Abin-2 (N-16): sc-32637



The Power to Question

BACKGROUND

The nuclear factor NF κ B is essential for the regulation of immune response genes, inflammatory processes and apoptosis. Abin-2 (also designated A20-binding inhibitor of NF κ B activation 2) is an intracellular zinc-finger protein that inhibits the expression of NF κ B by recruiting a chromatin-remodeling complex to the target gene. Abin-2, a p105-associated protein, is a potent inhibitor of TNF-induced cell death. Abin-2 can also associate with TPL-2, and in endogenous tissues it is frequently associated with both TPL-2 and p105. siRNA depletion of Abin-2 has been found to reduce levels of TPL-2 but not of p105, which indicates that Abin-2 is involved in the TLR4 signaling pathway. Abin-2 inhibits endothelial apoptosis, but upon deletion of the carboxy-terminus of the protein, its ability to inhibit apoptosis is removed.

REFERENCES

- 1. Wu, W.S., et al. 2002. The promyelocytic leukemia protein represses A20-mediated transcription. J. Biol. Chem. 277: 31734-31739.
- Tadros, A., et al. 2003. Abin-2 protects endothelial cells from death and has a role in the antiapoptotic effect of angiopoietin-1. Blood 102: 4407-4409.
- Hughes, D.P., et al. 2003. The anti-inflammatory endothelial tyrosine kinase Tie2 interacts with a novel NFκB inhibitor Abin-2. Circ. Res. 92: 630-636.
- Chien, C.Y., et al. 2003. The A20-binding protein Abin-2 exerts unexpected function in mediating transcriptional coactivation. FEBS Lett. 543: 55-60.
- Lang, V., et al. 2004. Abin-2 forms a ternary complex with TPL-2 and NF-κB1 p105 and is essential for TPL-2 protein stability. Mol. Cell. Biol. 24: 5235-5248.

CHROMOSOMAL LOCATION

Genetic locus: TNIP2 (human) mapping to 4p16.3; Tnip2 (mouse) mapping to 5 B2.

SOURCE

Abin-2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Abin-2 of human origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-32637 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-32637 P, (100 μ g 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.

RESEARCH USE

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

APPLICATIONS

Abin-2 (N-16) is recommended for detection of Abin-2 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).

Abin-2 (N-16) is also recommended for detection of Abin-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Abin-2 siRNA (h): sc-44638, Abin-2 siRNA (m): sc-44639, Abin-2 shRNA Plasmid (h): sc-44638-SH, Abin-2 shRNA Plasmid (m): sc-44639-SH, Abin-2 shRNA (h) Lentiviral Particles: sc-44638-V and Abin-2 shRNA (m) Lentiviral Particles: sc-44639-V.

Abin-2 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Abin-2 isoforms: 49/37 kDa.

Positive Controls: SW480 cell lysate: sc-2219.

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.

SELECT PRODUCT CITATIONS

1. Wu, B., et al. 2008. Proteomics analysis of immunoprecipitated proteins associated with the oncogenic kinase cot. Mol. Cells 25: 43-49.

PROTOCOLS

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



Try **Abin-2 (H-8): sc-271850**, our highly recommended monoclonal alternative to Abin-2 (N-16).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com