SANTA CRUZ BIOTECHNOLOGY, INC.

A-Myb (H-125): sc-28686

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Myb family of transcription factors, which includes the structurally related A-, B-, and c-Myb genes, regulate differentiation and cellular growth through binding to promoters with the consensus sequence PyAAC(G/T)G and transactivating gene expression. c-Myb is the cellular homolog of the leukemogenic avian retroviral protein v-Myc. c-Myb is expressed predominantly in immature and rapidly dividing hematopoietic cells, and cellular levels of c-Myb substantially decreases as cells reach terminal differentiation. B-Myb is expressed in a wide variety of proliferating cells, with levels accumulating during the G_1 to S phase transition. A-Myb is expressed at specific times in reproductive tissues, some neural cells, and a subset of normal and neoplastic B lymphocytes. Both A-Myb and B-Myb are expressed in t(14:18) lymphoma cells where they then inhibit cell arrest and apoptotic signaling. Expression of B-Myb rescues cells from p53-induced G_1 phase arrest that is mediated by p21, while A-Myb functions as an anti-apoptotic factor by effectively activating the bcl-2 promoter and thereby up-regulating Bcl-2 expression.

CHROMOSOMAL LOCATION

Genetic locus: MYBL1 (human) mapping to 8q13.1; Mybl1 (mouse) mapping to 1 A2.

SOURCE

A-Myb (H-125) is a rabbit polyclonal antibody raised against amino acids 628-745 mapping at the C-terminus of A-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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28686 X, 200 µg/0.1 ml.

APPLICATIONS

A-Myb (H-125) is recommended for detection of A-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).

A-Myb (H-125) is also recommended for detection of A-Myb in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for A-Myb siRNA (h): sc-29613, A-Myb siRNA (m): sc-29614, A-Myb shRNA Plasmid (h): sc-29613-SH, A-Myb shRNA Plasmid (m): sc-29614-SH, A-Myb shRNA (h) Lentiviral Particles: sc-29613-V and A-Myb shRNA (m) Lentiviral Particles: sc-29614-V.

A-Myb (H-125) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

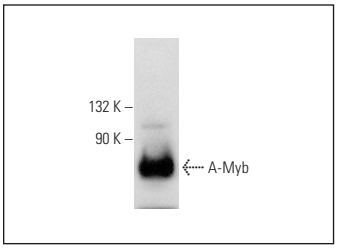
Molecular Weight of A-Myb: 83 kDa.

Positive Controls: NAMALWA cell lysate: sc-2234 or human skeletal muscle extract: sc-363776.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



A-Myb (H-125): sc-28686. Western blot analysis of A-Myb expression in human skeletal muscle tissue extract.

SELECT PRODUCT CITATIONS

1. Pilikinton, M., et al. 2007. Mip/LIN-9 regulates the expression of B-Myb and the induction of Cyclin A, Cyclin B, and Cdk1. J. Biol. Chem. 282: 168-175.
2. Horvath, G.C., et al. 2009. RFX2 is a candidate downstream amplifier of A-MYB regulation in mouse spermatogenesis. BMC Dev. Biol. 9: 63.

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 or our catalog for detailed protocols and support products.