



Abin-3 (N-19): sc-79827

BACKGROUND

The nuclear factor NFκB is essential for the regulation of immune response genes, inflammatory processes and apoptosis. Abin-3 (A20-binding inhibitor of NFκB activation 3), also known as Listeria-induced gene protein or TNFAIP3-interacting protein 3 (TNIP3), is a 319 amino acid protein that negatively regulates NFκB activation in response to TNF and LPS. Through its interaction with A20, Abin-3 interferes with TRAF2-mediated transactivation signals and effectively inhibits TNF-induced NFκB expression. Abin-3 is highly expressed in thymus, lymph node, lung and fetal liver, with lower expression levels in spleen, brain, tonsils and leukocytes. Abin-3 has been found to be induced by Listeria infection and can be slightly downregulated by dexamethasone.

REFERENCES

1. Staeger, H., et al. 2001. Two novel genes FIND and LIND differentially expressed in deactivated and Listeria-infected human macrophages. *Immunogenetics* 53: 105-113.
2. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608019. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Bouwmeester, T., et al. 2004. A physical and functional map of the human TNFα/NFκB signal transduction pathway. *Nat. Cell Biol.* 6: 97-105.
4. Wullaert, A., et al. 2007. LIND/Abin-3 is a novel lipopolysaccharide-inducible inhibitor of NFκB activation. *J. Biol. Chem.* 282: 81-90.
5. Weaver, B.K., et al. 2007. Abin-3: a molecular basis for species divergence in interleukin-10-induced anti-inflammatory actions. *Mol. Cell. Biol.* 27: 4603-4616.
6. Verstrepen, L., et al. 2008. Expression of the NFκB inhibitor Abin-3 in response to TNF and toll-like receptor 4 stimulation is itself regulated by NFκB. *J. Cell. Mol. Med.* 12: 316-329.
7. Verstrepen, L., et al. 2009. Abins: A20 binding inhibitors of NFκB and apoptosis signaling. *Biochem. Pharmacol.* 78: 105-114.

CHROMOSOMAL LOCATION

Genetic locus: TNIP3 (human) mapping to 4q27.

SOURCE

Abin-3 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Abin-3 of human origin.

STORAGE

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

PROTOCOLS

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

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-79827 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-79827 X, 200 µg/0.1 ml.

APPLICATIONS

Abin-3 (N-19) is recommended for detection of Abin-3 of 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).

Suitable for use as control antibody for Abin-3 siRNA (h): sc-72418, Abin-3 shRNA Plasmid (h): sc-72418-SH and Abin-3 shRNA (h) Lentiviral Particles: sc-72418-V.

Abin-3 (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Abin-3: 38 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.