

c-Abl (H-300): sc-13076

BACKGROUND

The Abl oncogene was initially identified as the viral transforming gene of Abelson murine leukemia virus (A-MuLV). The major translational product of c-Abl has been identified as a protein with tyrosine kinase activity and an SH2 domain. The Abl oncogene is implicated in several human leukemias including 90-95% of chronic myelocytic leukemia (CML), 20-25% of adult acute lymphoblastic leukemia (ALL) and 2-5% of pediatric ALL. In these leukemias the c-Abl proto-oncogene undergoes a (9;22) chromosomal translocation producing the Philadelphia (Ph1) chromosome. The molecular consequence of this translocation is the generation of a chimeric Bcr/c-Abl mRNA encoding activated Abl protein-tyrosine kinase. The Bcr gene has been shown to encode a GTPase-activating protein (GAP) specific for the Ras-related GTP-binding protein, p21Rac.

CHROMOSOMAL LOCATION

Genetic locus: ABL1 (human) mapping to 9q34.12; Abl1 (mouse) mapping to 2 B.

SOURCE

c-Abl (H-300) is a rabbit polyclonal antibody raised against amino acids 781-1080 mapping near the C-terminus of c-Abl 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.

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.

APPLICATIONS

c-Abl (H-300) is recommended for detection of c-Abl and Bcr/Abl fusion proteins of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (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 c-Abl siRNA (h): sc-29843, c-Abl siRNA (m): sc-29844, c-Abl shRNA Plasmid (h): sc-29843-SH, c-Abl shRNA Plasmid (m): sc-29844-SH, c-Abl shRNA (h) Lentiviral Particles: sc-29843-V and c-Abl shRNA (m) Lentiviral Particles: sc-29844-V.

Molecular Weight of c-Abl: 120 kDa.

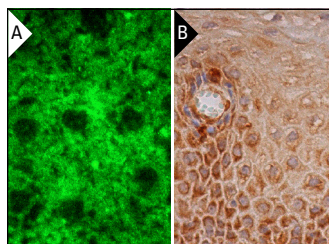
Molecular Weight of Bcr/Abl fusion protein: 210 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or RAW 264.7 whole cell lysate: sc-2211.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



c-Abl (H-300): sc-13076. Immunofluorescence staining of normal mouse liver frozen section showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human uterine cervix tissue showing cytoplasmic staining of squamous epithelial cells (B).

SELECT PRODUCT CITATIONS

1. Ba, X., et al. 2005. Signaling function of PSGL-1 in neutrophil: tyrosine-phosphorylation-dependent and c-Abl-involved alteration in the F-actin-based cytoskeleton. *J. Cell. Biochem.* 94: 365-373.
2. Wilkes, M.C., et al. 2006. Transforming growth factor β activation of c-Abl is independent of receptor internalization and regulated by phosphatidylinositol 3-kinase and PAK2 in mesenchymal cultures. *J. Biol. Chem.* 281: 27846-27854.
3. Chen, C., et al. 2006. c-Abl is involved in the F-actin assembly triggered by L-selectin crosslinking. *J. Biochem.* 140: 229-235.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **c-Abl (8E9): sc-56887** or **c-Abl (SPM328): sc-52990**, our highly recommended monoclonal alternatives to c-Abl (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **c-Abl (8E9): sc-56887**.