



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human RAB26 Protein
Catalog Number: hRP-1660
Manufacturer: LD Biopharma, Inc.

Introduction

Endocytosis is involved in a wide variety of cellular processes, including uptake and internalization of solutes and components of the extracellular matrix (ECM), regulation of signaling induced by extracellular ligands, trafficking of cell surface receptors, such as integrins, and rearrangement of the actin cytoskeleton. Endocytosis and intracellular trafficking are coordinated by a family of small GTPases termed the Rabs. Rab proteins are classified according to their function and localization in different intracellular compartments and membrane domains. Rab26 was found on the parotid acinar cell secretory granules to regulate amylase release. Rab26 interacts with Rim1, a Rab3-interacting protein. The expression of Rab26 was regulated by the transcriptional factor MIST1 and was associated with the maturation of secretory granules. Recent data indicated that Rab26 is able to regulate the cell surface transport, specifically from the Golgi, such as GPCR, α 2-ARs.

Full-length human Rab26 cDNA (255 aa, Isoform-I, derived from BC066913) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein was expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: RAB26 (CATX-8; RAB11c)
Accession Number: NP_055168
Species: Human
Size: 20 μ g / Vial
Composition: 0.2 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Jin RU, et al., *RAB26 coordinates lysosome traffic and mitochondrial localization*. J. Cell.



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Li C, et al., *Rab26 modulates the cell surface transport of alpha2-adrenergic receptors from the Golgi*. J. Biol. Chem. 287 (51), 42784-42794 (2012)

Tian X, et al., *RAB26 and RAB3D are direct transcriptional targets of MIST1 that regulate exocrine granule maturation*. Mol. Cell. Biol. 30 (5), 1269-1284 (2010)

Fukuda M. et al., *Distinct Rab binding specificity of Rim1, Rim2, rabphilin, and Noc2. Identification of a critical determinant of Rab3A/Rab27A recognition by Rim2*. J. Biol. Chem. 278 (17), 15373-15380 (2003)

Applications

1. May be used for in vitro RAB26 protein mediated cancer cell metastasis regulation in various cells study by intracellular delivery of this protein with “ProFectin” reagent.
2. May be used for mapping RAB26 protein-protein interaction.
3. As antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGEFSRKKTPKSKGASTPAASTLPTANGARPARSGTALS
GPDAPPNGPLQPGRPSLGGGVDFYDVAFKVMLVGD SGVGKTCLLVRFKDGAF LAGTFISTV GID
FRNKVLDVDGVKVKLQMWDTAGQERFRSVTHAYYRDAHALLLLYDVTNKASFDNIQAWLTEIHE
YAQHDVALMLLGNKVDSAHERVVKREDGEKLAKEYGLPFMETS AKTGLNVDLAF'TAI AKELKRR
SMKAPSEPRFRLHDYVKREGRGASCCRP