SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl10 (A-6): sc-13153

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Bcl10, also designated CIPER, c-CARMEN and mE10, was first identified as a gene truncated or mutated in MALT B cell lymphomas and other tumor types. Bcl10 is homologous to the equine herpesvirus-2 E10 gene and, like E10, it contains an N-terminal caspase recruitment domain (CARD). Expression of Bcl10 has been shown to induce NFκB activation in a NIK-dependent pathway, and research indicates that the CARD domain is essential for this activation; although in a separate study, Bcl10 by itself did not induce JNK or NFκB activation. Overexpression of Bcl10 has been shown to induce apoptosis in a manner dependent on CARD-mediated oligomerization. Bcl10 has also been shown to play a role in processing of caspase-9 to its active dimer. Other studies have shown that Bcl10 is not mutated in many human tumors and lymphomas.

CHROMOSOMAL LOCATION

Genetic locus: BCL10 (human) mapping to 1p22.3; Bcl10 (mouse) mapping to 3 H2.

SOURCE

Bcl10 (A-6) is a mouse monoclonal antibody raised against amino acids 1-197 of Bcl10 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bcl10 (A-6) is available conjugated to agarose (sc-13153 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-13153 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-13153 PE), fluorescein (sc-13153 FITC), Alexa Fluor® 488 (sc-13153 AF488), Alexa Fluor® 546 (sc-13153 AF546), Alexa Fluor® 594 (sc-13153 AF594) or Alexa Fluor® 647 (sc-13153 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-13153 AF680) or Alexa Fluor® 790 (sc-13153 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Bcl10 (A-6) is recommended for detection of Bcl10 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), 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).

Suitable for use as control antibody for Bcl10 siRNA (h): sc-29793, Bcl10 siRNA (m): sc-29794, Bcl10 shRNA Plasmid (h): sc-29793-SH, Bcl10 shRNA Plasmid (m): sc-29794-SH, Bcl10 shRNA (h) Lentiviral Particles: sc-29793-V and Bcl10 shRNA (m) Lentiviral Particles: sc-29794-V.

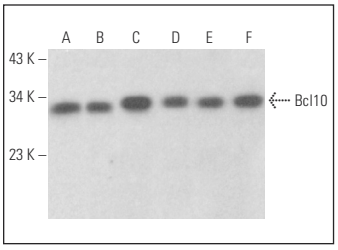
Molecular Weight of Bcl10: 33 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NAMALWA cell lysate: sc-2234 or Ramos cell lysate: sc-2216.

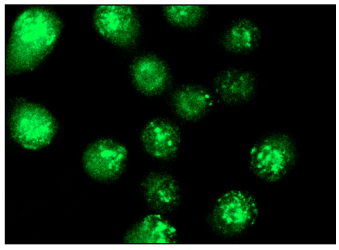
STORAGE

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

DATA



Bcl10 (A-6): sc-13153. Western blot analysis of Bcl10 expression in Ramos (**A**), K-562 (**B**), NAMALWA (**C**), MCF7 (**D**), Jurkat (**E**) and Raji (**F**) whole cell lysates.



Bcl10 (A-6): sc-13153. Immunofluorescence staining of methanol-fixed KNRK cells showing cytoplasmic and nuclear localization.

SELECT PRODUT CITITATIONS

1. Borthakur, A., et al. 2010. Platelet-activating factor-induced NFκB activation and IL-8 production in intestinal epithelial cells are Bcl10-dependent. Inflamm. Bowel Dis. 16: 593-603.
2. Carvalho, G., et al. 2010. Interplay between Bcl10, MALT1 and IκBα during T-cell-receptor-mediated NFκB activation. J. Cell Sci. 123: 2375-2380.
3. Carvalho, G., et al. 2011. Participation of the cell polarity protein PALS1 to T-cell receptor-mediated NFκB activation. PLoS ONE 6: e18159.
4. Borthakur, A., et al. 2013. *Lactobacillus acidophilus* alleviates platelet-activating factor-induced inflammatory responses in human intestinal epithelial cells. PLoS ONE 8: e75664.
5. Douanne, T., et al. 2016. The paracaspase MALT1 cleaves the LUBAC subunit HOIL1 during antigen receptor signaling. J. Cell Sci. 129: 1775-1780.
6. Ma, C.A., et al. 2017. Germline hypomorphic CARD11 mutations in severe atopic disease. Nat. Genet. 49: 1192-1201.
7. Jacobs, K.A., et al. 2019. Paracaspase MALT1 regulates glioma cell survival by controlling endo-lysosome homeostasis. EMBO J. 39: e102030.
8. Nicolau, C.A., et al. 2020. TAK1 lessens the activity of the paracaspase MALT1 during T cell receptor signaling. Cell. Immunol. 353: 104115.

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.