## SANTA CRUZ BIOTECHNOLOGY, INC.

# NALP1 (M-90): sc-66993



#### 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

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- 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. 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.
- 4. 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.
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#### CHROMOSOMAL LOCATION

Genetic locus: NIrp1a/NIrp1b/NIrp1c (mouse) mapping to 11 B4.

### SOURCE

NALP1 (M-90) is a rabbit polyclonal antibody raised against amino acids 181-270 mapping within an internal region of NALP1a of mouse origin.

#### PRODUCT

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

#### **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.

#### **APPLICATIONS**

NALP1 (M-90) is recommended for detection of NALP1a, NALP1b, and NALP1c of mouse and rat 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).

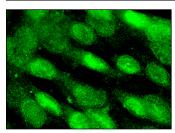
Suitable for use as control antibody for NALP1 siRNA (m): sc-63287, NALP1 siRNA (r): sc-270039, NALP1 shRNA Plasmid (m): sc-63287-SH, NALP1 shRNA Plasmid (r): sc-270039-SH, NALP1 shRNA (m) Lentiviral Particles: sc-63287-V and NALP1 shRNA (r) Lentiviral Particles: sc-270039-V.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat antirabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



NALP1 (M-90): sc-66993. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing nuclear localization.

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

#### **RESEARCH USE**

#### MONOS Try NALP1 (F-1): sc-390133, our highly recommended Satisfation monoclonal aternative to NALP1 (M-90). Guaranteed