

Bcl-11b (M-50): sc-98514

BACKGROUND

Bcl-11a (CtIP-1, EVI9, B cell CLL/lymphoma 11A) and Bcl-11b (CtIP-2, RIT1, B cell CLL/lymphoma 11B) genes play crucial roles in lymphopoiesis and influence the progression of hematopoietic malignancies. Disruption of the Bcl-11b (B cell chronic lymphocytic leukemia/lymphoma 11B) locus is linked to T cell acute lymphoblastic leukemia and the loss of heterozygosity in mice results in T cell lymphoma. Bcl-11 proteins are related C₂H₂ zinc-finger transcription factors that act as transcriptional repressors. Bcl-11b can interact with the metastasis-associated proteins MTA1 and MTA2 through the amino-terminal region. Bcl-11a is essential for postnatal development and normal lymphopoiesis. The Bcl-11a mouse gene is a common site of retroviral integration in myeloid leukemia, and may function as a leukemia disease gene, in part, through its interaction with Bcl-6.

REFERENCES

1. Dyer, M.J., et al. 2002. The configuration of the immunoglobulin genes in B cell chronic lymphocytic leukemia. *Leukemia* 16: 973-984.
2. Avram, D., et al. 2002. COUP-TF (chicken ovalbumin upstream promoter transcription factor)-interacting protein 1 (CTIP1) is a sequence-specific DNA binding protein. *Biochem. J.* 368: 555-563.
3. Durum, S.K. 2003. Bcl-11: sibling rivalry in lymphoid development. *Nat. Immunol.* 4: 512-514.
4. Liu, P., et al. 2003. Bcl-11a is essential for normal lymphoid development. *Nat. Immunol.* 4: 525-532.
5. Nagel, S., et al. 2003. The cardiac homeobox gene Nkx2.5 is deregulated by juxtaposition with Bcl-11b in pediatric T-ALL cell lines via a novel t(5;14)(q35.1;q32.2). *Cancer Res.* 63: 5329-5334.
6. Togashi, T., et al. 2004. Two distinct methods analyzing chromatin structure using centrifugation and antibodies to modified Histone H3: both provide similar chromatin states of the Rit1/Bcl-11b gene. *Biochem. Biophys. Res. Commun.* 313: 489-495.
7. Sakata, J., et al. 2004. Involvement of V(D)J recombinase in the generation of intragenic deletions in the Rit1/Bcl-11b tumor suppressor gene in γ -ray-induced thymic lymphomas and in normal thymus of the mouse. *Carcinogenesis* 25: 1069-1075.
8. Senawong, T., et al. 2005. Bcl-11a-dependent recruitment of SIRT1 to a promoter template in mammalian cells results in histone deacetylation and transcriptional repression. *Arch. Biochem. Biophys.* 434: 316-325.

CHROMOSOMAL LOCATION

Genetic locus: Bcl11b (mouse) mapping to 12 F1.

SOURCE

Bcl-11b (M-50) is a rabbit polyclonal antibody raised against amino acids 640-689 mapping near the C-terminus of Bcl-11b of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Bcl-11b (M-50) is recommended for detection of Bcl-11b of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Bcl-11b siRNA (m): sc-44942, Bcl-11b shRNA Plasmid (m): sc-44942-SH and Bcl-11b shRNA (m) Lentiviral Particles: sc-44942-V.

Molecular Weight of human Bcl-11b: 116 kDa.

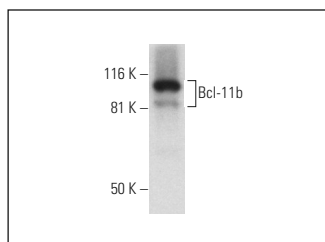
Molecular Weight of mouse Bcl-11b isoforms: 95/87/74 kDa.

Positive Controls: SP2/0 whole cell lysate: sc-364795.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Bcl-11b (M-50): sc-98514. Western blot analysis of Bcl-11b expression in SP2/0 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.