

Recombinant Rat NLRC4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52628

Size: 10ug, 100ug

Protein Name: NLR family CARD domain-containing protein 4 (Ice protease-activating factor) (Ipad)

Synonym: Nlrc4, Ipad

UniProt ID: F1M649

UniProt Link: www.uniprot.org/uniprotkb/F1M649/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1023 AA

Molecular Weight: 116 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNFIKENSQALIQRMGIVVIKQICDDL FALNV LN GEEVAIICSHRVEQDAARDIVHMILKKGSAACNLFL
KSLNWNYPVYQDLTGHS LFHQ NLEEDLDVLAQSLKDLYNSPVFKNFFPLGEDIDIIFNLQITFTEPVL
WRKDHRHHRVEQMTLGSLLEALKSPCLIEGESGKGKSTLLQKIAMLWASGMCPALNQFKLVFFIRLS
SARGGLFETLYDQLVNIPDSISKPTFRALLKLHKKVLFLLDAYNEFHPQNCPEIEALVKENHRFKNMV
IVTTTTECLRHIRHVGALTVEVGDMTEDSARVLIREVLINELAEGLLFQMQUESRCLRNLMRTPLFVVIT
CAIQMGSEEFQAHTQTMLFQTFYDLLIQKNRRRHSGGTSGDFVRS LDYCGDLAEGVF SHKFD FEL
EDVCSMNEDVLVRTGLLCKYTAQRLRPTYKFFHKSFQEYTAGRR LSSLLKSREPEEVSKGNSYLKK
MVSISDITSLYGNLLLYTCGSSTEATRAIMRHLAMVCEHGS LQGLSVTKRPLWRQESIQNLRNTTEQ
DVLKAINVNSFVECGINLFSESISKSELSQEFEAFFQGKSLYINSENIPDYLFDFFKYLPNCV SALDFVK
LDFYGRATVSQDKTGENSSGVHTEGPSTYIPSAVSLFFNWMQKFKTLEVTLRDISKLNKQDIKYL
KIFSSASNLKLYIKRCAAVAGRLSSVLRTCKNIHSLMVEASPLTTEDEQYITSVTDLQNL SIHDLHTQRL
PGGLADSLGNLKNLLKLILDDIRLNEEDAKSLAEGLRN LKKMRLHLTRLSDMGEGMDYIVKSLSEEP
CDLQEMKLVDCCLTANSLKILAQNHLNVLKSVLDMSENYLEKAGSEALQGLIGRLGVLEQLSALMLP
WCWDAYISLPNLLKQLEGTPGLVKLGLKNWRLRDEEIRSFGEFLEMNPLRDLQQLDLAGHGVSSDG
WLSFMDVFENLKQLVFFDFGT EEF LPDAALVRKLGVLSKL TLLQEARLTGWELDDYDISVIKGT FKL
VTA

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 (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. The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria.

Subcellular Localization: Cytoplasm, cytosol .

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.