SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-11a/b (F-10): sc-515783

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.

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.

CHROMOSOMAL LOCATION

Genetic locus: BCL11A (human) mapping to 2p16.1, BCL11B (human) mapping to 14q32.2.

SOURCE

Bcl-11a/b (F-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 656-681 near the C-terminus of Bcl-11b of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bcl-11a/b (F-10) is available conjugated to agarose (sc-515783 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515783 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515783 PE), fluorescein (sc-515783 FITC), Alexa Fluor® 488 (sc-515783 AF488), Alexa Fluor® 546 (sc-515783 AF546), Alexa Fluor® 594 (sc-515783 AF594) or Alexa Fluor® 647 (sc-515783 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515783 AF680) or Alexa Fluor® 790 (sc-515783 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

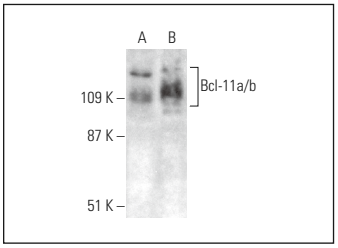
APPLICATIONS

Bcl-11a/b (F-10) is recommended for detection of Bcl-11a and Bcl-11b of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

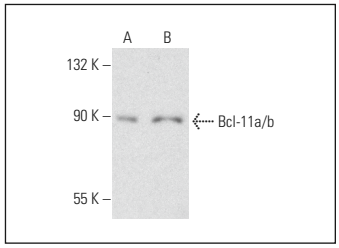
Molecular Weight of Bcl-11a/b: 96 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, RAW 264.7 nuclear extract: sc-24961 or CCRF-CEM nuclear extract: sc-2146.

DATA



Bcl-11a/b (F-10): sc-515783. Western blot analysis of Bcl-11a/b expression in Jurkat (**A**) and CCRF-CEM (**B**) nuclear extracts.



Bcl-11a/b (F-10): sc-515783. Western blot analysis of Bcl-11a/b expression in F9 (**A**) and RAW 264.7 (**B**) nuclear extracts.

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.

PROTOCOLS

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