

## v-Myb/c-Myb (4E3): sc-56809

### BACKGROUND

The Myb family of transcription factors regulates proliferation, differentiation and apoptosis of hematopoietic cells. The avian myeloblastosis viral (v-Myb) protein is nuclear and binds to specific DNA sequences. The gene encoding v-Myb is oncogenic, causing monoclastic 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 proto-oncogene 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, and is expressed in proliferating B cell centroblasts. Transgenic mice overexpressing a-Myb possess enhanced hyperplasia of the lymph nodes.

### REFERENCES

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4. Wang, D.M. and Lipsick, J.S. 2002. Mutational analysis of the transcriptional activation domains of v-Myb. *Oncogene* 21: 1611-1615.
5. Bryja, V., et al. 2003. Lipoxigenase inhibitors v-Myb-transformed monoblasts BM2. *Prostaglandins Other Lipid Mediat.* 72: 131-145.
6. Nemajero, A., et al. 2003. Trichostatin A suppresses transformation by the v-Myb oncogene in BM2 cells. *J. Hematother. Stem Cell Res.* 12: 225-235.
7. 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.
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### CHROMOSOMAL LOCATION

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

### SOURCE

v-Myb/c-Myb (4E3) is a mouse monoclonal antibody raised against full length recombinant v-Myb.

### PRODUCT

Each vial contains 50  $\mu$ g IgG<sub>2a</sub> in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

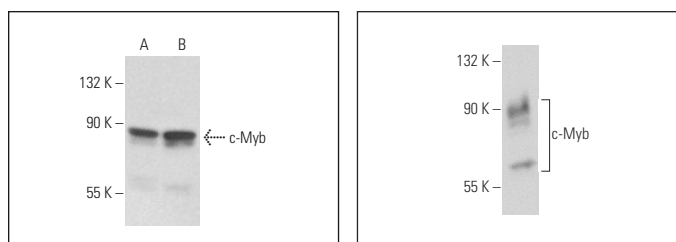
v-Myb/c-Myb (4E3) is recommended for detection of both v-Myb and c-Myb of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of c-Myb: 75 kDa.

Molecular Weight of v-Myb: 72 kDa.

Positive Controls: CCRF-CEM nuclear extract: sc-2146, Jurkat whole cell lysate: sc-2204 or Jurkat nuclear extract: sc-2132.

### DATA



c-Myb (4E3): sc-56809. Western blot analysis of c-Myb expression in Jurkat (A) and CCRF-CEM (B) nuclear extracts.

v-Myb/c-Myb (4E3): sc-56809. Western blot analysis of c-Myb expression in Jurkat whole cell lysate.

### 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](http://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® 488 and Alexa Fluor® 647.