

Recombinant Human NLRC4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50723

Size: 10ug, 100ug

Protein Name: NLR family CARD domain-containing protein 4 (CARD, LRR, and NACHT-containing protein) (CED-4-like protein Clan) (Caspase recruitment domain-containing protein 12) (Ice protease-activating factor) (Ipaf)

Synonym: NLRC4, CARD12, CLAN, CLAN1, IPAF, UNQ6189/PRO20215

UniProt ID: Q9NPP4

UniProt Link: www.uniprot.org/uniprotkb/Q9NPP4/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1024 AA

Molecular Weight: 116 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNFIKDNSRALIQRMGMTVIKQITDDLFWNVNLNREEVNIICCEKVEQDAARGIIHMILKKGSESCNLF
KSLKEWNYPLFQDLNGQSLFHQTSEGLDDLAQDLKDLYHTPSFLNFYPLGEDIDIIFNLKSTFTPEVL
WRKDQHHHRVEQLTLNGLLQALQSPCIIEGESGKGKSTLLQRIAMLWGSGKCKALTCKFKVFFLRLS
RAQGGLFETLCDQLLDIPGTIRKQTFMAMLLKLRQRVFLLDGYNEFKPQNCPEIEALIKENHRFKNM
VIVTTTTECLRHIRQFGALTAEVGDMTEDSAQALIREVLIKELAEGLLLQIQKSRCLRNLMKTPLFVVIT
CAIQMGSESEFHSHTQTTLFHTFYDLLIQKNKHKHKGVAAASDFIRSLDHCGDLAEGVFSHKFDFELQD
VSSVNEDVLLTTGLLCKYTAQRFKPKYKFFHKSQFEYTAGRRLSSLLTSHEPEEVTKGNGYLQKMVS
ISDITSTYSSLLRYTCGSSVEATRAVMKHLAAVYQHGCLLGLSLIAKRPLWRQESLQSVKNTTEQEILK
AININSFVECGIHLHQESTSKSALSQEFEEAFFQGKSLYINSGNIPDYLDFDFEHLPNCASALDFIKLDFY
GGAMASWEKAAEDTGGIHMEEAPETYIPSRVSLFFNWKQEFRTLEVTLRDFSKLNKQDIRYLGKIF
SSATSLRLQIKRCAGVAGSLSLVLSTCKNIYSMLVEASPLTIEDERHITSVTNLKTLSTHDLQNQRPLG
GLTDSLGNLKNLTKLIMDNIKMNEEDAIAEGLKNLKKMCLFHLTHLSDIGEGMDYIVKSLSSSEPCDL
EEIQLVSCCLSANAVKILAQNLHNLVKLSILDLSENYLEKDGNEALHELIDRMNVLEQLTALMLPWGCD
VQGSLSLLKHLEEVPLVGLGLKNWRLTDTEIRILGAFFGKNPLKNFQQLNLAGNRVSSDGWLAFM
GVFENLKQLVFFDFSTKEFLPDPALVRKLSQVLSKLTFLQEARLVGWQFDDDDLSVITGAFKLVTA

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 NLR family CARD domain-containing protein 4 (CARD, LRR, and NACHT-containing protein) (CED-4-like protein Clan) (Caspase recruitment domain-containing protein 12) (Ice protease-activating factor) (Ipaf) 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: Key component of inflammasomes that indirectly senses specific proteins from pathogenic bacteria and fungi and responds by assembling an inflammasome complex that promotes caspase-1 activation, cytokine production and macrophage pyroptosis (PubMed:15107016). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria (By similarity).

Subcellular Localization: Cytoplasm . Cytoplasm, cytosol . Inflammasome .

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.