

c-Myc (N-262): sc-764

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 1 and Mxi1, and Mad 1-Max dimers have been shown to repress transcription through interaction with mSin3.

CHROMOSOMAL LOCATION

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

SOURCE

c-Myc (N-262) is a rabbit polyclonal antibody raised against amino acids 1-262 of c-Myc of human origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-764 X, 200 µg/0.1 ml.

APPLICATIONS

c-Myc (N-262) is recommended for detection of c-Myc p67 of mouse, rat, human, monkey, *Xenopus laevis* and zebrafish 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); non cross-reactive with c-Myc tag.

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.

c-Myc (N-262) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of c-Myc: 67 kDa.

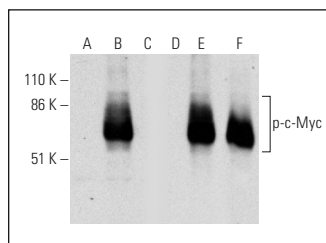
STORAGE

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

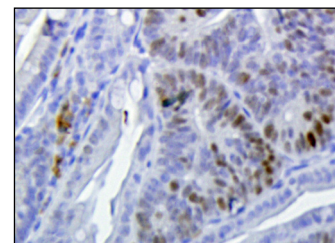
RESEARCH USE

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

DATA



Western blot analysis of c-Myc phosphorylation in non-transfected: sc-117752 (A,D), untreated mouse c-Myc transfected: sc-118892 (B,E) and lambda protein phosphatase (sc-200312A) treated mouse c-Myc transfected: sc-118892 (C,F) 293T whole cell lysates. Antibodies tested include p-c-Myc (Thr 58/Ser 62)-R: sc-8000-R (A,B,C) and c-Myc (N-262): sc-764 (D,E,F).



c-Myc (N-262): sc-764. Nuclear c-Myc in small intestinal adenoma in APC -/+ (20X microscopic magnification). Dilution: 1:80 in dilution buffer (0.05% BSA in PBS). Blocking: 0.1% BSA in PBS at room temp. Kindly provided by Dr. Albert J. Fornace Jr., Georgetown University.

SELECT PRODUCT CITATIONS

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- Papanikolaou, V., et al. 2011. Survivin regulation by HER2 through NFκB and c-myc in irradiated breast cancer cells. *J. Cell. Mol. Med.* 15: 1542-1550.
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- Li, C., et al. 2011. Oncogenic role of EAPII in lung cancer development and its activation of the MAPK-ERK pathway. *Oncogene* 30: 3802-3812.
- Hillje, A.L., et al. 2011. Neural stem cells maintain their stemness through protein kinase C ζ-mediated inhibition of TRIM32. *Stem Cells* 29: 1437-1447.
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- Li, L., et al. 2012. The human cadherin 11 is a pro-apoptotic tumor suppressor modulating cell stemness through Wnt/β-catenin signaling and silenced in common carcinomas. *Oncogene* 31: 3901-3912.



Try **c-Myc (9E10): sc-40** or **c-Myc (C-33): sc-42**, our highly recommended monoclonal alternatives to c-Myc (N-262). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **c-Myc (9E10): sc-40**.