

Arg (1H1B11): sc-81154

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. and Rabstein, L.S. 1970. Lymphosarcoma: virus-induced thymic-independent disease in mice. *Cancer Res.* 30: 2213-2222.
2. de Klein, A., van Kessel, A.G., Grosveld, G., Bartram, C.R., Hagemeyer, A., Bootsma, D., Spurr, N.K., Heisterkamp, N., Groffen, J. and Stephenson, J.R. 1982. A cellular oncogene is translocated to the Philadelphia chromosome in chronic myelocytic leukemia. *Nature* 300: 765-767.
3. Prywes, R., Foulkes, J.G., Rosenberg, N. and Baltimore, D. 1983. Sequences of the A-MuLV protein needed for fibroblasts and lymphoid cell transformation. *Cell* 34: 569-579.
4. Konopka, J.B., Watanabe, S.M. and Witte, O.N. 1984. An alteration of the human c-Abl protein in K562 leukemia cells unmasks associated tyrosine kinase activity. *Cell* 37: 1035-1042.

CHROMOSOMAL LOCATION

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

SOURCE

Arg (1H1B11) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 54-268 of Arg of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Arg (1H1B11) is available conjugated to agarose (sc-81154 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-81154 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-81154 PE), fluorescein (sc-81154 FITC), Alexa Fluor® 488 (sc-81154 AF488), Alexa Fluor® 546 (sc-81154 AF546), Alexa Fluor® 594 (sc-81154 AF594) or Alexa Fluor® 647 (sc-81154 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-81154 AF680) or Alexa Fluor® 790 (sc-81154 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

Arg (1H1B11) 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

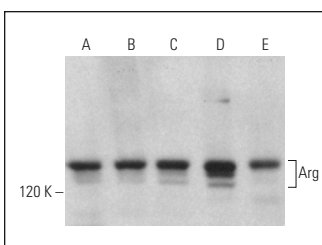
Molecular Weight of Arg: 145 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Arg (h): 293T Lysate: sc-116765 or K-562 whole cell lysate: sc-2203.

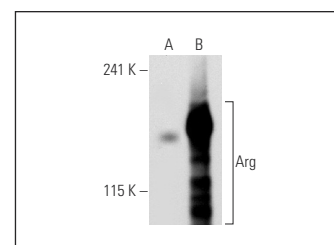
RECOMMENDED SUPPORT REAGENTS

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, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Arg (1H1B11): sc-81154. Western blot analysis of Arg expression in K-562 (A), MOLT-4 (B), HL-60 (C), HeLa (D) and NIH/3T3 (E) whole cell lysates.



Arg (1H1B11): sc-81154. Western blot analysis of Arg expression in non-transfected: sc-117752 (A) and human Arg transfected: sc-116765 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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

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