

Abi-3 (C-7): sc-376982



The Power to Question

BACKGROUND

The Abelson oncogene was initially identified as the viral transforming component of Abelson murine leukemia virus (A-MuLV). The Abelson gene (Ab1) encodes a SH2-domain bearing tyrosine kinase which conducts mitogenic signaling pursuant to growth factor receptor ligation. The Abl interactor proteins, Abi-1, Abi-2 and Abi-3, are SH3-domain containing proteins that bind to the proline-rich motifs of Abl and activate the kinase function. The Abi family members are thought to negatively regulate cell growth and transformation, including cellular transformation through v-Abl as well as mediate cell motility by regulating Actin polymerization in lamellipodia and filopodia. Abi-3, also designated NESH, is a 366 amino acid protein that interacts with TARSH, a cellular senescence-related gene that acts as a trigger of tumor development.

REFERENCES

- Miyazaki, K., et al. 2000. Isolation and characterization of a novel human gene (NESH) which encodes a putative signaling molecule similar to e3B1 protein. *Biochim. Biophys. Acta* 1493: 237-241.
- Ichigotani, Y., et al. 2002. Forced expression of NESH suppresses motility and metastatic dissemination of malignant cells. *Cancer Res.* 62: 2215-2219.

CHROMOSOMAL LOCATION

Genetic locus: ABI3 (human) mapping to 17q21.32; Abi3 (mouse) mapping to 11 D.

SOURCE

Abi-3 (C-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 145-179 within an internal region of Abi-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Abi-3 (C-7) is available conjugated to agarose (sc-376982 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376982 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376982 PE), fluorescein (sc-376982 FITC), Alexa Fluor® 488 (sc-376982 AF488), Alexa Fluor® 546 (sc-376982 AF546), Alexa Fluor® 594 (sc-376982 AF594) or Alexa Fluor® 647 (sc-376982 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376982 AF680) or Alexa Fluor® 790 (sc-376982 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376982 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

Abi-3 (C-7) is recommended for detection of Abi-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Abi-3 (C-7) is also recommended for detection of Abi-3 in additional species, including bovine.

Suitable for use as control antibody for Abi-3 siRNA (h): sc-93770, Abi-3 siRNA (m): sc-140778, Abi-3 shRNA Plasmid (h): sc-93770-SH, Abi-3 shRNA Plasmid (m): sc-140778-SH, Abi-3 shRNA (h) Lentiviral Particles: sc-93770-V and Abi-3 shRNA (m) Lentiviral Particles: sc-140778-V.

Molecular Weight (predicted) of Abi-3: 39 kDa.

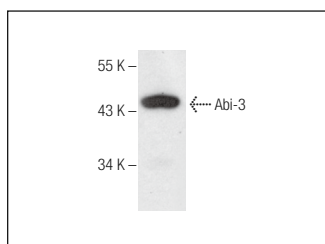
Molecular Weight (observed) of Abi-3: 43 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, WI-38 whole cell lysate: sc-364260 or mouse spleen extract: sc-23913.

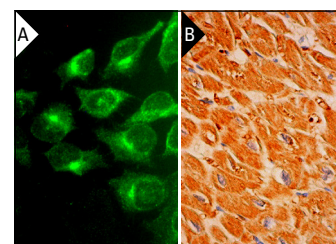
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Abi-3 (C-7): sc-376982. Western blot analysis of Abi-3 expression in KNRK whole cell lysate.



Abi-3 (C-7): sc-376982. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes (B).

RESEARCH USE

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