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-29491. 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


PROTOCOLS

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

Monos "Satisfaction Guaranteed"

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.