

Supplemental material

Chen et al., <https://doi.org/10.1084/jem.20171815>

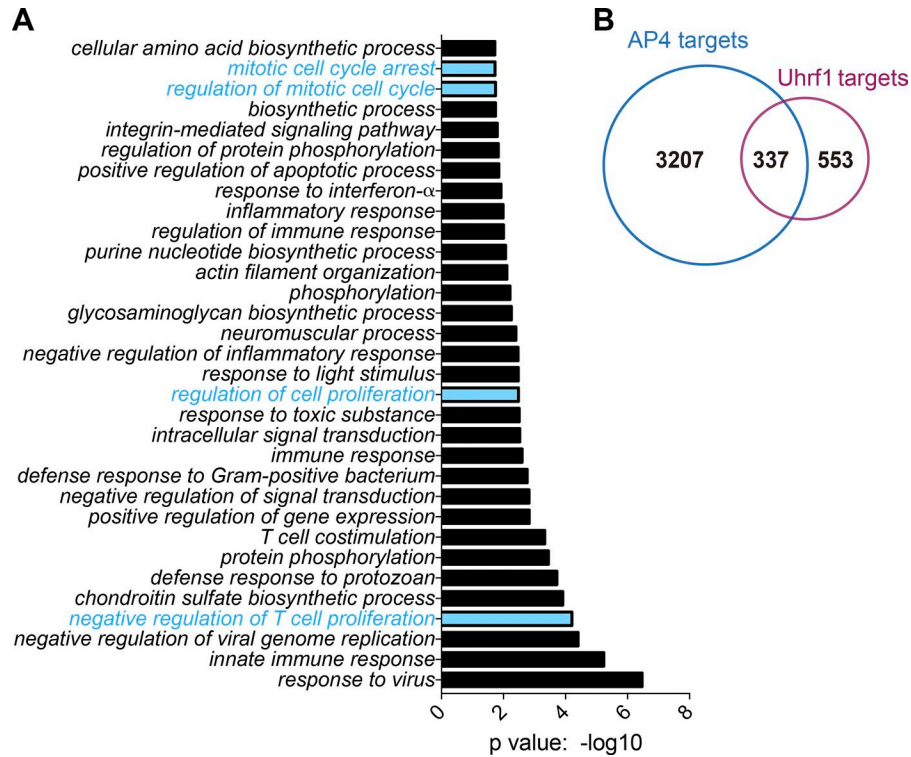


Figure S1. **RNA-seq analysis of Uhrf1 WT and KO GC B cells.** (A) GO-term pathway enrichment analysis of differentially expressed genes (DEGs, $P < 0.05$; fold change > 1.2) between Uhrf1 WT and KO GC B cells. Cell proliferation-associated pathways are highlighted in blue. (B) Venn diagram showed the comparison between AP4 targets and Uhrf1 targets. AP4 targets were derived from DEGs of AP4-positive and -negative GC B subsets (GSE80669; $P < 0.05$; fold change > 1.5). Uhrf1 targets were DEGs ($P < 0.05$; fold change > 1.2) of Uhrf1 WT and KO GC B cells from RNA-seq.

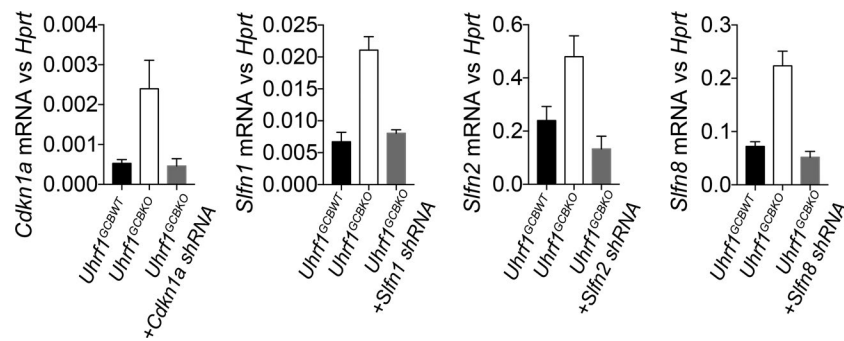


Figure S2. **shRNA knockdown efficiency validation.** shRNA knockdown efficiency of *Cdkn1a*, *Slnf1*, *Slnf2*, and *Slnf8* were quantified by RT-qPCR with FACS-sorted transduced GC B cells from Figs. 5 G and 6 E. Data are representative of two experiments. Error bars show means \pm SEM.

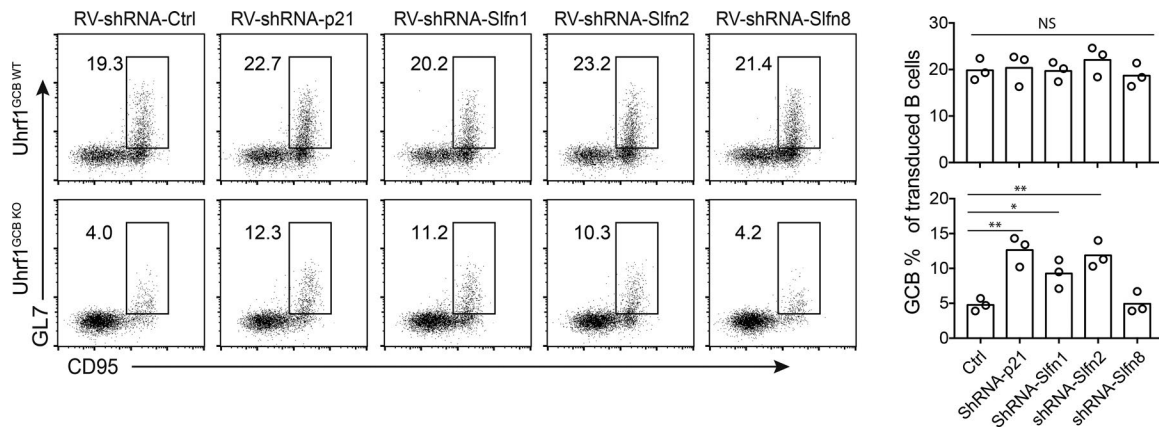


Figure S3. **GC rescue by p21 and Slfns shRNA.** In vitro activated B cells from Uhfr1^{GCB WT} or Uhfr1^{GCB KO} mice were transduced with retroviral shRNA for p21 and Slfns as indicated, adoptively transferred into MD4 BCR transgenic mice, and then immunized with SRBCs for 8 d. GC response of transduced B cells was analyzed by flow cytometry. Data are representative of two experiments. Statistical analysis was done with two-way ANOVA. Error bars show means \pm SEM. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$.

Table S1. **Oligonucleotide sequences**

qPCR primers	Sequence (5'-3')
Slfn1-5QF	CTTTGCCTTACTTCTCTGG
Slfn1-3QR	AGAATCAGCACAGGGGTCC
Slfn2-5QF	TTTGAAGCAGAGAAGAGCGAT
Slfn2-3QR	AACCTCTTACACAGCCGC
Slfn8-5QF	TGCGTAAAGGCTATTCTCTCC
Slfn8-3QR	CACAATGCTTCTTTCCAGTCCT
uhrf1-5QF	AGGAGAAGAGCAGGAAGCG
uhrf1-3QR	GCGTTGCCCTTGTCTCT
Cdkn1a-5QF	AACATTCCAGCCCTTCCCC
Cdkn1a-3QR	ACTGCCAATCACACACTATCCT
shRNA sequences	For GC B transduction, two shRNA sequences were combined
AP4 sh1F	GATCCGCGAGCAGTTATCGTGAAGTCTTTCAAGAGAAGACTTCACGATAACTGCTCGTTTTTTG
AP4 sh1R	AATTCAAAAAACGAGCAGTTATCGTGAAGTCTTCTTGAAGACTTCACGATAACTGCTCGCG
AP4 sh2F	GATCCGACACAGCTCAAGCGCTTTATCTTCAAGAGAGATAAAGCGCTTGAGCTGTGTTTTTTG
AP4 sh2R	AATTCAAAAAACACAGCTCAAGCGCTTTATCTTCTTGAAGATAAAGCGCTTGAGCTGTGTCG
c-Myc sh1F	GATCCGCTGGAGATGATGACCGAGTTATTCAAGAGATAACTCGGTCATCATCTCCAGTTTTTTG
c-Myc sh1R	AATTCAAAAAAGGAGATGATGACCGAGTTATCTTGAATAACTCGGTCATCATCTCCAGCG
c-Myc sh2F	GATCCGATCCTATGTTGCGGTCGCTATTCAAGAGATAGCGACCGCAACATAGGATGTTTTTTG
c-Myc sh2R	AATTCAAAAACATCCTATGTTGCGGTCGCTATCTTGAATAGCGACCGCAACATAGGATGCG
P21-shRNA 5F	GATCCGAGTGAGCAGTTGCGCCGTGATCTCGAGATCACGGCGCAACTGCTCACTTTTTTG
P21-shRNA 3R	AATTCAAAAAAGTGAGCAGTTGCGCCGTGATCTCGAGATCACGGCGCAACTGCTCACTCG
Slfn1 sh 1F	GATCCGAGCAAAGAATTGCCAGCCTAATTCAAGAGATTAGGCTGGCAATTCTTTGCTTTTTTTG
Slfn1 sh 1R	AATTCAAAAAAGCAAAGAATTGCCAGCCTAATCTTGAATTAGGCTGGCAATTCTTTGCTCG
Slfn1 sh 2F	GATCCGACATGGAATAGGAGAAGATTTTTCAAGAGAAAATCTTCTCTATTCCATGTTTTTTG
Slfn1 sh 2R	AATTCAAAAAACATGGAATAGGAGAAGATTTTTCTTGAAAAATCTTCTCTATTCCATGTGCG
Slfn2 sh 1F	GATCCGAGAATGGCACCTGGAGGATTTTTCAAGAGAAAATCCTCCAGGTGCCATTCTTTTTTTG
Slfn2 sh 1R	AATTCAAAAAAGAATGGCACCTGGAGGATTTTTCTTGAAAAATCCTCCAGGTGCCATTCTCG
Slfn2 sh 2F	GATCCGATGGGCATCAGTGTGATCTGTTCAAGAGACAGATCAACTGATGCCATTTTTTTG
Slfn2 sh 2R	AATTCAAAAAATGGGCATCAGTGTGATCTGTTCAAGAGATCAACTGATGCCATCG
Slfn8 sh 1F	GATCCGGCTATCTCTGTGATTCTAACTTCAAGAGAGTTAGAAATCACAGAGATACGCTTTTTTTG
Slfn8 sh 1R	AATTCAAAAAGCGTATCTCTGTGATTCTAACTCTTGAAGTTAGAAATCACAGAGATACGCCG
Slfn8 sh 2F	GATCCGATCAAATACAGGCCTACTGATTTCAAGAGAATCAGTAGGCCTGATTTGATTTTTTTG
Slfn8 sh 2R	AATTCAAAAAATCAAATACAGGCCTACTGATTTCTTGAATCAGTAGGCCTGATTTGATCG