

Recombinant Human NALP2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50695

Size: 10ug, 100ug

Protein Name: NACHT, LRR and PYD domains-containing protein 2 (Nucleotide-binding site protein 1) (PYRIN domain and NACHT domain-containing protein 1) (PYRIN-containing APAF1-like protein 2)

Synonym: NLRP2, NALP2, NBS1, PAN1, PYPAF2

UniProt ID: Q9NX02

UniProt Link: www.uniprot.org/uniprotkb/Q9NX02/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1062 AA

Molecular Weight: 121 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVSSAQMGFNLQALLEQLSQDELKFKYLITTFSLAHELQKIPHKEVDKADGKQLVEILTTHCDSYWW
EMASLQVFEEKMHRMDLSERAKDEVREAALKSFNKRKPLSLGITRKERPPLDVDEMLERFKTEAQAF
TETKGNVICLGKEVFKGKKPKDKNRCRYILKTKFREMWKSWPGDSKEVQVMAERYKMLIPFSNPRV
LPGPFSYTVVLYGPAGLGKTTLAQKLMLDWAEDNLIHKFKYAFYLSCRELSRLGPCSFAELVFRDWP
ELQDDIPHILAQARKILFVIDGFDELGAAPGALIEDICGDWEKKKPVVLLGSLLNRVMLPKAALLVTTR
PRALRDLRILAEPIYIRVEGFLEEDRRAYFLRHFGDEDQAMRAFELMRSNAALFQLGSAPAVCWIVC
TTLKLQMEKGEDPVPTCLTRTGLFLRFLCSRFPQGAQLRGALRTLSELLAAQGLWAQTSVLHREDLER
LGVQESDLRLFLDGDILRQDRVSKGCYSFIHLSFQQFLTALFYTLEKEEEEEDRDGHTWDIGDVQKLLS
GVERLRNPDLIQAGYYSFGLANEKRAKELEATFGCRMSPDIKQELLRCDISCKGGHSTVTDLQELLG
CLYESQEEELVKEVMAQFKEISLHLNAVDVVPSSFCVKHCRNLQKMSLQVIKENLPENVTASESDAE
VERSQDDQHMLPFWTDLCSIFGSNKDLMGLAINDSFLSASLVRILCEQIASDTCBLQRRVVFKNISPAD
AHRNLCLALRGHKTVTYLTLQGNDQDDMFALCEVLRHPECNLRYLGLVSCSATTQQWADLSLALE
VNQSLTCVNLSDNELLDEGAKLLYTLRHPKCFQLRSLENCHLTEANCKDLAAVLVVSRELTHLCLA
KNPIGNTGVKFLCEGLRYPECKLQTLVLWNCIDITSDGCCDLTKLLQEKSSLLCLDLGLNHIGVKGMKF
LCEALRKPLCNLRCLWLWGCSIPPFSCEDLCSALSCNQSLVTLDLQGNPLGSSGVKMLFETLTCSG
TLRTLRLKIDDFNDELNKLLEEIEEKNPQLIIDTEKHHPWAERPSSHDFMI

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant NACHT, LRR and PYD domains-containing protein 2 (Nucleotide-binding site protein 1) (PYRIN domain and NACHT domain-containing protein 1) (PYRIN-containing APAF1-like protein 2) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Component of cytoplasmic lattices, which consist in fibrous structures found in the cytoplasm of oocytes and preimplantation embryos (PubMed:41118754). Cytoplasmic lattices are required to store maternal proteins critical for embryonic development, such as ribosomal proteins, cytoskeletal tubulins and proteins controlling epigenetic reprogramming of the preimplantation embryo, in a poised but restrained state, regulating their availability for early embryonic development (PubMed:41118754). Suppresses TNF- and CD40-induced NFκB1 activity at the level of the IKK complex, by inhibiting NFκB1A degradation induced by TNF (PubMed:15456791). When associated with PYCARD, activates CASP1, leading to the secretion of mature pro-inflammatory cytokine IL1β (PubMed:15456791). May be a component of the inflammasome, a protein complex which also includes PYCARD, CARD8 and CASP1 and whose function would be the activation of pro-inflammatory caspases (PubMed:15456791).

Subcellular Localization: Cytoplasm .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.