

Arg (h): 293T Lysate: sc-116765

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.
3. Prywes, R., et al. 1983. Sequences of the A-MuLV protein needed for fibroblasts and lymphoid cell transformation. *Cell* 34: 569-579.
4. Konopka, J.B., et al. 1984. An alteration of the human c-Abl protein in K-562 leukemia cells unmasks associated tyrosine kinase activity. *Cell* 37: 1035-1042.
5. Stam, K., et al. 1985. Evidence of a new chimeric Bcr/c-Abl mRNA in patients with chronic myelocytic leukemia and the Philadelphia chromosome. *N. Engl. J. Med.* 313: 1429-1433.
6. Diekmann, D., et al. 1991. Bcr encodes a GTPase-activating protein for p21Rac. *Nature* 351: 400-402.
7. Overduin, M., et al. 1992. Three-dimensional solution structure of the Src homology 2 domain of c-Abl. *Cell* 70: 697-704.

CHROMOSOMAL LOCATION

Genetic locus: ABL2 (human) mapping to 1q25.2.

PRODUCT

Arg (h): 293T Lysate represents a lysate of human Arg transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Arg (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Arg antibodies. Recommended use: 10-20 µl per lane.

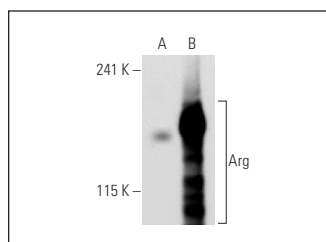
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Arg (1H1B11): sc-81154 is recommended as a positive control antibody for Western Blot analysis of enhanced human Arg expression in Arg transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.