

Recombinant Mouse GIMA5 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51741

Size: 10ug, 100ug

Protein Name: GTPase IMAP family member 5 (GTPase of the immunity-associated protein 5) (Immunity-associated nucleotide 4-like 1 protein) (Immunity-associated protein 3)

Synonym: Gimap5, Ian4l1, Ian5, Imap3

UniProt ID: Q8BWF2

UniProt Link: www.uniprot.org/uniprotkb/Q8BWF2/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 308 AA

Molecular Weight: 35 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MEHLQKSTYGTIVQGPEAHCVQESSCLRILLVGKSGCGKSATGNSILRRPAFQSRLRGQSVTRTSQA
ETGTWEGRSILVVDTPPIFESKAQNQDMDKDIGDCYLLCAPGPHVLLVLTQLGRFTAEDAMAVRMVK
EVFGVGVMRHMIVLFTRKEDLEEKSLFEFVTHTDNRSLRSLTQECGRRYCAFNNRASGEEQQGQLA
ELMALVRRLEQCEGSFHSNDLFLHAEALLREGYSVHQEAYRCYLAKVRQEVEKQRRELEEQEGS
WIAKMICTVKSCWSSHTAACALLIVLGLTLLTTFINLCISRCK

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 GTPase IMAP family member 5 (GTPase of the immunity-associated protein 5) (Immunity-associated nucleotide 4-like 1 protein) (Immunity-associated protein 3) 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: Plays a role in T lymphocyte development and the optimal generation of CD4/CD8 double-positive thymocytes (PubMed:16509771). Inhibitor of GSK3A. May act by sequestering GSK3A in cytoplasmic vesicles and impairing its translocation to the nucleus. Consequently, impairs GSK3A-dependent transcriptional program and regulation of the DNA damage response occurring during T cells proliferation (PubMed:29382851). Required for the survival of bone marrow hematopoietic stem cells, as well as of peripheral T cells, natural killer (NK) and NK T-cell development and the maintenance of normal liver function (PubMed:18796632, PubMed:21502331). May promote the survival of mature T lymphocytes upon cytokine withdrawal (PubMed:16509771). May regulate Ca(2+) homeostasis by modulating lysosomal Ca(2+) stores, preventing its accumulation in the absence of T cell activation (By similarity). May play a role in mitochondrial DNA segregation in hematopoietic tissues (PubMed:25808953). Is a regulator of liver endothelial cell homeostasis (PubMed:33956074).

Subcellular Localization: Lysosome . Lysosome membrane ; Single-pass type IV membrane protein . Endosome, multivesicular body membrane ; Single-pass type IV membrane protein . Endosome membrane ; Single-pass type IV membrane protein .

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.