

NALP6 (F-20): sc-50636

BACKGROUND

NACHT-, LRR- and PYD-containing protein (NALP) family function in the regulation of apoptosis and inflammatory signaling pathways. Members of the NALP family (also designated Pyrin-containing APAF1-like proteins) include NALP1 through NALP11. Most short NALPs, such as NALP6, have a C-terminal leucine-rich repeat (LRR) region, an N-terminal Pyrin (MEFV) domain (PYD) followed by a NACHT domain, and a NACHT-associated domain (NAD). The predicted 892 amino acid NALP6 protein has an N-terminal PYD, a central NACHT-type nucleotide-binding site domain and a C-terminal domain containing at least 5 LRR motifs. NALP6 is a putative mediator in the activation of CASP1 via ASC (PYD and CARD domain-containing protein) and promotes activation of NFκB. NALP6 binds to ASC with its DAPIN domain. Predominant expression of NALP6 is observed in granulocytes, whereas lower levels of expression are detected in T cells.

REFERENCES

- Grenier, J.M., et al. 2002. Functional screening of five PYPAF family members identifies PYPAF5 as a novel regulator of NFκB and caspase-1. *FEBS Lett.* 530: 73-78.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606838. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Albrecht, M., et al. 2003. Identification of mammalian orthologs associates PYPAF5 with distinct functional roles. *FEBS Lett.* 538: 173-177.
- Drygin, D., et al. 2005. Induction of oligonucleotides in lung epithelial carcinoma cells. *Oligonucleotides* 15: 105-108

CHROMOSOMAL LOCATION

Genetic locus: NLRP6 (human) mapping to 11p15.5.

SOURCE

NALP6 (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NALP6 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-50636 P, (100 µg 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.

PROTOCOLS

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

APPLICATIONS

NALP6 (F-20) is recommended for detection of NALP6 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).

NALP6 (F-20) is also recommended for detection of NALP6 in additional species, including canine.

Suitable for use as control antibody for NALP6 siRNA (h): sc-61147, NALP6 shRNA Plasmid (h): sc-61147-SH and NALP6 shRNA (h) Lentiviral Particles: sc-61147-V.

Molecular Weight of NALP6: 99 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.

SELECT PRODUCT CITATIONS

- Normand, S., et al. 2011. Nod-like receptor pyrin domain-containing protein 6 (NLRP6) controls epithelial self-renewal and colorectal carcinogenesis upon injury. *Proc. Natl. Acad. Sci. USA* 108: 9601-9606.

RESEARCH USE

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