

## c-Myc (C-19): sc-788



The Power to Question

## BACKGROUND

c-Myc-, N-Myc- and L-Myc-encoded proteins function in cell proliferation, differentiation and neoplastic disease. Amplification of the c-Myc gene has been found in several types of human tumors including lung, breast and colon carcinomas. The presence of three sequence motifs in the c-Myc COOH terminus, including the leucine zipper, the helix-loop-helix and a basic region, provided initial evidence for a sequence-specific binding function. A basic region helix-loop-helix leucine zipper motif (bHLH-Zip) protein, designated Max, specifically associates with c-Myc, N-Myc and L-Myc proteins. The Myc-Max complex binds to DNA in a sequence-specific manner under conditions where neither Max nor Myc exhibits appreciable binding. Max can also form heterodimers with at least two additional bHLH-Zip proteins, Mad and Mxi1 and Mad-Max.

## CHROMOSOMAL LOCATION

Genetic locus: MYC (human) mapping to 8q24.21; Myc (mouse) mapping to 15 D1.

## SOURCE

c-Myc (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the C-terminus of c-Myc of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-788 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

c-Myc (C-19) is recommended for detection of c-Myc p67 and c-Myc tagged fusion proteins of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

c-Myc (C-19) is also recommended for detection of c-Myc p67 and c-Myc tagged fusion proteins in additional species, including canine and feline.

Suitable for use as control antibody for c-Myc siRNA (h): sc-29226, c-Myc siRNA (m): sc-29227, c-Myc shRNA Plasmid (h): sc-29226-SH, c-Myc shRNA Plasmid (m): sc-29227-SH, c-Myc shRNA (h) Lentiviral Particles: sc-29226-V and c-Myc shRNA (m) Lentiviral Particles: sc-29227-V.

Molecular Weight of c-Myc: 67 kDa.

Positive Controls: c-Myc (m): 293T Lysate: sc-118892, K-562 whole cell lysate: sc-2203 or Jurkat nuclear extract: sc-2132.

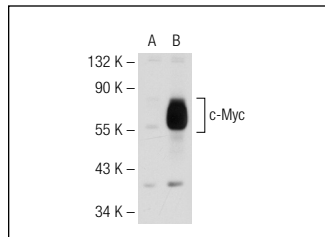
## STORAGE

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

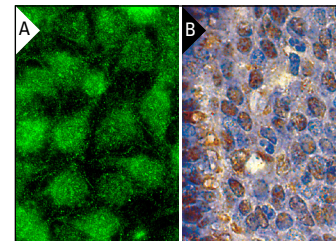
## RESEARCH USE

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

## DATA



c-Myc (C-19): sc-788. Western blot analysis of c-Myc expression in non-transfected: sc-117752 (A) and mouse c-Myc transfected: sc-118892 (B) 293T whole cell lysates.



c-Myc (C-19): sc-788. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded mouse uterus tissue showing nuclear localization (B).

## SELECT PRODUCT CITATIONS

- Okano, H.J., et al. 1999. The cytoplasmic Purkinje onconeural antigen CDR2 down-regulates c-Myc function: implications for neuronal and tumor cell survival. *Genes Dev.* 13: 2087-2097.
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- Elamin, M.H., et al. 2010. Curcumin inhibits the Sonic Hedgehog signaling pathway and triggers apoptosis in medulloblastoma cells. *Mol. Carcinog.* 49: 302-314.
- Kim, E.Y., et al. 2010. Differences between cellular and molecular profiles of induced pluripotent stem cells generated from mouse embryonic fibroblasts. *Cell. Reprogram.* 12: 627-639.
- Phan, D., et al. 2011. A novel protein kinase C target site in protein kinase D is phosphorylated in response to signals for cardiac hypertrophy. *Biochem. Biophys. Res. Commun.* 411: 335-341.
- Schuster, C., et al. 2011. The cooperating mutation or "second hit" determines the immunologic visibility toward MYC-induced murine lymphomas. *Blood* 118: 4635-4645.
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- Huang, R., et al. 2011. MYCN and MYC regulate tumor proliferation and tumorigenesis directly through BMI1 in human neuroblastomas. *FASEB J.* 25: 4138-4149.



Try **c-Myc (9E10): sc-40** or **c-Myc (C-33): sc-42**, our highly recommended monoclonal alternatives to c-Myc (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **c-Myc (9E10): sc-40**.