

Bcl-11b (F-4): sc-365320

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_2H_2 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.

CHROMOSOMAL LOCATION

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

SOURCE

Bcl-11b (F-4) is a mouse monoclonal antibody raised against amino acids 251-290 mapping within an internal region of Bcl-11b of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bcl-11b (F-4) is available conjugated to agarose (sc-365320 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365320 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365320 PE), fluorescein (sc-365320 FITC), Alexa Fluor® 488 (sc-365320 AF488), Alexa Fluor® 546 (sc-365320 AF546), Alexa Fluor® 594 (sc-365320 AF594) or Alexa Fluor® 647 (sc-365320 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365320 AF680) or Alexa Fluor® 790 (sc-365320 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

Bcl-11b (F-4) is recommended for detection of Bcl-11b of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (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.

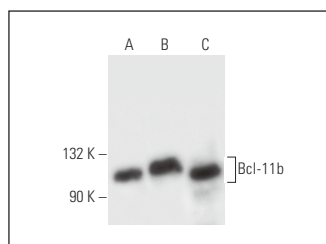
Molecular Weight of mouse Bcl-11b isoforms: 95/87/74 kDa.

Positive Controls: THP-1 whole cell lysate: sc-2238, Jurkat whole cell lysate: sc-2204 or Jurkat nuclear extract: sc-2132.

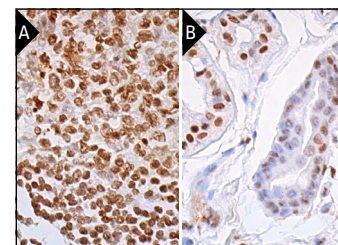
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Bcl-11b (F-4): sc-365320. Western blot analysis of Bcl-11b expression in THP-1 (A) and Jurkat (B) whole cell lysates and Jurkat nuclear extract (C).



Bcl-11b (F-4): sc-365320. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nuclear staining of cells in germinal center and cells in non-germinal center (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human sweat gland tissue showing nuclear staining of glandular cells (B).

RESEARCH USE

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