SANTA CRUZ BIOTECHNOLOGY, INC.

NALP13 (N-20): sc-68681

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NALPs (NACHT-, LRR- and PYD-containing proteins) comprise a subfamily of caterpiller proteins and function in the regulation of apoptosis and signaling pathways. Short NALP proteins contain an N-terminal Pyrin domain, as well as a NACHT domain, a NACHT-associated domain (NAD) and a C-terminal leucine-rich repeat (LRR) region, while long NALP proteins exhibit a C-terminal extension containing a function to find domain (FIIND) and a caspase recruitment domain (CARD). NALP13, also known as NLRP13 (NLR family, Pyrin domain containing 13), NOD14 or PAN13, is a 1,043 amino acid member of the NALP protein family and exists as a short NALP, containing one DAPIN domain, one NACHT domain and 7 LRR repeats. Characteristic of NALP proteins, NALP13 functions as a component of inflammasomes and is involved in inflammatory responses throughout the body.

REFERENCES

1. Martinon, F., Burns, K. and Tschopp, J. 2002. The inflammasome: a molecular platform triggering activation of inflammatory caspases and processing of proIL-β. Mol. Cell 10: 417-426.
2. Chamaillard, M., Girardin, S.E., Viala, J. and Philpott, D.J. 2003. Nods, NALPs and NAIP: intracellular regulators of bacterial-induced inflammation. Cell. Microbiol. 5: 581-592.
3. Inohara, N. and Nuñez, G. 2003. NODs: intracellular proteins involved in inflammation and apoptosis. Nat. Rev. Immunol. 3: 371-382.
4. Tschopp, J., Martinon, F. and Burns, K. 2003. NALPs: a novel protein family involved in inflammation. Nat. Rev. Mol. Cell Biol. 4: 95-104.
5. Petrilli, V., Papin, S. and Tschopp, J. 2005. The inflammasome. Curr. Biol. 15: 581.
6. Martinon, F. and Tschopp, J. 2007. Inflammatory caspases and inflammasomes: master switches of inflammation. Cell Death Differ. 14: 10-22.
7. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 609660. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: NLRP13 (human) mapping to 19q13.42.

SOURCE

NALP13 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NALP13 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-68681 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

NALP13 (N-20) is recommended for detection of NALP13 of 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).

Suitable for use as control antibody for NALP13 siRNA (h): sc-75862, NALP13 shRNA Plasmid (h): sc-75862-SH and NALP13 shRNA (h) Lentiviral Particles: sc-75862-V.

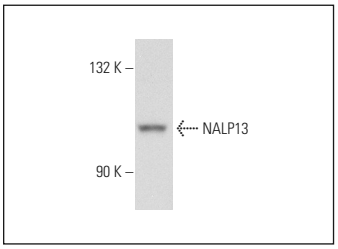
Molecular Weight of NALP13: 119 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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



NALP13 (N-20): sc-68681. Western blot analysis of NALP13 expression in HeLa whole cell lysate.

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.