

# Recombinant Human NALP4 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP50696

Size: 10ug, 100ug

Protein Name: NACHT, LRR and PYD domains-containing protein 4 (Cancer/testis antigen 58) (CT58) (PAAD and NACHT-containing protein 2) (PAN2) (PYRIN and NACHT-containing protein 2) (PYRIN-containing APAF1-like protein 4) (PYPAF4) (Ribonuclease inhibitor 2)

Synonym: NLRP4, NALP4, PAN2, PYPAF4, RNH2

UniProt ID: Q96MN2

UniProt Link: [www.uniprot.org/uniprotkb/Q96MN2/entry](http://www.uniprot.org/uniprotkb/Q96MN2/entry)

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 994 AA

Molecular Weight: 113 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MAASFFSDFGLMWYLEELKKEEFRKFKEHLKQMTLQLELKQIPWTEVKKASREELANLLIKHYEEQQ  
AWNITLRIFQKMDRKDLCMKVMRERTGYTKTYQAHAKQKFSRLWSSKSVTEIHLYFEEEVKQEECD  
HLDRLFAPKEAGKQPRTVIIQGPQGIGKTTLLMKLMMAWSDNKIFRDRFLYTFYFCCRELRELPTSL  
ADLISREWPDPAPITEIVSQPERLLFVIDSFEELQGGGLNEPDSDLCDLMEKRPVQVLLSSLLRKKM  
LPEASLLIAIKPVCPKELRDQVTISEIYQPRGFNESDRLVYFCCFFKDPKRAMAFNLVRESEQLFSIC  
QIPLLCWILCTSLKQEMQKGKDLALTCQSTTSVYSSFVFNLFTEPGAEGPTPQTQHQLKALCSLAAE  
GMWTDTFEFCEDDLRRNGVVDADIPALLGTKILLKYGERESSYVFLHVCIQEFCAALFYLLKSHLDHP  
HPAVRCVQELLVANFEKARRAHWIFLGCFLTGLLNKKEQEKLDAFFGFQLSQEIKQIQHQLKSLGE  
RGNPQGQVDSLAIIFYCLFEMQDPAFVKQAVNLLQEANFHIIDNVDLVVSAYCLKYCSSLRKLCSFVQ  
NVFKKEDEHSSTSDYSLICWHHICSVLTTSGLHRELQVQDSTLSESTFVTWCNQLRHPSCRLQKLG  
NNVSFSGQSLLFEVLFYQPDLYLSFTLTKLSDIRSLCDALNYPAGNVKELALVNCHLSPIDCEVL  
AGLLTNNKKLTLYLVSCNQLDTGVPLLCALCSPDVLVYLMALFCHLSEQCCEYISEMLLRNKSRY  
LDLSANVLKDEGLKTLCEALKHPDCCLDSLCLVKCFITAAGCEDLASALISNQLKILQIGCNEIGDVG  
VQLLCRALHTDCLRLEILGLEECGLTSTCKDLASVLTCSKTLQQLNLTNTLDHTGVVVLCEALRHP  
ECALQVLGLRKTDDEETQALLTAEERNPNLTITDDCDTITRVEI

### 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 4 (Cancer/testis antigen 58) (CT58) (PAAD and NACHT-containing protein 2) (PAN2) (PYRIN and NACHT-containing protein 2) (PYRIN-containing APAF1-like protein 4) (PYPAF4) (Ribonuclease inhibitor 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:** May be involved in inflammation and recognition of cytosolic pathogen-associated molecular patterns (PAMPs) not intercepted by membrane-bound receptors. Acts as a negative regulator of the type I interferon signaling pathway by serving as an adapter to promote DTX4-mediated ubiquitination of activated TBK1, and its subsequent degradation. Suppresses NF-kappaB induction by the cytokines TNFA and IL1B, suggesting that it operates at a point of convergence in these two cytokine signaling pathways.

**Subcellular Localization:** N/A

### 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.