# SANTA CRUZ BIOTECHNOLOGY, INC.

# Arg (C-20): sc-6356



# 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.

# CHROMOSOMAL LOCATION

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

## SOURCE

Arg (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Arg of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6356 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

Arg (C-20) is recommended for detection of Arg of mouse 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 (C-20) is also recommended for detection of Arg in additional species, including equine, canine, bovine, porcine and avian.

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.

#### **RESEARCH USE**

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

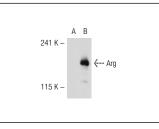
## PROTOCOLS

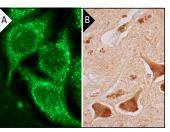
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

# STORAGE

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

# DATA





Arg (C-20): sc-6356. Western blot analysis of Arg expression in non-transfected: sc-117752 ( $\bf A$ ) and human Arg transfected: sc-116765 ( $\bf B$ ) 293T whole cell lysates.

Arg (C-20): sc-6356. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells and endothelial cells (B).

#### SELECT PRODUCT CITATIONS

- Okuda, K., et al. 2001. Arg tyrosine kinase activity is inhibited by STI571. Blood 97: 2440-2448.
- Nishimura, N., et al. 2003. Suppression of Arg kinase activity by STI571 induces cell cycle arrest through up-regulation of Cdk inhibitor p18/INK4c. Oncogene 22: 4074-4082.
- Haberler, C., et al. 2006. Immunohistochemical analysis of plateletderived growth factor receptor-α, -β, c-Kit, c-Abl, and Arg proteins in glioblastoma: possible implications for patient selection for imatinib mesylate therapy. J. Neurooncol. 76: 105-109.
- Salehi, M., et al. 2007. Study of ARG (ABL related gene-ABL2) protein, a tyrosine kinase protein, in Burkitt's lymphoma. J. Sci. 18: 215-220.
- Qiao, F., et al. 2008. Distinct functions of Cdk5(Y15) phosphorylation and Cdk5 activity in stress fiber formation and organization. Exp. Cell Res. 314: 3542-3550.
- Kabiri, Z., et al. 2009. Evaluation of ARG protein expression in mature B cell lymphomas compared to non-neoplastic reactive lymph node. Cell. Immunol. 259: 111-116.
- 7. Conradt, L., et al. 2011. Disclosure of erlotinib as a multikinase inhibitor in pancreatic ductal adenocarcinoma. Neoplasia 13: 1026-1034.

#### MONOS Satisfation Guaranteed Try Arg (1H1B11): sc-81154, our highly recommended monoclonal alternative to Arg (C-20).