

BATF is required for human and mouse Th9 cell development

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Supplementary Figures

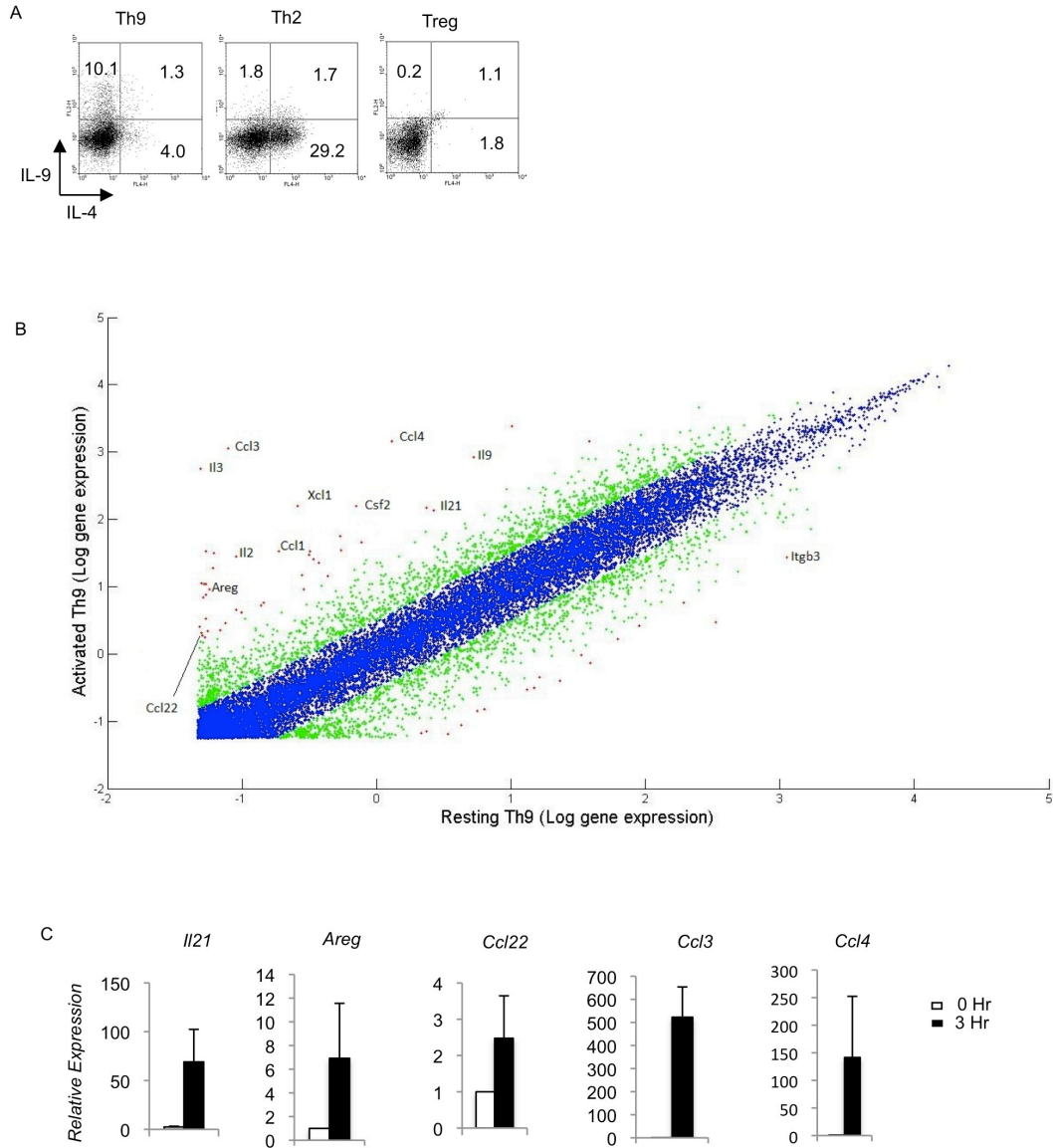


Figure S1. Microarray analysis of gene expression in Th9 cells.

(A) Naïve CD4⁺ T cells were differentiated under Th2, Th9 or iTreg polarizing conditions for five days before cells were stimulated with PMA and ionomycin and analyzed for production of IL-4 and IL-9 by intracellular staining. Data are representative of cells used for microarray analysis.

(B) Correlation of gene expression in resting and anti-CD3 activated Th9 cells. Selected induced (above the diagonal) or repressed (below the diagonal) genes are indicated.

(C) RNA was isolated from resting or anti-CD3 activated Th9 cells for expression analysis of the indicated genes using qRT-PCR. Expression is relative to resting Th9 cells and normalized to beta-2 microglobulin expression.

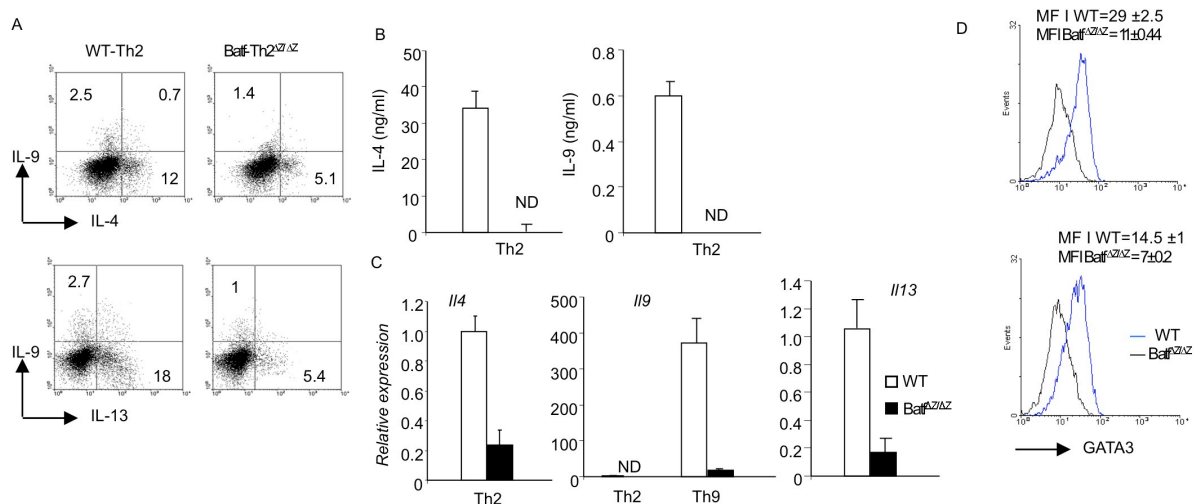


Figure S2. BATF is required for the development of Th2 cells.

(A-D) Naïve CD4⁺ T cells were isolated from wild type and BATF-deficient mice and differentiated under Th2 or Th9 polarizing conditions before analysis.

(A) Th2 cells were assessed for production of IL-9, IL-4, and IL-13 using intracellular cytokine staining following five hours stimulation with PMA and ionomycin.

(B) Th2 cells were assessed for production of IL-9, and IL-4 using ELISA following 24 hour stimulation with anti-CD3.

(C) Th2 cells were assessed for expression of IL-9, IL-4, and IL-13 using qRT-PCR of mRNA following six hours stimulation with anti-CD3. Expression is relative to wild type Th2 cells and normalized to beta-2 microglobulin expression.

(D) Th2 (top) and Th9 (bottom) cells were assessed for GATA3 expression using intracellular staining. Mean fluorescence intensity is indicated as the average ± SD of cells from three mice.