SANTA CRUZ BIOTECHNOLOGY, INC.

NALP1 (N-14): sc-34689



BACKGROUND

NACHT-, LRR- and PYD-containing protein 1 (NALP1), also designated caspase recruitment domain protein 7, is a cytoplasmic protein. NALP1 contains a putative nucleotide binding site, a region of leucine-rich repeats and death domain folds at both termini, providing protein/protein association functions such as caspase recruitment. NALP1 is involved in the innate immune response and is a component of the inflammasome. It forms cytoplasmic structures called death effector filaments and enhances APAF1 and cytochrome c-dependent activation of pro-caspase-9 and consecutive apoptosis. NALP1 is widely expressed in thymus, heart, spleen and peripheral blood leukocytes.

REFERENCES

- Hiller, S., Kohl, A., Fiorito, F., Herrmann, T., Wider, G., Tschopp, J., Grutter, M.G. and Wuthrich, K. 2003. NMR structure of the apoptosis- and inflammation-related NALP1 Pyrin domain. Structure 11: 1199-1205.
- 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.
- Damiano, J.S., Oliveira, V., Welsh, K. and Reed, J.C. 2004. Heterotypic interactions among NACHT domains: implications for regulation of innate immune responses. Biochem. J. 381: 213-219.
- Sanz, C., Calasanz, M.J., Andreu, E., Richard, C., Prosper, F. and Fernandez-Luna, J.L. 2004. NALP1 is a transcriptional target for cAMP-responseelement-binding protein (CREB) in Myeloid leukaemia cells. Biochem. J. 384: 281-286.
- Liu, F., Lo, C.F., Ning, X., Kajkowski, E.M., Jin, M., Chiriac, C., Gonzales, C., Naureckiene, S., Lock, Y.W., Pong, K., Zaleska, M.M., Jacobsen, J.S., Silverman, S. and Ozenberger, B.A. 2004. Expression of NALP1 in cerebellar granule neurons stimulates apoptosis. Cell. Signal. 16: 1013-1021.

CHROMOSOMAL LOCATION

Genetic locus: NLRP1 (human) mapping to 17p13.2.

SOURCE

NALP1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NALP1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34689 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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

NALP1 (N-14) is recommended for detection of NALP1 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 NALP1 siRNA (h): sc-45479, NALP1 shRNA Plasmid (h): sc-45479-SH and NALP1 shRNA (h) Lentiviral Particles: sc-45479-V.

Molecular Weight of NALP1 mouse and rat isoforms: 134 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try NALP1 (B-2): sc-166368 or NALP1 (6D598): sc-71641, our highly recommended monoclonal aternatives to NALP1 (N-14).