SANTA CRUZ BIOTECHNOLOGY, INC.

NALP4 (P-20): sc-50623

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NALPs are a subfamily of cytoplasmic proteins within the larger family of CATERPILLER proteins. Most short NALPs, such as NALP4 (PAN2, PYPAF4), have an N-terminal pyrin (MEFV) domain (PYD), followed by a NACHT domain, a NACHT-associated domain (NAD) and a C-terminal leucine-rich repeat (LRR) region. Long NALPs, such as NALP1, also have C-terminal extensions containing caspase recruitment domains (CARDs) and function to find domains (FIINDs). NALPs are putative agents in the activation of proinflammatory caspases (e.g. CASP1) through their association with multiprotein complexes called inflammasomes. NALP4, a 110 kDa protein, demonstrates predominant expression in spleen tissue, followed by placenta, lung, liver, kidney, pancreas and thymus tissues.

REFERENCES

1. Moricca, G., Arcuri, E. and Moricca, P. 1981. Neuroadenolysis of the pituitary. Acta Anaesthesiol. Belg. 32: 87-99.
2. Fiorentino, L., Stehlik, C., Oliveira, V., Ariza, M.E., Godzik, A. and Reed, J.C. 2002. A novel PAAD-containing protein that modulates NFκB induction by cytokines tumor necrosis factor α and interleukin-1β. J. Biol. Chem. 277: 35333-35340.
3. Drygin, D., Koo, S., Perera, R., Barone, S. and Bennett, C.F. 2005. Induction of Toll-like receptors and NALP/PAN/PYPAF family members by modified oligonucleotides in lung epithelial carcinoma cells. Oligonucleotides 15: 105-118.

CHROMOSOMAL LOCATION

Genetic locus: NALP4 (human) mapping to 19q13.43; Nalp4a (mouse) mapping to 7 A3.

SOURCE

NALP4 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NALP4 of human 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-50623 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.

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.

APPLICATIONS

NALP4 (P-20) is recommended for detection of all isoforms of NALP4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NALP4 siRNA (h): sc-61144.

Molecular Weight of NALP4: 110 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.