



Recombinant Mouse NALP2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51598

Size: 10ug, 100ug

Protein Name: NACHT, LRR and PYD domains-containing protein 2

Synonym: Nlrp2, Nalp2

UniProt ID: Q4PLS0

UniProt Link: www.uniprot.org/uniprotkb/Q4PLS0/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1046 AA

Molecular Weight: 119 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MEHFDPLGFNLKDVLRKLDKTELNNFKRTLRSCLPDTMKQINKLTMDLANGAQLAEILTDHCPSAWI
KRVTQILEEINRVDLAELVVKQIEEAVLKVPPEEKVSSKPREPSGTLTFPWNFVQGAKRPEDKQKEE
WKTRYTAKWKQNFWPCKNKEIYVVTESYKTLALCNPKIETPFAHAIVLHGPPGSGKTTMAKQLMLE
WSESKQAQIFSCAFYISCREVNNTKPCTFAHLLSMDNPSWRDCVIRDLILGKEFLFVVDGFDELTFPA
GALIRDLCGDWNTVKPVEVLLGSLLKRKMAPHATLLVTRTQSLHQIFVMMMDQPLLVELTGFLEQEK
QEYFQKYFEDEEGEEEDKGEGKALRALKEVRCNADLYQMASLPTACGIFCLCLELRMKKGEDLSLT
CQTYTSMFLNFLCEVFSSETCEDHLNEEFQILFKKICILAANSLEQVPILCEEDFLTLKLNLNHHPMV
CRHILFKDSSSTHCLSFICLGIQQLLAAIFVQELGQESKGVSKYSIQNMLSREARLKNPDLSGLLPFVF
GLLNETRIQELKTTFGCQISTEVKRKFLECESGENKPLLLLMNMQEILSCLYESQEEGFVKEAMVLFE
DISLHLKTSTDLIHASFCLKNSQNLQTMCLKVEKAVFPENVAALESTAKHQRSPDEQRMLTFWTDFC
DTFNSNKKLVFLDIHESFLNSSALEILCEKLPSASCCLQKVVLKNISPDDAYEKLCLIFNGYKTISHLILQ
GGNLDSMHSLCEVLKNPACNLKFLSLGSCSTAAQKWDDFFPVLKVNQSLIFLDLTDNSLLDKSAKL
LCNIWKEPKCILQRVSLENCQLTEACCKDLSSVLMVSRTLTHLSLANNKLGDNQVKNLCESISCTECN
LQTLVLWSCNITNAGCHYLSKMLKQTLCLKHLDLGLNRIGTKGAKFLCEALKNPCKSLKSLWLGCSCI
TPLNCQDFSETLRSNKSNTLDLSQNVLTDAIKTFCEALKLQICPLQMLRLKFDEAKPSIQNLIQEMK
VSHPQLRISSDQVDLKNPPLPHFIF

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 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 the subcortical maternal complex (SCMC), a multiprotein complex that plays a key role in early embryonic development (PubMed:28317850). The SCMC complex is a structural constituent of cytoplasmic lattices, which consist in fibrous structures found in the cytoplasm of oocytes and preimplantation embryos (By similarity). 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 (By similarity). Suppresses TNF- and CD40-induced NFκB1 activity at the level of the IKK complex, by inhibiting NFκB1A degradation induced by TNF (By similarity). When associated with PYCARD, activates CASP1, leading to the secretion of mature pro-inflammatory cytokine IL1β (By similarity). 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 (By similarity).

Subcellular Localization: Cytoplasm . Nucleus . Note=localized in the cytoplasm, nucleus and close to nuclear pores in the oocytes.

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.