

NALP14 (H-10): sc-398068

BACKGROUND

NALP14 (NACHT, LRR and PYD domains-containing protein 14) is a testis specific nucleotide binding protein. It is a member of the NLRP family and contains one DAPIN (Pyrin, AIM, ASC and death domain-like (PAAD)) domain, eleven LRR (leucine-rich repeats) and one NACHT domain. NALP proteins most often act as an intracellular receptors involved in innate immunity. NALP14 has been linked to spermatogenesis but more likely functions as an inflammasome component. The inflammasome comprises a NALP member and an ASC adapter that ensures caspase-1 recruitment to the inflammasome. Different types of inflammasomes are stimulated by a wide variety of microbial, foreign and endogenous materials.

REFERENCES

1. Chamaillard, M., et al. 2003. Nods, NALPs and NAIP: intracellular regulators of bacterial-induced inflammation. *Cell. Microbiol.* 5: 581-592.
2. Tschopp, J., et al. 2003. NALPs: a novel protein family involved in inflammation. *Nat. Rev. Mol. Cell Biol.* 4: 95-104.
3. Horikawa, M., et al. 2005. The mouse germ-cell-specific leucine-rich repeat protein NALP14: a member of the NACHT nucleoside triphosphatase family. *Biol. Reprod.* 72: 879-889.
4. Kufer, T.A., et al. 2005. NACHT-LRR proteins (NLRs) in bacterial infection and immunity. *Trends Microbiol.* 13: 381-388.

CHROMOSOMAL LOCATION

Genetic locus: NLRP14 (human) mapping to 11p15.4; Nlrp14 (mouse) mapping to 7 E3.

SOURCE

NALP14 (H-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 108-153 within an internal region of NALP14 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NALP14 (H-10) is available conjugated to agarose (sc-398068 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398068 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398068 PE), fluorescein (sc-398068 FITC), Alexa Fluor® 488 (sc-398068 AF488), Alexa Fluor® 546 (sc-398068 AF546), Alexa Fluor® 594 (sc-398068 AF594) or Alexa Fluor® 647 (sc-398068 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398068 AF680) or Alexa Fluor® 790 (sc-398068 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398068 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

NALP14 (H-10) is recommended for detection of NALP14 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 NALP14 siRNA (h): sc-62659, NALP14 siRNA (m): sc-77410, NALP14 shRNA Plasmid (h): sc-62659-SH, NALP14 shRNA Plasmid (m): sc-77410-SH, NALP14 shRNA (h) Lentiviral Particles: sc-62659-V and NALP14 shRNA (m) Lentiviral Particles: sc-77410-V.

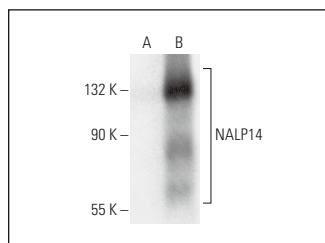
Molecular Weight of NALP14: 125 kDa.

Positive Controls: NALP14 (h): 293T Lysate: sc-174433 or SJRH30 cell lysate: sc-2287.

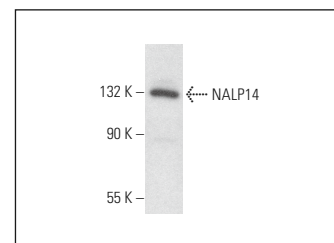
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



NALP14 (H-10): sc-398068. Western blot analysis of NALP14 expression in non-transfected: sc-117752 (A) and human NALP14 transfected: sc-174433 (B) 293T whole cell lysates.



NALP14 (H-10): sc-398068. Western blot analysis of NALP14 expression in SJRH30 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Ouwendijk, W.J.D., et al. 2020. Analysis of virus and host proteomes during productive HSV-1 and VZV infection in human epithelial cells. *Front. Microbiol.* 11: 1179.

STORAGE

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

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