p-c-Abl (7.Tyr 412): sc-293130

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, p21ras.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: ABL1 (human) mapping to 9q34.12.

SOURCE

p-c-Abl (7.Tyr 412) is a mouse monoclonal antibody raised against a short amino acid sequence containing Tyr 412 phosphorylated of c-Abl of human origin.

PRODUCT

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
p-c-Abl (7.Tyr 412) is available conjugated to agarose (sc-293130 AC), 500 µg/0.25 ml agarose in 1 ml, for IP, and to HRP (sc-293130 HRP), 200 µg/ml, for WB, HCl/P and ELISA.

APPLICATIONS

p-c-Abl (7.Tyr 412) is recommended for detection of Tyr 412 phosphorylated c-Abl of 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)] 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 shRNA Plasmid (h): sc-29843-SH and c-Abl shRNA (h) Lentiviral Particles: sc-29843-V.

Molecular Weight of p-c-Abl: 120 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

Western blot analysis of c-Abl phosphorylation in untreated (A, C) and lambda protein phosphatase (sc-200312A) treated (B, D) K-562 whole cell lysates. Antibodies tested include p-c-Abl (7.Tyr 412): sc-293130 (A, B) and c-Abl (K-12): sc-131 (C, D)

SELECT PRODUCT CITATIONS


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. Not for resale.

PROTOCOLS

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