

## B-Myc (L-19): sc-13665

### BACKGROUND

The Myc family of genes includes five functional members, including c-Myc, L-Myc, N-Myc, B-Myc, and S-Myc. The B-Myc gene maps to the rat chromosome 3 and encodes a 178 amino acid protein. B-Myc is a short-lived nuclear protein which is phosphorylated on residues Ser 60 and Ser 68. B-Myc-specific mRNA is most highly expressed in rat brain and closely resembles the expression pattern of c-Myc. The B-Myc protein is primarily expressed in hormonally-controlled tissues, with the highest level of expression in the epididymis. B-Myc shows extensive homology to c-Myc in the N-terminal region, which contains a transcriptional activation domain. B-Myc inhibits both neoplastic transformation and transcriptional activation by c-Myc, and therefore may function as an inhibitor of cellular proliferation.

### REFERENCES

1. Ingvarsson, S., Asker, C., Axelson, H., Klein, G. and Sumegi, J. 1988. Structure and expression of B-Myc, a new member of the Myc gene family. *Mol. Cell. Biol.* 8: 3168-3174.
2. Asker, C., Steinitz, M., Andersson, K., Sumegi, J., Klein, G. and Ingvarsson, S. 1989. Nucleotide sequence of the rat B-Myc gene. *Oncogene* 4: 1523-1527.
3. Resar, L.M., Dolde, C., Barrett, J.F. and Dang, C.V. 1993. B-Myc inhibits neoplastic transformation and transcriptional activation by c-Myc. *Mol. Cell. Biol.* 13: 1130-1136.
4. Asker, C.E., Magnusson, K.P., Piccoli, S.P., Andersson, K., Klein, G., Cole, M.D. and Wiman, K.G. 1995. Mouse and rat B-Myc share amino acid sequence homology with the c-Myc transcriptional activator domain and contain a B-Myc specific carboxy terminal region. *Oncogene* 11: 1963-1969.
5. Dang, C.V. 1999. c-Myc target genes involved in cell growth, apoptosis, and metabolism. *Mol. Cell. Biol.* 19: 1-11.
6. Gregory, M.A., Xiao, Q., Cornwall, G.A., Lutterbach, B. and Hann, S.R. 2000. B-Myc is preferentially expressed in hormonally-controlled tissues and inhibits cellular proliferation. *Oncogene* 19: 4886-4895.

### CHROMOSOMAL LOCATION

Genetic locus: Bmyc (mouse) mapping to 2 A3.

### SOURCE

B-Myc (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of B-Myc of rat 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-13665 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-13665 X, 200 µg/0.1 ml.

### APPLICATIONS

B-Myc (L-19) is recommended for detection of B-Myc of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for B-Myc siRNA (m): sc-38070, B-Myc shRNA Plasmid (m): sc-38070-SH and B-Myc shRNA (m) Lentiviral Particles: sc-38070-V.

B-Myc (L-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of B-Myc: 26 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### SELECT PRODUCT CITATIONS

1. Teng, A.C., Kuraitis, D., Deeke, S.A., Ahmadi, A., Dugan, S.G., Cheng, B.L., Crowson, M.G., Burgon, P.G., Suuronen, E.J., Chen, H.H. and Stewart, A.F. 2010. IRF2BP2 is a skeletal and cardiac muscle-enriched ischemia-inducible activator of VEGFA expression. *FASEB J.* 24: 4825-4834.

### 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) or our catalog for detailed protocols and support products.