

Supplementary Methods:

Chromatin immunoprecipitation (ChIP). We fixed the cells in 1% formaldehyde, resuspended in lysis buffer and sonicated 5 x 30 sec (amplitude 55%) in a Ultrasonic Dismembrator Model 500 (Fisher). We pre-cleared the supernatants with protein A/G-Agarose beads (Roche) and 10% input was collected. We performed the Immunoprecipitations (20 x10⁶ cells each) using polyclonal antibodies to Bcl-6 (N-3), N-CoR (H-303) (Santa Cruz), SMRT, H4 pan-acetylated, H3 Lysine 9 dimethylated (Upstate) and HA (Sigma), normal rabbit serum (Jackson Immuno Research) and water as controls (O/N, 4°C). DNA-proteins complexes were pulled-down with A/G-Agarose beads (4°C/30 min) and washed. We resuspended the beads were in Elution Buffer, incubated O/N at 65°C to reverse cross-links and purified using QIAquick PCR purification columns (Qiagen). DNA fragments were detected by 42 cycles of PCR. ChIPs were performed four times. All the IPs were performed in duplicates in each of the experiments.

Primers for ChIP:

MIP-1 α promoter-F: 5' -ACGATGCTGGGTCAGGTATC-3';

MIP-1 α promoter-R: 5'-AGTGACTAGGGCGCTGTGTT-3';

BCL-6 intron 7-F: 5'-CGATGAGGAGTTTCGGGATGT-3';

BCL-6 intron 7-R: 5'-TTTCTGGGGGCTCTGTGGACT-3';

Cyclin D2 promoter-F: 5'-AGAAAGCCTGGCGAGTGAG-3' ;

Cyclin D2 promoter-R: 5'-AGGAAAAACCCGCTTCCTC-3';

HPRT-F: 5'-TCACAAGTAAGTTAGAATTTGAGAAC-3';

HPRT-F: 5'-CACAGTTCTCAAATTCTAACTTACTT-3';

GAPDH promoter-F: 5'-TCCTCATCCGTACTIONTACTT-3';

GAPDH promoter-R: 5'-GGTCTTAGCCTCCCTCCCAACTG-3'.

Primers for QPCR:

Mip1 α -F: 5'-GGTCTCCACTGCTGCCCTTGC-3';

Mip1 α -R: 5'-GGAATCTGCCGGGAGGTGTAGC-3';

CD69-F: 5'-AGCCCCAAAATGCTTGTTCTG-3';

CD69-R: 5'-TTCCTCTCTACCTGCGTATCG-3';

CD80-F: 5'-CATCCTGGGCCATTACCTTA-3';

CD80-R: 5'-TCTCTCTCTGCATCTTGGGG-3';

CyclinD2-F: 5'-CCGGACCTAATCCCTCACTC-3';

CyclinD2-R: 5'-CACACCGATGCAGCTTTCTA-3';

HPRT-F: 5'-AAAGGAACCCCACGAAGTGTT-3';

HPRT-R: 5'-TCAAGGGCATATCCTACAACAA-3';

GAPDH-F: 5'-CGACCACTTTGTCAAGCTCA-3';

GAPDH-R: 5'-CCCTGTTGCTGTAGCCAAAT-3';

CD23b-F = 5'-ATGAATCCTCCAAGCAGGAG-3';

CD23b-R = 5'-GACTTGAAGCTGCTCAGATCTGCT-3';

Taqman probes:

Blimp1: Hs00153357

CD20: Hs00174849

HPRT: Hs00355752.

Humoral response and tissue analysis: We immunized intraperitoneally 15 three month-old C57BL/6 mice with 100 μ g of the hapten (4-hydroxy-3-nitrophenyl)-acetyl (NP)₂₁ coupled to chicken γ globulin (CGG) (BioSearch Technologies) in alum (Pierce). One day

after immunizations, we randomized the mice into three groups (n=5) and we treated them intraperitoneally every 12 h for 14 d with either: WP 750 μ g (in 325 μ l of BS), MP 750 μ g (in 325 μ l of BS) or PB 325 μ l. Mice were bled (200 μ l) before immunization and on days seven and 14 of the treatment. We collected blood using tubes containing gel/clot activator (Sarstedt) and the sera were stored at -20 C for further analysis. We measure antibodies specific to NP on NP₁₇-BSA-coated plates (BioSearch Technologies) respectively using anti-IgG and anti-IgM antibodies (Southern Biotechnology). Titers were assigned to the serial dilution corresponding to $1/2 V_{max}$. At day 14 the mice were sacrificed and their tissues (spleen, lung, heart, liver, intestines, kidney, skeletal muscle and skin) harvested. Organs were weighed and tissues were processed for histological analysis as described above. We stained the slides with hematoxylin (Lerner Laboratories) and eosin (Fisher Chemicals). Pictures were taken using a light microscope (Zeiss Axiophot).

Peptide Affinity: We allowed 30 μ M of bacterially expressed GST-Bcl-6^{BTB} to bind to glutathione beads (Amersham) and then we incubated them with 0,1 μ M, 10 μ M, and 100 μ M concentration of pure WP or MP in PBS. After 1 h of binding the beads were washed 5 times with PBS. The beads were resuspended 6x Laemmli buffer, the proteins submitted to SDS-PAGE and detected by Coomassie Blue staining. The resulting bands corresponding to captured peptides were quantified using the MultiGauge software package (FujiFilm).

EMSA. We transfected 2×10^6 293T cells 4 μ g pEF-Bcl-6 expression plasmid using Superfect (Qiagen). We made nuclear extracts from 48 hours later, as previously reported. Oligonucleotides containing three Bcl-6 binding sites were annealed and end labeled using

phosphonucleotide kinase ³⁷. In each case we allowed 2 µg nuclear extract to interact with 10 fmol ³²P labeled oligonucleotides probes. In addition, reactions were exposed to 50-fold excess unlabeled probe and Bcl-6 D8 (Sigma) antibody, NMS, WP or MP as indicated. We in vitro translated the Bcl-6 DNA binding domain and then we labeled with ³⁵S methionine using the TnT T7 coupled reticulocyte lysate system (Promega). 0.2, 0.5, 1, 2, 5, and 10 µg was allowed to interact with 10fmol ³²P labeled probes. 5µg of Bcl-6DBD was allowed also to interact with 100 fold cold competitor or 5 µg WP.