

Recombinant Human NALP7 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50697

Size: 10ug, 100ug

Protein Name: NACHT, LRR and PYD domains-containing protein 7 (Nucleotide-binding oligomerization domain protein 12) (PYRIN-containing APAF1-like protein 3)

Synonym: NLRP7, NALP7, NOD12, PYPAF3

UniProt ID: Q8WX94

UniProt Link: www.uniprot.org/uniprotkb/Q8WX94/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 980 AA

Molecular Weight: 112 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTSPQLEWTLQTLLEQLNEDELKSFKSLLWAFPLEDVLQKTPWSEVEEADGKKLAEILVNTSSENWI
RNATVNILEEMNLTELCKMAKAEMMEDGQVQEIDNPELGDAEEDSELAKEGEGWRNSMEKQSL
VWKNTFWQGDIDNFHDDVTLRNQRFIPFLNPRTPRKLTPYTVVLHGPAGVGKTTLAKKCMLDWTDC
NLSPTLRYAFYLSCKELSRMGPCSF AELISKDWPELQDDIPSILAQAQRILFVVDGLDELKVPPGALIQ
DICGDWEKKKPVPVLLGSLLKRKMLPRAALLVTTRPRALRDLQLLAQQPIYVRVEGFLEEDRRAYFLR
HFGDEDQAMRAFELMRSNAALFQLGSAPAVCWIVCTTLKLQMEKGEDPVPTCLTRTGLFLRFLCSR
FPQGAQLRGALRTL SLLAAQGLWAQMSVFHREDLERLG VQESDLRLFLDGDILRQDRVSKGCYSFI
HLSFQQFLTALFYALEKEEGEDRDGHAWDIGDVQKLLSGEERLKNPDLIQVGHFLFLANEKRAKEL
EATFGCRMSPDIKQELLQCKAHLHANKPLSVTDLKEVLGCLYESQEEELAKVVVAPFKEISIHNTS
EVMHCSFSLKHCQDLQKLSLQVAKGVFLENYMDFELDIEFERCTYLTIPNWARQDLRSLRLWTD FCS
LFSSNSNLKFLEV KQSFLSDSSVRILCDHVTRSTCHLQKVEIKNVTPDTAYRDFCLAFIGKKT LTHLTL
AGHIEWERTMMLMLCDLLRNHCKNLQYLR LGGHCATPEQWAEFFYVLKANQSLKHLRLSANVLLDE
GAMLLYKTMTRPKHFLQMLSLENCRLTEASCKDLAAVLVVS KKLTHLCLAKNPIGDTGVKFLCEGLS
YPDCKLQTLVLQQCSITKLGCRYLSEALQEACSLTNLDLSINQIARGLWILCQALENPN CNLKHRLRKT
YETNLEIKKLL EEVKEKNPKLTIDCNASGATAPPCCDFFC

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 7 (Nucleotide-binding oligomerization domain protein 12) (PYRIN-containing APAF1-like protein 3) 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). Inhibits CASP1/caspase-1-dependent IL1B secretion (PubMed:15817483).

Subcellular Localization: Cytoplasm, cell cortex . Note=Localized at the oocyte cortex.

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.