

NALP5 (C-3): sc-514998

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 NF κ B 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 19q13.43.

REFERENCES

1. Tong, Z.B., et al. 2002. A human homologue of mouse Mater, a maternal effect gene essential for early embryonic development. *Hum. Reprod.* 17: 903-911.
2. Panichkul, P.C., et al. 2005. Recurrent biparental hydatidiform mole: additional evidence for a 1.1-Mb locus in 19q13.4 and candidate gene analysis. *J. Soc. Gynecol. Investig.* 12: 376-383.
3. Ponsuksili, S., et al. 2006. Bovine NALP5, in adult tissues, oocytes, and preimplantation embryos. *Biol. Rep.* 74: 577-584.

CHROMOSOMAL LOCATION

Genetic locus: NLRP5 (human) mapping to 19q13.43; Nlrp5 (mouse) mapping to 7 A3.

SOURCE

NALP5 (C-3) is a mouse monoclonal antibody raised against amino acids 201-450 mapping within an internal region of NALP5 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NALP5 (C-3) is available conjugated to agarose (sc-514998 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514998 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514998 PE), fluorescein (sc-514998 FITC), Alexa Fluor[®] 488 (sc-514998 AF488), Alexa Fluor[®] 546 (sc-514998 AF546), Alexa Fluor[®] 594 (sc-514998 AF594) or Alexa Fluor[®] 647 (sc-514998 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514998 AF680) or Alexa Fluor[®] 790 (sc-514998 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

NALP5 (C-3) is recommended for detection of NALP5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 NALP5 siRNA (h): sc-61145, NALP5 siRNA (m): sc-61146, NALP5 shRNA Plasmid (h): sc-61145-SH, NALP5 shRNA Plasmid (m): sc-61146-SH, NALP5 shRNA (h) Lentiviral Particles: sc-61145-V and NALP5 shRNA (m) Lentiviral Particles: sc-61146-V.

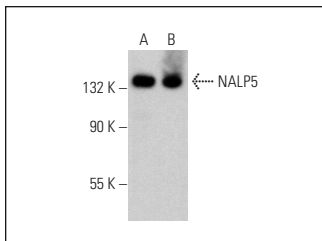
Molecular Weight of NALP5: 134 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or 3T3-L1 cell lysate: sc-2243.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



NALP5 (C-3): sc-514998. Western blot analysis of NALP5 expression in NIH/3T3 (A) and 3T3-L1 (B) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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