c-Myc (A-14): sc-789



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.

SOURCE

c-Myc (A-14) is available as either rabbit (sc-789) or goat (sc-789-G) polyclonal affinity purified antibody raised against a peptide mapping near the C-terminus of c-Myc of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-789 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-789 X, 200 μ g/0.1 ml; as phycoerythrin (sc-789 PE) or fluorescein (sc-789 FITC) conjugates for flow cytometry, 100 tests; and as Alexa Fluor® 405 (sc-789 AF405), Alexa Fluor® 488 (sc-789 AF488) or Alexa Fluor® 647(sc-789 AF647) conjugates for immunofluorescence; 100 μ g/2 ml.

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APPLICATIONS

c-Myc (A-14) is recommended for detection of c-Myc p67 and c-Myc tagged fusion proteins of human and monkey origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g 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), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); minimal cross-reactivity with c-Myc of mouse and rat origin.

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

c-Myc (A-14) X TransCruz antibody is recommended for ChIP assays.

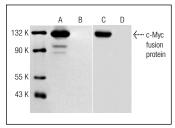
Molecular Weight of c-Myc: 67 kDa.

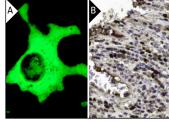
Positive Controls: HeLa whole cell lysate: sc-2200.

STORAGE

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

DATA





Western blot analysis of whole cell lysates prepared from COS cells transfected with a c-Myc fusion protein (**A,C**) and non-transfected (**B,D**) cells. Antibodies tested include c-Myc (A-14): sc-789 (**A,B**) and c-Myc (A-14)-G: sc-789-G (**C,D**).

c-Myc (A-14): sc-789. Immunofluorescence staining of methanol-fixed COS cells transfected with c-Myc fusion protein showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cervical cancer tissue showing nuclear and cytoplasmic staining of tumor cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

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RESEARCH USE

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