

Recombinant Human GBP4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50357

Size: 10ug, 100ug

Protein Name: Guanylate-binding protein 4 (EC 3.6.5.-) (GTP-binding protein 4) (GBP-4)
(Guanine nucleotide-binding protein 4)

Synonym: GBP4

UniProt ID: Q96PP9

UniProt Link: www.uniprot.org/uniprotkb/Q96PP9/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 640 AA

Molecular Weight: 73 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGERTLHAAVPTPGYPESESIMMAPICLVENQEEQLTVNSKALEILDKISQPVVVAIVGLYRTGKSYL
MNRLAGKRNGFPLGSTVQSETKGIWMWCVPHLSKPNHTLVLLDTEGLGDVEKSNPKNDWIFALAV
LLSSSFVYNSVSTINHQALEQLHYVTELAELIRAKSCPRPDEAEDSSEFASFFPDFIWTVRDFTLELKL
DGNPITEDEYLENALKLIPGKNPKIQNSNMPRECIRHFFRKRKCFVDRPTNDKQYLNHMDEVPEEN
LERHFLMQSDNFCSYIFTHAKTKTLREGIIVTGKRLGTLVVITYVDAINS GAVPCLEN AVTALA QLENPA
AVQRAADHYSQQMAQQLRLPTDTLQELLDVHAACEREAIAVFMEHSFKDENHEFQKKLVDTIEKKK
GDFVLQNEEASAKYCAELKRLSEHLTESILRGIFSVPGGHNLYLEKKQVEWDYKLVPRKGVKANE
VLQNFLQSQVVVEESILQSDKALTAGEKAIAAERAMKEAAEKEQELLREKQKEQQQMMEAQERSFQ
EYMAQMEKKLEERENLLREHERLLKHKLVQEEMLKEEFQKKSEQLNKEINQLKEKIESTKNEQLR
LLKILDMASNIMIVTLPGASKLLGVGTYKYLGSRI

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 Guanylate-binding protein 4 (EC 3.6.5.-) (GTP-binding protein 4) (GBP-4) (Guanine nucleotide-binding protein 4) 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: Interferon (IFN)-inducible GTPase that plays important roles in innate immunity against a diverse range of bacterial, viral and protozoan pathogens (By similarity). Negatively regulates the antiviral response by inhibiting activation of IRF7 transcription factor (By similarity).

Subcellular Localization: Golgi apparatus membrane . Cytoplasm . Nucleus . Cytoplasm, perinuclear region . Note=Heterodimers with GBP1, GBP2 and GBP5 localize in the compartment of the prenylated GBPs: with GBP1 in a vesicle-like compartment, with GBP2, around the nucleus and with GBP5, at the Golgi apparatus.

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.