

Barik et al., Figure S 1

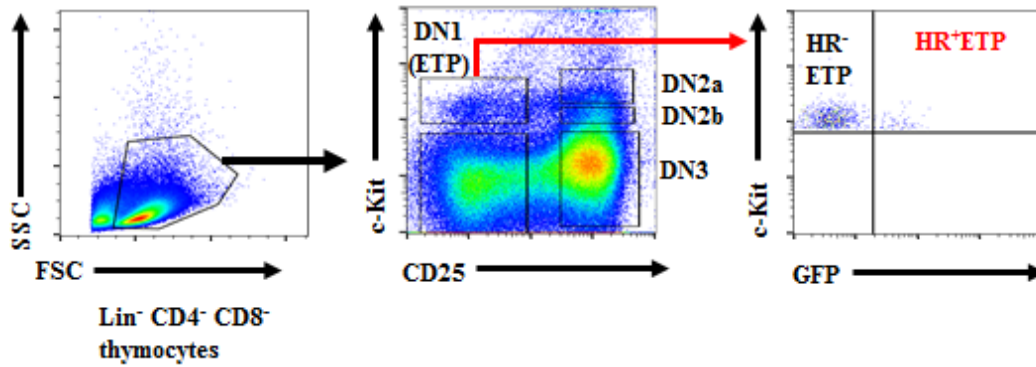


Figure S1. Strategy for isolation of ETPs.

Thymic cells from IL-13R α 1-GFP reporter mice were depleted of lineage-positive (Lin^+) cells including CD4^+ , $\text{CD8}\alpha^+$, CD11b^+ , CD11c^+ , CD19^+ , B220^+ , CD49b^+ , CD105^+ , MHCII^+ , Ter-119^+ , and $\text{TCR}\gamma/\delta$. The Lin^- cells were then gated on $\text{c-Kit}^+ \text{CD25}^-$ as double negative ($\text{CD4}^- \text{CD8}^-$) 1 (DN1) cells. These are referred to as early thymic progenitors (ETPs) and were further gated on on the basis of GFP expression and sorted into HR^+ (GFP⁺) or HR^- (GFP⁻) ETPs.

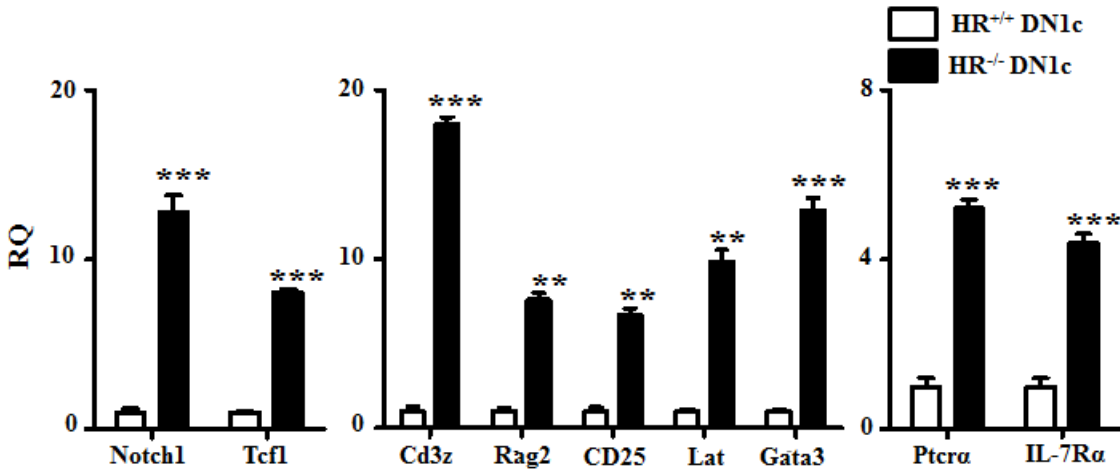


Figure S2. Expression of HR reduces T cell potential in thymic DN1c subsets.

DN1c cells from HR^{+/+} and HR^{-/-} mice were analysed for mRNA expression of genes associated with T-cell lineage potential. The data shows the relative mRNA quantity (RQ) normalized to GAPDH housekeeping gene. The bars represent mean RQ \pm SD for the indicated genes compiled from 3 independent experiments. ** $p < 0.01$, and *** $p < 0.001$ as determined by two-tailed, unpaired Student's t-test from 3 independent experiments.

Barik et al., Figure S3

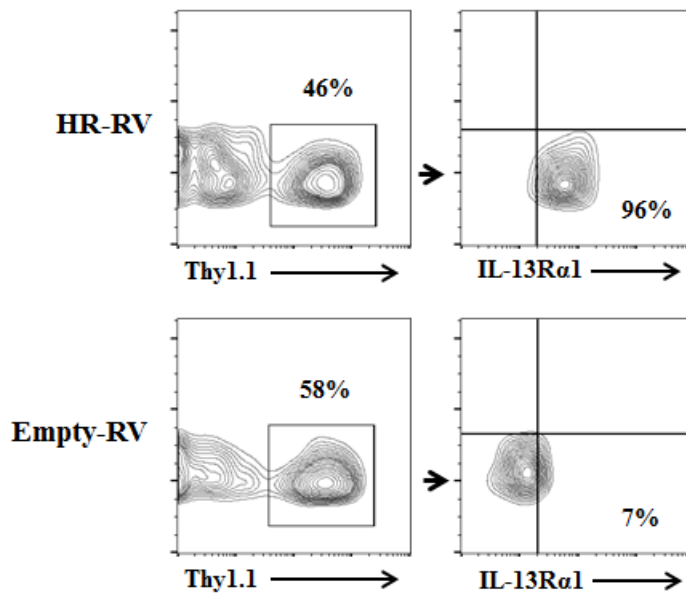


Figure S3. Restoration of HR expression in ETPs by retroviral transduction.

ETPs from HR^{-/-} mice were transduced with murine stem cell virus (MSCV) containing Thy1.1 reporter gene alone or together with IL-13Rα1 gene. The MSCV-Thy1.1 retroviral vector is referred to as empty RV and the MSCV-Thy1.1-IL-13Rα1 is designated as HR-RV. The transduced cells are then tested for HR and Thy1.1 expression by staining with anti-IL-13Rα1 and anti-Thy1.1 antibodies.

Barik et al., Figure S4

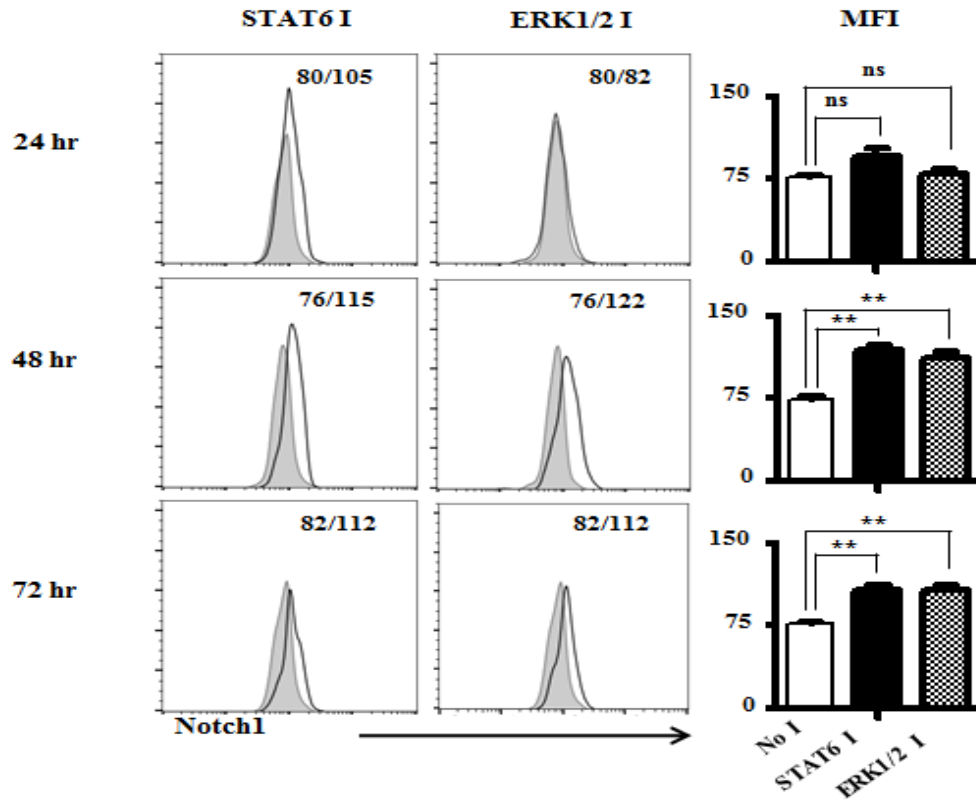


Figure S4. Inhibition of STAT6 activation rescues Notch1 expression in HR⁺ ETPs.

Lin⁻ CD4⁻ CD8⁻ thymocytes were isolated from IL-13R α 1-GFP reporter mice and treated with either STAT6 or ERK1/2 inhibitor for the indicated period of time. The cells were then stained with antibodies to CD25, CD44, c-Kit, and Notch1. The CD25⁻CD44⁺c-Kit⁺GFP⁺(HR⁺) ETPs were analyzed for Notch1 expression by flow cytometry. The shaded (no inhibitor) and open (with inhibitor) histograms show representative experiments and the bar graphs show the mean \pm SD MFI results compiled from three independent experiments. ** p <0.01 as determined by one way ANOVA.