# SANTA CRUZ BIOTECHNOLOGY, INC.

# v-Myb/c-Myb (3H2747): sc-73248



# BACKGROUND

The Myb family of transcription factors regulates proliferation, differentiation and apoptosis of hematopoletic cells. The avian myeloblastosis viral (v-Myb) protein is nuclear and binds to specific DNA sequences. The gene encoding v-Myb is oncogenic, causing monoblastic leukemia and transforming myelomonocytic cells by deregulating the expression of specific target genes. v-Myb functions as a transcriptional activator, and it can repress biologically relevant genes such as Ets-2, which promotes macrophage differentiation. The protooncogene c-Myb encodes for a nuclear protein that plays a role in transcriptional regulation and may be essential for hematopoietic cell proliferation. Another member of the Myb family, designated a-Myb, is expressed in proliferating B cell centroblasts. Transgenic mice overexpressing a-Myb possess enhanced hyperplasia of the lymph nodes.

# REFERENCES

- 1. Dvorakova, M., et al. 2001. An *ex vivo* model to study v-Myb-induced leukemogenicity. Blood Cells Mol. Dis. 27: 437-445.
- 2. Tahirov, T.H., et al. 2001. Crystals of ternary protein-DNA complexes composed of DNA-binding domains of c-Myb or v-Myb, C/EBP $\alpha$  or C/EBP $\beta$  and tom-1A promoter fragment. Acta Crystallogr. D Biol. Crystallogr. 57: 1655-1658.
- 3. Bartonek, P., et al. 2002. bFGF signaling and v-Myb cooperate in sustained growth of primitive progenitors. Oncogene 21: 400-410.
- 4. Wang, D.M. and Lipsick, J.S. 2002. Mutational analysis of the transcriptional activation domains of v-Myb. Oncogene 21: 1611-1615.
- Bryja, V., et al. 2003. Lipoxygenase inhibitors v-Myb-transformed monoblasts BM2. Prostaglandins Other Lipid Mediat. 72: 131-145.
- Nemajerova, A., et al. 2003. Trichostatin A suppresses transformation by the v-Myb oncogene in BM2 cells. J. Hematother. Stem Cell Res. 12: 225-235.
- Chayka, O., et al. 2004. v-Myb mediates cooperation of a cell-specific enhancer with the MIM-1 promoter. Mol. Cell. Biol. 25: 499-511.

## CHROMOSOMAL LOCATION

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

## SOURCE

v-Myb/c-Myb (3H2747) is a mouse monoclonal antibody raised against full length recombinant v-Myb.

# PRODUCT

Each vial contains 50  $\mu g~lgG_{2a}$  in 0.5 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# APPLICATIONS

v-Myb/c-Myb (3H2747) is recommended for detection of both v-Myb and c-Myb of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)]; non cross-reactive with *Xenopus* a-Myb.

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.

Molecular Weight of v-Myb: 72 kDa.

Molecular Weight of c-Myb: 75 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, CCRF-CEM cell lysate: sc-2225 or Jurkat nuclear extract: sc-2132.

#### DATA



v-Myb/c-Myb (3H2747): sc-73248. Western blot analysis of c-Myb expression in Jurkat whole cell Ivsate

## **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.



See **c-Myb (D-7): sc-74512** for c-Myb antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.