

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NLRP3/NALP3 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) NALP1 and rhNALP2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human NLRP3/NALP3 Ala4-Val223 Accession # Q96P20
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

NALP3 (NACHT, Leucine-rich repeat and PYD domain containing protein 3; also PYPAF1, CIAS1 and CLR1.1) is a cytoplasmic 115-130 kDa member of the NLRP family of molecules. It is selectively expressed, being found in stratified squamous and transitional epithelium, Hassell's corpuscles, neutrophils, dendritic cells and T cells. NALP3 promotes IL-1 β and IL-18 maturation by activating caspase-1. It does so by forming a NALP3 inflammasome comprised of NALP3, ASC and caspase-1. Bacterial RNA and cell wall peptidoglycan can bind to NALP3, promoting (potentially) ATP binding, NALP3 oligomerization, and caspase activation. Human NALP3 is 1036 amino acids (aa) in length. It contains an N-terminal DAPIN domain (aa 1-93), a NACHT domain (aa 220-536), and seven consecutive LRRs (aa 740-991). Alternate splice forms are reported. Either individually, or in combination, there can be deletions of aa 836-892 or 721-777, and a premature truncation after Gly719 that generates a 70 kDa isoform. Over aa 3-223, human NALP3 shares 76% aa identity with mouse NALP3.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.