

Recombinant Mouse RAB7B Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51809

Size: 10ug, 100ug

Protein Name: Ras-related protein Rab-7b

Synonym: Rab7b

UniProt ID: Q8VEA8

UniProt Link: www.uniprot.org/uniprotkb/Q8VEA8/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 199 AA

Molecular Weight: 23 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNPRKKVDLKLIVGALGVGKTSLLHQYVHKTFEEYQTTLGASILSKIILDDTTKLQIWDGQERF
RSMVSTFYKGS DGCILAFDVTDPESFEALDIWRDDVLAKIIPMEQSYPMVVLGNKIDLEDRKVSQEVV
HGWCKEKDMPYFEVSAKNDINVVQAFEVLASRALLRYQGTAENHLIDSIKLSPGQPKSRCC

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 Ras-related protein Rab-7b 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: Controls vesicular trafficking from endosomes to the trans-Golgi network (TGN). Acts as a negative regulator of TLR9 signaling and can suppress TLR9-triggered TNFA, IL6, and IFNB production in macrophages by promoting TLR9 lysosomal degradation. Also negatively regulates TLR4 signaling in macrophages by promoting lysosomal degradation of TLR4. Promotes megakaryocytic differentiation by increasing NF-kappa-B-dependent IL6 production and subsequently enhancing the association of STAT3 with GATA1. Not involved in the regulation of the EGF- and EGFR degradation pathway.

Subcellular Localization: Late endosome . Lysosome . Golgi apparatus . Golgi apparatus, trans-Golgi network . Cytoplasmic vesicle, phagosome . Cytoplasmic vesicle, phagosome membrane ; Lipid-anchor ; Cytoplasmic side . Note=Recruited to phagosomes containing S.aureus or Mycobacterium.

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.