

Supplementary Figure 8: Disruption of ER α does not impacts T cell hyperactivation in B6.*Sle1b* males (A) Dot plots show the percentage of splenocytes in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b*.*ER* $\alpha^{+/+}$, and B6.*Sle1b*.*ER* $\alpha^{-/-}$ mice that were CD4⁺CD69⁺ activated T cells. (B)

Representative contour plots from show the frequency of CD4⁺CD69⁺ T cells in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{+/+}$, and B6.*Sle1b.ER* $\alpha^{-/-}$ mice. (C) Dot plots show the percentage of splenocytes in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{+/+}$, and B6.*Sle1b.ER* $\alpha^{-/-}$ mice that were CD4⁺CD134⁺ activated T cells. (D) Representative contour plots from show the frequency of CD4⁺CD134⁺ T cells in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{+/+}$, and B6.*Sle1b.ER* $\alpha^{-/-}$ mice. (E) Dot plots show the percentage of splenocytes in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{+/+}$, and B6.*Sle1b.ER* $\alpha^{-/-}$ mice. (E) Dot plots show the percentage of splenocytes in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{+/+}$, and B6.*Sle1b.ER* $\alpha^{-/-}$ mice that were CD4⁺CD62L⁺ naïve T cells. (F) Representative contour plots from show the frequency of CD4⁺CD62L⁺ T cells in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{-/-}$ mice. (F) Representative contour plots from show the frequency of CD4⁺CD62L⁺ T cells in male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{-/-}$ mice. Splenocytes were collected from male B6.*ER* $\alpha^{+/+}$, B6.*ER* $\alpha^{-/-}$, B6.*Sle1b.ER* $\alpha^{-/-}$ (N=10), B6.*Sle1b.ER* $\alpha^{+/+}$ (N=32), and B6.*Sle1b.ER* $\alpha^{-/-}$ (N=11) mice that were 5-6 months of age. The longer horizontal bar in each panel denotes the mean for each group, and the shorter black bars indicate the standard error of the mean. The * indicates p≤0.05, and the ** indicates p≤0.01.