

## c-Myb (M-19): sc-516

### 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<sub>1</sub> to S phase transition following mitogenic stimulation. Studies suggest that B-Myb expression rescues cells from p53-induced G<sub>1</sub> arrest mediated by p21.

### CHROMOSOMAL LOCATION

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

### SOURCE

c-Myb (M-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of c-Myb of mouse origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-516 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-516 X, 200 µg/0.1 ml.

### APPLICATIONS

c-Myb (M-19) is recommended for detection of c-Myb of mouse, rat and, to a lesser extent, 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 (M-19) is also recommended for detection of c-Myb in additional species, including equine, canine and porcine.

Suitable for use as control antibody for c-Myb siRNA (h): sc-29855, c-Myb siRNA (m): sc-29856, c-Myb siRNA (r): sc-108009, c-Myb shRNA Plasmid (h): sc-29855-SH, c-Myb shRNA Plasmid (m): sc-29856-SH, c-Myb shRNA Plasmid (r): sc-108009-SH, c-Myb shRNA (h) Lentiviral Particles: sc-29855-V, c-Myb shRNA (m) Lentiviral Particles: sc-29856-V and c-Myb shRNA (r) Lentiviral Particles: sc-108009-V.

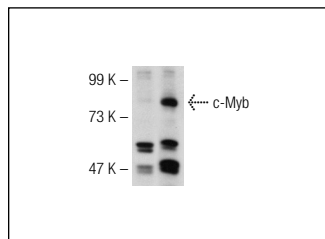
c-Myb (M-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of c-Myb: 75 kDa.

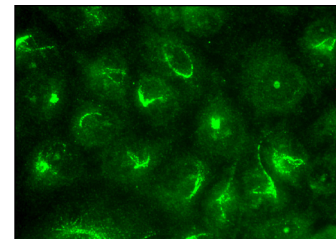
### STORAGE

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

### DATA



c-Myb (M-19): sc-516. Western blot analysis of c-Myb expression in non-transfected: sc-117752 (A) and mouse c-Myb transfected: sc-118891 (B) 293T whole cell lysates.



c-Myb (M-19): sc-516. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

### SELECT PRODUCT CITATIONS

- Allen III, R., et al. 2001. Negative regulation of CD4 gene expression by a HES-1-c-Myb complex. *Mol. Cell. Biol.* 21: 3071-3082.
- Reizis, B. and Leder, P. 2001. The upstream enhancer is necessary and sufficient for the expression of the pre-T cell receptor alpha gene in immature T lymphocytes. *J. Exp. Med.* 194: 979-990.
- Umayahara, Y., et al. 2002. Protein kinase C-dependent, CCAAT/enhancer-binding protein  $\beta$ -mediated expression of Insulin-like growth factor I gene. *J. Biol. Chem.* 277: 15261-15270.
- Sandberg, M.L., et al. 2005. c-Myb and p300 regulate hematopoietic stem cell proliferation and differentiation. *Dev. Cell* 8: 153-166.
- Bresson, C., et al. 2007. Large-scale analysis by SAGE reveals new mechanisms of v-erbA oncogene action. *BMC Genomics* 8: 390.
- Anemaet, I.G., et al. 2010. Transactivation of cytosolic alanine aminotransferase gene promoter by p300 and c-Myb. *J. Mol. Endocrinol.* 45: 119-132.
- Zarnegar, M.A., et al. 2010. Cell-type-specific activation and repression of PU.1 by a complex of discrete, functionally specialized cis-regulatory elements. *Mol. Cell. Biol.* 30: 4922-4939.

### RESEARCH USE

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

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Try **c-Myb (D-7): sc-74512**, our highly recommended monoclonal alternative to c-Myb (M-19). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **c-Myb (D-7): sc-74512**.