SANTA CRUZ BIOTECHNOLOGY, INC.

B-Myb (C-5): sc-390198

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The highly leukemogenic avian retrovirus E26 contains two oncogenes, v-Myb and v-Ets, which are expressed together as a fusion protein. The cellular homolog of v-Myb, designated c-Myb, encodes a transcription factor. Deletion or disruption of a negative regulatory domain mapping within the carboxy-terminal domain of c-Myb results in enhanced transactivating capacity and, in parallel, leads to activation of its ability to transform hemopoietic cells. c-Myb is expressed preferentially, but not exclusively, in immature hemopoietic cells and its expression decreases as cells differentiate. A second member of the Myb proto-oncogene family, B-Myb, encodes a second sequence-specific DNA binding protein. B-Myb RNA levels are low or undetectable in quiescent cells but increase at the G_1/S-phase transition following mitogenic stimulation. Studies suggest that B-Myb expression rescues cells from p53-induced G_1 arrest mediated by p21.

CHROMOSOMAL LOCATION

Genetic locus: MYBL2 (human) mapping to 20q13.12.

SOURCE

B-Myb (C-5) is a mouse monoclonal antibody raised against amino acids 586-700 of B-Myb 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. Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-390198 X, 200 µg/0.1 ml.

B-Myb (C-5) is available conjugated to agarose (sc-390198 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390198 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390198 PE), fluorescein (sc-390198 FITC), Alexa Fluor® 488 (sc-390198 AF488), Alexa Fluor® 546 (sc-390198 AF546), Alexa Fluor® 594 (sc-390198 AF594) or Alexa Fluor® 647 (sc-390198 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390198 AF680) or Alexa Fluor® 790 (sc-390198 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

B-Myb (C-5) is recommended for detection of B-Myb 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).

Suitable for use as control antibody for B-Myb siRNA (h): sc-43523, B-Myb shRNA Plasmid (h): sc-43523-SH and B-Myb shRNA (h) Lentiviral Particles: sc-43523-V.

B-Myb (C-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

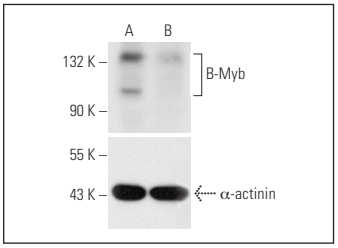
Molecular Weight of B-Myb: 110 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or B-Myb (h): 293T Lysate: sc-116447.

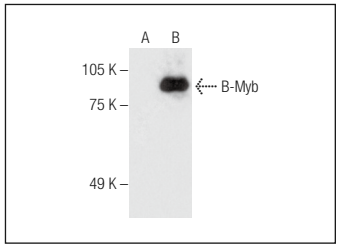
STORAGE

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

DATA



B-Myb Double Nickase Plasmid (h): sc-401318-NIC. Western blot analysis of B-Myb expression in non-transfected control (**A**) and B-Myb Double Nickase Plasmid transfected (**B**) HEK293T whole cell lysates. Blot probed with B-Myb (C-5): sc-390198. α-actinin (H-2): sc-17829 used as specificity and loading control.



B-Myb (C-5): sc-390198. Western blot analysis of B-Myb expression in non-transfected: sc-117752 (**A**) and human B-Myb transfected: sc-116447 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Dey, S., et al 2020. miR-29a is repressed by MYC in pancreatic cancer and its restoration drives tumor-suppressive effects via downregulation of LOXL2. Mol. Cancer Res. 18: 311-323.
2. Li, Q., et al. 2021. MYBL2 disrupts the Hippo-YAP pathway and confers castration resistance and metastatic potential in prostate cancer. Theranostics 11: 5794-5812.
3. Gandhi, S., et al. 2021. Proteasomal degradation of p130 facilitate cell cycle deregulation and impairment of cellular differentiation in high-risk human papillomavirus 16 and 18 E7 transfected cells. Mol. Biol. Rep. 48: 5121-5133.
4. Xia, Y., et al. 2022. TGFβ reprograms TNF stimulation of macrophages towards a non-canonical pathway driving inflammatory osteoclastogenesis. Nat. Commun. 13: 3920.
5. Zhong, F., et al. 2022. Combinatorial transcriptional regulation of HEB/ZEB1/ASCL1 and MYBL2 on Ras/ErbB signaling. Biochem. Biophys. Res. Commun. 622: 170-176.

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.