SANTA CRUZ BIOTECHNOLOGY, INC.

Abin-1 (N-20): sc-162473

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The Power to Question

BACKGROUND

Abin-1, also known as TNIP1 (TNFAIP3 interacting protein 1), VAN or NAF1 (nef-associated factor 1), is a 636 amino acid protein that localizes to both the nucleus and the cytoplasm and is shuttled between the two intercellular regions in a CRM1-dependent manner. Expressed ubiquitously with highest expression in spleen and skeletal muscle, Abin-1 interacts with A20 and, via this interaction, interferes with TRAF2-mediated transactivation signals and effectively inhibits TNF-induced NFκB expression. Additionally, Abin-1 can be incorporated into HIV-1 virions and, if overexpressed, can inhibit viral replication. Abin-1 may also play an important role in the regulation of nuclear import and export activities. Multiple isoforms of Abin-1 exist due to alternative splicing events.

REFERENCES

1. Fukushi, M., et al. 1999. Identification and cloning of a novel cellular protein NAF1, Nef-associated factor 1, that increases cell surface CD4 expression. FEBS Lett. 442: 83-88.
2. Zhang, S., et al. 2002. A new ERK 2 binding protein, NAF1, attenuates the EGF/ERK 2 nuclear signaling. Biochem. Biophys. Res. Commun. 297: 17-23.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607714. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Favre, M., et al. 2003. High frequency of alternative splicing of human genes participating in the HIV-1 life cycle: a model using tsg 101, βTrCP, PPIA, Ini1, NAF1, and PML. J. Acquir. Immune Defic. Syndr. 34: 127-133.
5. Shiote, Y., et al. 2006. Multiple splicing variants of NAF1/Abin-1 transcripts and their alterations in hematopoietic tumors. Int. J. Mol. Med. 18: 917-923.
6. Mauro, C., et al. 2006. Abin-1 binds to nemo/IKKγ and co-operates with A20 in inhibiting NFκB. J. Biol. Chem. 281: 18482-18488.

CHROMOSOMAL LOCATION

Genetic locus: TNIP1 (human) mapping to 5q33.1; Tnip1 (mouse) mapping to 11 B1.3.

SOURCE

Abin-1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Abin-1 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-162473 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Abin-1 (N-20) is recommended for detection of Abin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with Abin-2 or Abin-3.

Abin-1 (N-20) is also recommended for detection of Abin-1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Abin-1 siRNA (h): sc-92019, Abin-1 siRNA (m): sc-140779, Abin-1 shRNA Plasmid (h): sc-92019-SH, Abin-1 shRNA Plasmid (m): sc-140779-SH, Abin-1 shRNA (h) Lentiviral Particles: sc-92019-V and Abin-1 shRNA (m) Lentiviral Particles: sc-140779-V.

Molecular Weight of Abin-1: 72 kDa.

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) 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.

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.