

NALP10 (Q-20): sc-50609

BACKGROUND

The NACHT-, LRR- and PYD-containing protein (NALP) family functions 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. Several family members, such as NALP1, NALP2, NALP3 and NALP6, influence NF κ B and caspase pathways as components of the inflammasome. NALP10 is a member of the NALP family that lacks the LRR region but also may play a regulatory role in the innate immune system. NALP10 inhibits NF κ B activation as well as apoptosis induced by ASC. It is highly expressed in brain, heart and skeletal muscle and is regulated by Annexin A7 in a mechanism that may be involved with tumorigenesis.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609662. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Chamailard, M., et al. 2003. Nods, NALPs and NAIP: intracellular regulators of bacterial-induced inflammation. *Cell. Microbiol.* 5: 581-592.
3. Tschopp, J., et al. 2003. NALPs: a novel protein family involved in inflammation. *Nat. Rev. Mol. Cell Biol.* 4: 95-104.
4. Hiller, S., et al. 2003. NMR structure of the apoptosis- and inflammation-related NALP1 Pyrin domain. *Structure* 11: 1199-1205.
5. Sanz, C., et al. 2004. NALP1 is a transcriptional target for cAMP-response-element-binding protein (CREB) in myeloid leukaemia cells. *Biochem. J.* 384: 281-286.
6. Liu, F., et al. 2004. Expression of NALP1 in cerebellar granule neurons stimulates apoptosis. *Cell. Signal.* 16: 1013-1021.
7. Damiano, J.S., et al. 2004. Heterotypic interactions among NACHT domains: implications for regulation of innate immune responses. *Biochem. J.* 381: 213-219.
8. Kinoshita, T., et al. 2005. PYPAF3, a Pyrin-containing APAF1-like protein, is a feedback regulator of caspase-1-dependent interleukin-1 β secretion. *J. Biol. Chem.* 280: 21720-21725.
9. Torosyan, Y., et al. 2006. Distinct effects of Annexin A7 and p53 on arachidonate lipoxygenation in prostate cancer cells involve 5-Lipoxygenase transcription. *Cancer Res.* 66: 9609-9616.

CHROMOSOMAL LOCATION

Genetic locus: NLRP10 (human) mapping to 11p15.4.

SOURCE

NALP10 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NALP10 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.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50609 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NALP10 (Q-20) is recommended for detection of NALP10 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

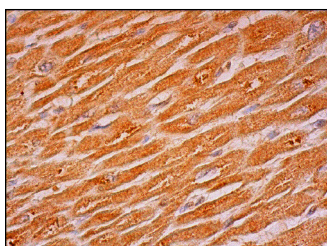
Suitable for use as control antibody for NALP10 siRNA (h): sc-61140, NALP10 shRNA Plasmid (h): sc-61140-SH and NALP10 shRNA (h) Lentiviral Particles: sc-61140-V.

Molecular Weight of NALP10: 75 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



NALP10 (Q-20): sc-50609. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

RESEARCH USE

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

PROTOCOLS

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