SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-11b (F-5): sc-365988

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

Bcl-11b (F-5) 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 IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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-5) 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).

Bcl-11b (F-5) is also recommended for detection of Bcl-11b in additional species, including canine, bovine and porcine.

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.

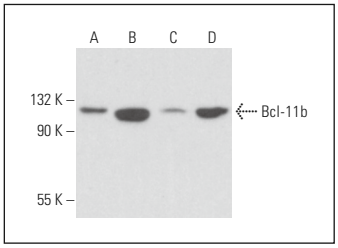
Molecular Weight of mouse Bcl-11b isoforms: 95/87/74 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, Jurkat whole cell lysate: sc-2204 or C2C12 whole cell lysate: sc-364188.

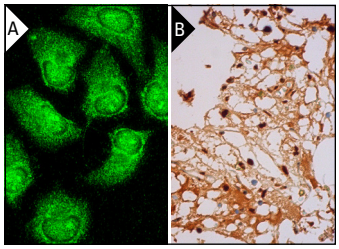
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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-5): sc-365988. Western blot analysis of Bcl-11b expression in Jurkat (**A**), CCRF-CEM (**B**), C2C12 (**C**) and TK-1 (**D**) whole cell lysates.



Bcl-11b (F-5): sc-365988. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing nuclear and cytoplasmic staining of hematopoietic cells (**B**).

SELECT PRODUCT CITATIONS

1. Eddings, C.R., et al. 2019. Pridopidine protects neurons from mutant-huntingtin toxicity via the σ-1 receptor. Neurobiol. Dis. 129: 118-129.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.