

NALP1 (6D598): sc-71641

BACKGROUND

NACHT-, LRR- and PYD-containing protein 1 (NALP1), also designated caspase recruitment domain protein 7, is a cytoplasmic protein. NALP1 contains a putative nucleotide binding site, a region of leucine-rich repeats, and death domain folds at both termini, providing protein/protein association functions such as caspase recruitment. NALP1 is involved in the innate immune response and is a component of the inflammasome. It forms cytoplasmic structures called death effector filaments and enhances APAF1 and cytochrome c-dependent activation of pro-caspase-9 and consecutive apoptosis. NALP1 is widely expressed in thymus, heart, spleen and peripheral blood leukocytes.

REFERENCES

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5. Sanz, C., Calasanz, M.J., Andreu, E., Richard, C., Prosper, F. and Fernandez-Luna, J.L. 2004. NALP1 is a transcriptional target for cAMP-response-element-binding protein (CREB) in myeloid leukaemia cells. *Biochem. J.* 384: 281-286.
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CHROMOSOMAL LOCATION

Genetic locus: NLRP1 (human) mapping to 17p13.2.

SOURCE

NALP1 (6D598) is a mouse monoclonal antibody raised against full length NALP1 of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

NALP1 (6D598) is recommended for detection of NALP1 of human origin by Western Blotting (starting dilution 1:200, 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), 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 NALP1 siRNA (h): sc-45479, NALP1 shRNA Plasmid (h): sc-45479-SH and NALP1 shRNA (h) Lentiviral Particles: sc-45479-V.

Molecular Weight of NALP1 uniprot human isoform α: 161 kDa.

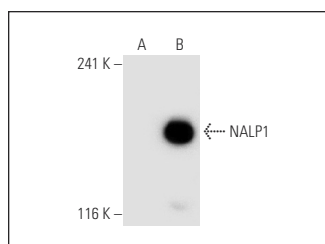
Molecular Weight of NALP1 uniprot human isoform β: 166 kDa.

Molecular Weight of NALP1 uniprot human isoform γ: 157 kDa.

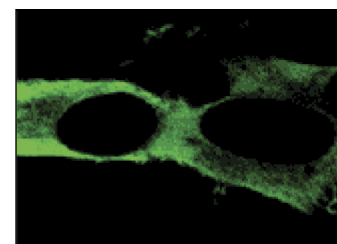
Molecular Weight of NALP1 uniprot human isoform δ: 162 kDa.

Positive Controls: NALP1 (h2): 293T Lysate: sc-116236.

DATA



NALP1 (6D598): sc-71641. Western blot analysis of NALP1 expression in non-transfected: sc-117752 (A) and human NALP1 transfected: sc-116236 (B) 293T whole cell lysates.



NALP1 (6D598): sc-71641. Immunofluorescence staining of methanol-fixed NALP1 transfected 293T cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Xue, F., Shu, R. and Xie, Y. 2015. The expression of NLRP3, NLRP1 and AIM2 in the gingival tissue of periodontitis patients: RT-PCR study and immunohistochemistry. *Arch. Oral Biol.* 60: 948-958.
2. Liang, N., Yang, Y.P., Li, W., Wu, Y.Y., Zhang, Z.W., Luo, Y. and Fan, Y.M. 2018. Overexpression of NLRP3, NLR4 and AIM2 inflammasomes and their priming-associated molecules (TLR2, TLR4, Dectin-1, Dectin-2 and NFKB) in *Malassezia* folliculitis. *Mycoses* 61: 111-118.

PROTOCOLS

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