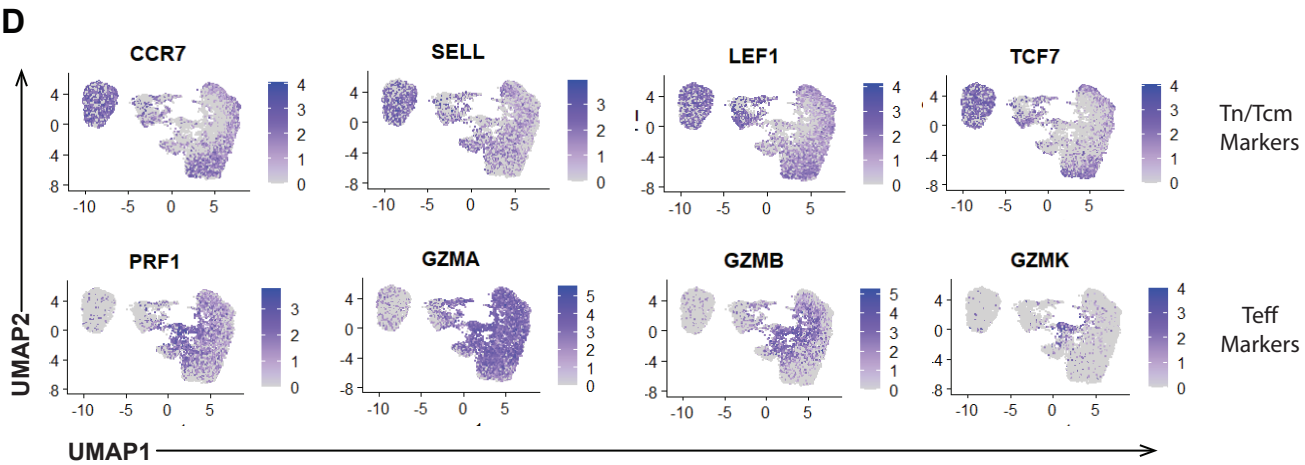
Supplementary Figure 2 (a) Representative flow plots showing percent of CD8 T cells expressing NR4A1(Nur77)-GFP in two conditions: supernatant and co-culture. Percent **(b)** of parent [CD44hi and CD44lo] and **(c)** among CD44lo and CD44hi CD8 T cells **(d)** gating strategy for for live splenic CD8 T cells related to **Fig.2E-F (e)** Representative flow plots and bar graph showing % of host CD3negative population expressing H2Kb-SIINFEKL peptide complex in the presence or absence of adoptively transferred memory CD4 T cells pulsed with Ova.

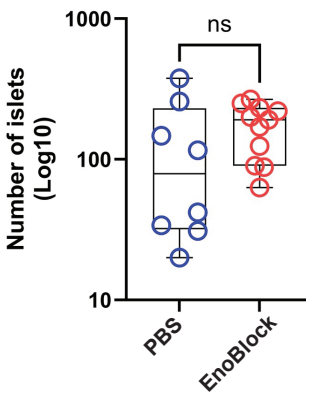
Suppl. Figure 3

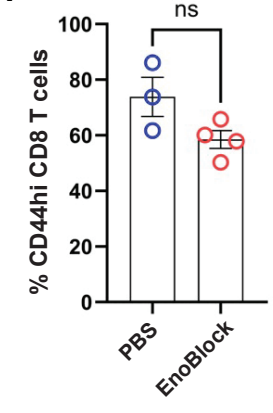


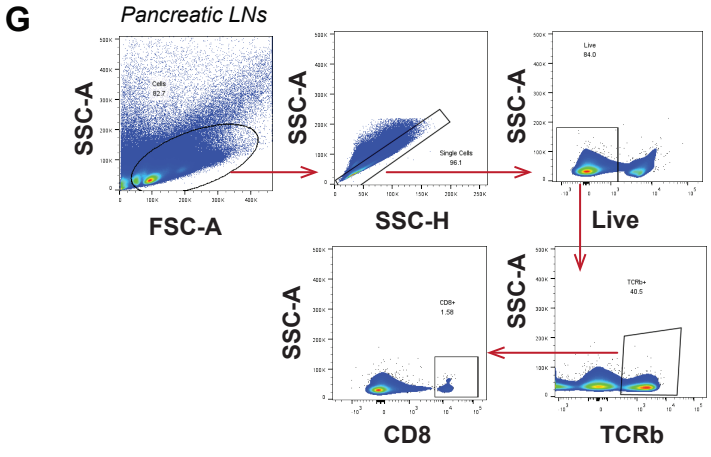












Supplementary Figure 3 (a) Schematic of *in vivo* adoptive transfer experiment. OT-I CD8 T cells (Thy1.1/1.2) were transferred into Thy1.2 congenic hosts either alone (n=4) or with CD4 T_{MEM} cells isolated from mice ubiquitously expressing Ova (n=6). CD44/CD62L phenotype of OT-I cells were assessed in the spleen after seven days. **(b)** Representative flow cytometry plots and **(c)** Bar-graphs showing percent of OT-I cells acquiring effector/effector memory phenotype (CD62Lneg CD44hi) from hosts receiving OT-I alone or OT-I + CD4 T_{MEM} expressing Ova. **(d)** Feature plots showing expression of naive/central memory T cell markers (top panel) versus T cell effector markers (lower panel). **(e)** Number of islets in NOD mice treated with EnoBlock versus PBS **(f)** Bar-graphs showing percent of CD44hi in pLNs isolated from EnoBlock treated NOD mice compared to PBS **(g)** Gating strategy for for pancreatic lymph nodes CD8 T cells related to **Fig.4H-J**