# v-Myb/c-Myb (SPM175): sc-56608



The Power to Overtio

## **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 for 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 proto-oncogene c-Myb encodes for a nuclear protein that plays a role in transcriptional regulation and may be essential for hematopoietic cell proliferation. A-Myb is also member of the Myb family that is expressed in proliferating B cell centroblasts. Transgenic mice overexpressing A-Myb posses enhanced hyperplasia of the lymph nodes.

# **REFERENCES**

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- 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.
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- 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 (SPM175) is a mouse monoclonal antibody raised against recombinant full length v-Myb/c-Myb of human origin.

#### **PRODUCT**

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

## **APPLICATIONS**

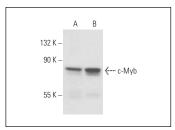
v-Myb/c-Myb (SPM175) is recommended for detection of both v-Myb and c-Myb of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting 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 (SPM175): sc-56608. Western blot analysis of c-Myb expression in Jurkat (**A**) and CCRF-CEM (**B**)

## **SELECT PRODUCT CITATIONS**

 Persson, M., et al. 2022. Rearrangements, expression, and clinical significance of MYB and MYBL1 in adenoid cystic carcinoma: a multi-institutional study. Cancers 14: 3691.

## **STORAGE**

Store at  $4^{\circ}$  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 for detailed protocols and support products.



See **c-Myb (D-7): sc-74512** for c-Myb antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor<sup>®</sup> 488, 546, 594, 647, 680 and 790.

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