SANTA CRUZ BIOTECHNOLOGY, INC.

c-Myb (H-141): sc-7874

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 to 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: MYB (human) mapping to 6q23.3; Myb (mouse) mapping to 10 A3.

SOURCE

c-Myb (H-141) is a rabbit polyclonal antibody raised against amino acids 500-640 of c-Myb of human origin.

PRODUCT

Each vial contains 200 µg IgG 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-7874 X, 200 µg/0.1 ml.

APPLICATIONS

c-Myb (H-141) is recommended for detection of c-Myb of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

c-Myb (H-141) is also recommended for detection of c-Myb in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for c-Myb siRNA (h): sc-29855, c-Myb siRNA (m): sc-29856, c-Myb shRNA Plasmid (h): sc-29855-SH, c-Myb shRNA Plasmid (m): sc-29856-SH, c-Myb shRNA (h) Lentiviral Particles: sc-29855-V and c-Myb shRNA (m) Lentiviral Particles: sc-29856-V.

c-Myb (H-141) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

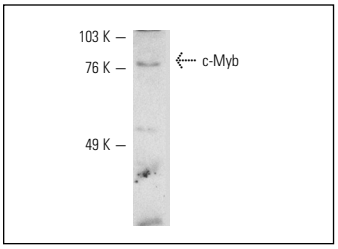
Molecular Weight of c-Myb: 75 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HL-60 whole cell lysate: sc-2209 or COLO 320DM cell lysate: sc-2226.

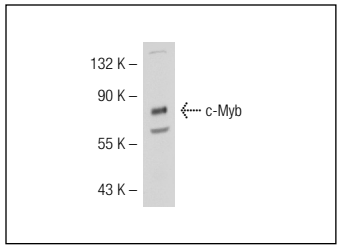
STORAGE

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

DATA



c-Myb (H-141): sc-7874. Western blot analysis of c-Myb expression in HL-60 whole cell lysate.



c-Myb (H-141): sc-7874. Western blot analysis of c-Myb expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

1. Halim, A.B., et al. 2001. Regulation of the human MAT2A gene encoding the catalytic α 2 subunit of methionine adenosyltransferase, MAT II. J. Biol. Chem. 276: 9784-9791.
2. Tapias, A., et al. 2008. Transcriptional regulation of the 5'-flanking region of the human transcription factor Sp3 gene by NF-1, c-Myb, B-Myb, AP-1 and E2F. Biochim. Biophys. Acta 1779: 318-329.
3. Molvaersmyr, A.K., et al. 2010. A SUMO-regulated activation function controls synergy of c-Myb through a repressor-activator switch leading to differential p300 recruitment. Nucleic Acids Res. 38: 4970-4984.
4. Lefebvre, C., et al. 2010. A human B-cell interactome identifies MYB and FOXM1 as master regulators of proliferation in germinal centers. Mol. Syst. Biol. 6: 377.
5. Anguita, E., et al. 2010. GFI1B controls its own expression binding to multiple sites. Haematologica 95: 36-46.
6. Papetti, M., et al. 2011. MYBL2, a link between proliferation and differentiation in maturing colon epithelial cells. J. Cell. Physiol. 226: 785-791.
7. Geng, C.D., et al. 2011. A new, lineage specific, autoup-regulation mechanism for human glucocorticoid receptor gene expression in 697 pre-B-acute lymphoblastic leukemia cells. Mol. Endocrinol. 25: 44-57.

RESEARCH USE

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