

Recombinant Rat NEMO Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52535

Size: 10ug, 100ug

Protein Name: NF-kappa-B essential modulator (NEMO) (IkB kinase-associated protein 1) (IKKAP1) (Inhibitor of nuclear factor kappa-B kinase subunit gamma) (I-kappa-B kinase subunit gamma) (IKK-gamma) (IKKG) (IkB kinase subunit gamma) (NF-kappa-B essential modifier)

Synonym: Ikbkg, Nemo

UniProt ID: Q6TMG5

UniProt Link: www.uniprot.org/uniprotkb/Q6TMG5/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 412 AA

Molecular Weight: 48 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSRHLWKNQLSEMVQPSPGPAEDQDMLGEESSLGKPAMLHLPSEQGTPETLQRCLEENQELRDAI
RQSNQMLRERCEELLHFQVSQREEKEFLMCKFQEARLVERLSLEKLDLRRQREQALEDLEHLKKC
QQQMAEDKASVKAQVTSLLGELQESQSRLEAATKERQTLEGRIRAVSEQVRQLESEREVLQQQHS
VQVDQLRMQNQSVEAALRMERQAASEEKRLAQLQAAYHQLFQDYDSHIKSSKGMQLEDLRQQLQ
QAEELVAKQELIDKLKEEAQHKIVMETVPVLKAQADIYKADFQAERHAREKLVERKELLQEQLQL
QREFNKLKVGCHESARIEDMRKRHVETSQPPLLPAPAHHSFHLALSNQRRSPPEPPDFCCPKCQY
QAPDMDTLQIHVMECIE

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 NF-kappa-B essential modulator (NEMO) (IκB kinase-associated protein 1) (IKKAP1) (Inhibitor of nuclear factor kappa-B kinase subunit gamma) (I-kappa-B kinase subunit gamma) (IKK-gamma) (IKKG) (IκB kinase subunit gamma) (NF-kappa-B essential modifier) 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: Regulatory subunit of the IKK core complex which phosphorylates inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. Its binding to scaffolding polyubiquitin plays a key role in IKK activation by multiple signaling receptor pathways. Can recognize and bind both 'Lys-63'-linked and linear polyubiquitin upon cell stimulation, with a much higher affinity for linear polyubiquitin. Could be implicated in NF-kappa-B-mediated protection from cytokine toxicity. Essential for viral activation of IRF3. Involved in TLR3- and IFIH1-mediated antiviral innate response; this function requires 'Lys-27'-linked polyubiquitination.

Subcellular Localization: Cytoplasm . Nucleus . Note=Sumoylated NEMO accumulates in the nucleus in response to genotoxic stress.

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.