

Description of Additional Supplementary Files

Supplementary Data 1

Pairwise comparison of differentially regulated genes in control (*Cd19^{Cre/+}*) versus *Rif1^{F/F}Cd19^{Cre/+}* B lymphocytes. Related to Figures 5 and S5.

Supplementary Data 2

Lists of genes in the PB and PC transcriptional signatures that are differentially regulated in *Rif1^{F/F}Cd19^{Cre/+}* activated B cells. Related to Figure 5.

Supplementary Data 3

List of RIF1 peaks in the genome of *ex vivo* activated B cells as determined by CHIP-Seq analysis. Related to Figure 6.

Supplementary Data 4

Lists of RIF1-bound genes in the top GREAT gene ontology enrichment categories. Related to Figure 6.

Supplementary Data 5

List of potential RIF1 binding motifs identified by the *de novo* motif-discovery program MEME-ChIP. Related to Figure 6.

Supplementary Data 6

List of motifs identified in RIF1 and BLIMP1 co-occupied regions by the motif-enrichment program SEA. Related to Figure 7.

Supplementary Data 7

List of RIF1 and BLIMP1 target genes. Related to Figure 8.