SANTA CRUZ BIOTECHNOLOGY, INC.

Arg (H-300): sc-20708

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 chronic myelocytic leukemia (CML), in which it undergoes a (9;22) chromosomal translocation and produces 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 related protein tyrosine kinase Arg, also designated Abl2, contains an SH2 and an SH3 domain. Arg has been shown to interact with and to phosphorylate c-Crk.

REFERENCES

1. Abelson, H.T., et al. 1970. Lymphosarcoma: virus-induced thymic-independent disease in mice. Cancer Res. 30: 2213-2222.
2. de Klein, A., et al. 1982. A cellular oncogene is translocated to the Philadelphia chromosome in chronic myelocytic leukemia. Nature 300: 765-767.

CHROMOSOMAL LOCATION

Genetic locus: ABL2 (human) mapping to 1q25.2; Abl2 (mouse) mapping to 1 G3.

SOURCE

Arg (H-300) is a rabbit polyclonal antibody raised against amino acids 831-1130 mapping near the C-terminus of Arg 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.

APPLICATIONS

Arg (H-300) is recommended for detection of Arg 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).

Arg (H-300) is also recommended for detection of Arg in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Arg siRNA (h): sc-38945, Arg siRNA (m): sc-38946, Arg shRNA Plasmid (h): sc-38945-SH, Arg shRNA Plasmid (m): sc-38946-SH, Arg shRNA (h) Lentiviral Particles: sc-38945-V and Arg shRNA (m) Lentiviral Particles: sc-38946-V.

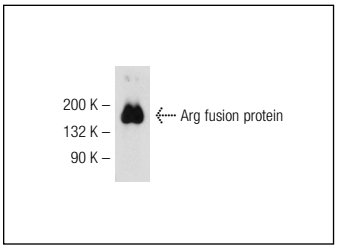
Molecular Weight of Arg: 145 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

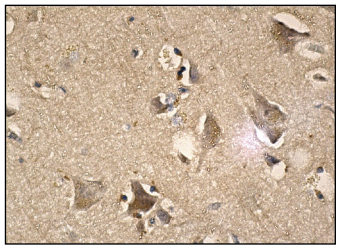
RECOMMENDED SECONDARY REAGENTS

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



Arg (H-300): sc-20708. Western blot analysis of human recombinant Arg fusion protein.



Arg (H-300): sc-20708. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing cytoplasmic and nuclear staining of glial and neuronal cells.

SELECT PRODUCT CITATIONS

1. Liu, L., et al. 2006. Phosphorylation of IκB-β is necessary for neuronal survival. J. Biol. Chem. 281: 1506-1515.
2. Yang, W.H., et al. 2010. O-GlcNAcylation regulates hyperglycemia-induced GPX1 activation. Biochem. Biophys. Res. Commun. 391: 756-761.

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.

PROTOCOLS

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