

# NALP5 (M-20): sc-50628

## 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. Several family members, such as NALP1, NALP2, NALP3 and NALP6 influence NFκB and caspase pathways as components of the inflammasome. NALP5 (also designated MATER) is a maternal effect protein required for early embryonic development. Most short NALPs, such as NALP5, 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 1,200-amino acid human NALP5 protein shares 53% sequence identity with the mouse protein. The gene which encodes the human NALP5 protein maps to chromosome 19q13.4.

## REFERENCES

1. Tong, Z.B., Bondy, C.A., Zhou, J. and Nelson, L.M. 2002. A human homologue of mouse Mater, a maternal effect gene essential for early embryonic development. *Hum. Reprod.* 17: 903-911.
2. Drygin, D., Koo, S., Perera, R., Barone, S. and Bennett, C.F. 2005. Induction of oligonucleotides in lung epithelial carcinoma cells. *Oligonucleotides* 15: 105-118.
3. Panichkul, P.C., Al-Hussaini, T.K., Sierra R., Kashork, C.D., Popek, E.J., Stockton, D.W. and Van den Veyver, I.B. 2005. Recurrent biparental hydranidiform mole: additional evidence for a 1.1-Mb locus in 19q13.4 and candidate gene analysis. *J. Soc. Gynecol. Investig.* 12: 376-383.
4. Ponsuksili, S., Brunner, R.M., Goldammer, T., Kühn, C., Walz, C., Chomdej, S., Tesfaye, D., Schellander, K., Wimmers, K. and Schwerin, M. 2006. Bovine NALP5, in adult tissues, oocytes, and preimplantation embryos. *Biol. Reprod.* 74: 577-584.

## CHROMOSOMAL LOCATION

Genetic locus: NALP5 (human) mapping to 19q13.43; Nalp5 (mouse) mapping to 7 A2.

## SOURCE

NALP5 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NALP5 of mouse 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-50628 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.

## APPLICATIONS

NALP5 (M-20) is recommended for detection of NALP5 of mouse and rat 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 NALP5 siRNA (m): sc-61146, NALP5 shRNA Plasmid (m): sc-61146-SH and NALP5 shRNA (m) Lentiviral Particles: sc-61146-V.

Molecular Weight of NALP5: 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) 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **NALP5 (C-3): sc-514998**, our highly recommended monoclonal alternative to NALP5 (M-20).