

# Bcl-11b (E-15): sc-103410

## 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 C<sub>2</sub>H<sub>2</sub> 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

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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.
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## CHROMOSOMAL LOCATION

Genetic locus: BCL11B (human) mapping to 14q32.2; Bcl11b (mouse) mapping to 12 F1.

## SOURCE

Bcl-11b (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Bcl-11b of human origin.

## RESEARCH USE

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-103410 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Bcl-11b (E-15) is recommended for detection of Bcl-11b of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with family member Bcl-11a.

Suitable for use as control antibody for Bcl-11b siRNA (h): sc-43579, Bcl-11b siRNA (m): sc-44942, Bcl-11b shRNA Plasmid (h): sc-43579-SH, Bcl-11b shRNA Plasmid (m): sc-44942-SH, Bcl-11b shRNA (h) Lentiviral Particles: sc-43579-V 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: Jurkat nuclear extract: sc-2132, K-562 nuclear extract: sc-2130 or Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Bcl-11b (F-4): sc-365320** or **Bcl-11b (F-5): sc-365988**, our highly recommended monoclonal alternatives to Bcl-11b (E-15).