

Abi-2 (A-20): sc-20326

BACKGROUND

The Abelson oncogene was initially identified as the viral transforming component of Abelson murine leukemia virus (A-MuLV). The Abelson gene (Abl1) encodes a SH2-domain bearing tyrosine kinase which conducts mitogenic signaling pursuant to growth factor receptor ligation. The Abl interactor proteins, Abi-1 and Abi-2, are SH3-domain containing proteins that bind to the proline-rich motifs of Abl and activate the kinase function. Two splice variants of Abi-1 are widely expressed, with the highest levels found in bone marrow, spleen, brain and testis. Abi-1 and Abi-2 are thought to negatively regulate cell growth and transformation, including cellular transformation through v-Abl. ABI1, the gene encoding Abi-1, has been shown to translocate and fuse with MLL (mixed lineage leukemia) gene in some cases of acute myeloid leukemia (AML). The Abi proteins have also been identified as mediators of cell motility by regulating Actin polymerization in lamellipodia and filopodia.

REFERENCES

1. Abelson, H.T., et al. 1970. Lymphosarcoma: virus-induced thymic-independent disease in mice. *Cancer Res.* 30: 2213-2222.
2. Prywes, R., et al. 1983. Sequences of the A-MuLV protein needed for fibroblasts and lymphoid cell transformation. *Cell* 34: 569-579.
3. Overduin, M., et al. 1992. Three-dimensional solution structure of the Src homology 2 domain of c-Abl. *Cell* 70: 697-704.
4. Shi, Y., et al. 1995. Abl-interactor-1, a novel SH3 protein binding to the carboxy-terminal portion of the Abl protein, suppresses v-Abl transforming activity. *Genes Dev.* 9: 2583-2597.
5. Taki, T., et al. 1998. Abi-1, a human homolog to mouse Abl-interactor 1, fuses the MLL gene in acute myeloid leukemia with t(10;11) (p11.2;q23). *Blood* 92: 1125-1130.
6. Juang, J.L. et al. 1999. *Drosophila* Abelson interacting protein (dAbi) is a positive regulator of Abelson tyrosine kinase activity. *Oncogene* 18: 5138-5147.

CHROMOSOMAL LOCATION

Genetic locus: ABI2 (human) mapping to 2q33.2, ABI1 (human) mapping to 10p11.2; Abi2 (mouse) mapping to 1 C2, Abi1 (mouse) mapping to 2 A3.

SOURCE

Abi-2 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Abelson interacting protein 2 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.

Blocking peptide available for competition studies, sc-20326 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Abi-2 (A-20) is recommended for detection of Abelson interacting protein 2 and, to a lesser extent, Abelson interacting protein 1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Abi-2 (A-20) is also recommended for detection of Abelson interacting protein 2 and, to a lesser extent, Abelson interacting protein 1 in additional species, including equine, canine, bovine, porcine and avian.

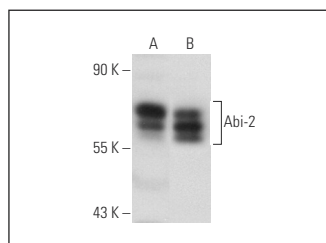
Molecular Weight of Abi-2: 68 kDa.

Positive Controls: H69AR whole cell lysate: sc-364382.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Abi-2 (A-20): sc-20326. Western blot analysis of Abi-2 expression in 293T (A) and H69AR (B) whole cell lysates.

STORAGE

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


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Try **Abi-2 (B-3): sc-393982** or **Abi-2 (B-8): sc-271717**, our highly recommended monoclonal alternatives to Abi-2 (A-20).