

Recombinant Human DEN1B Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50255

Size: 10ug, 100ug

Protein Name: DENN domain-containing protein 1B (Connecdenn 2) (Protein FAM31B)

Synonym: DENND1B, C1orf218, FAM31B

UniProt ID: Q6P3S1

UniProt Link: www.uniprot.org/uniprotkb/Q6P3S1/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 775 AA

Molecular Weight: 87 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDCRTKANPDRTFDLVLKVKCHASENEDPVVLWKFPEDFGDQEILQSVPKFCFPFDVERVSQNQVG
QHFTFVLTDIESKQRFGFCRLTSGGTICLCILSYLPWFVEVYYKLLNTLADYLAKELENDLNETLRSLYN
HPVPKANPTPNLSVNQEIFIACEQVLKDQPALVPHSYFIAPDVTGLPTIPESRNLTEYFVAVDVNNML
QLYASMLHERRIVIISSKLSTLTACIHGSAALLYPMYWQHIYIPVLPPHLLDYCCAPMPYLIHSSLIER
VKNKSLEDVVMLNVDNTNTLESPFSDLNNLPSDVVSALKNKLKKQSTATGDGVARAFLRAQAALFGSY
RDALRYKPGEPITFCEESFVKHRSSVMKQFLETAINLQLFKQFIDGRLAKLNAGRGFSDVFEEEITSG
GFCGGNPRSYQQWVHTVKKGGALFNTAMTKATPAVRTAYKFAKNHAKLGLKEVKSKLKHKENEED
YGTCSVVQYTPVYKLHNEKGGNSEKRKLAQARLKRPLKSLDGALYDDEDDDDIERASKLSSEDGE
EASAYLYESDDSVETRVKTPYSGEMDLLGEILDTLSTHSSDQGKLAAAKSLDFFRSMDDIDYKPTNK
SNAPSENNLAFLCGGSGDQAEWNLGQDDSAHGHKHLPPSPRKRVSSTGLTDSLFIKEENSNNKHLG
ADNVSDPTSGLDLQFTSPEVSQTDKGKTEKRETLISQISDILLIPGLGRHSSTFVPWEKEGKEAKETS
EDIGLLHEVVSLSCHMTSDFQQSLNISDKNTNGNQ

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 DENN domain-containing protein 1B (Connecdenn 2) (Protein FAM31B) 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: Guanine nucleotide exchange factor (GEF) for RAB35 that acts as a regulator of T-cell receptor (TCR) internalization in TH2 cells (PubMed:20154091, PubMed:20937701, PubMed:24520163, PubMed:26774822). Acts by promoting the exchange of GDP to GTP, converting inactive GDP-bound RAB35 into its active GTP-bound form (PubMed:20154091, PubMed:20937701). Plays a role in clathrin-mediated endocytosis (PubMed:20154091). Controls cytokine production in TH2 lymphocytes by controlling the rate of TCR internalization and routing to endosomes: acts by mediating clathrin-mediated endocytosis of TCR via its interaction with the adapter protein complex 2 (AP-2) and GEF activity (PubMed:26774822). Dysregulation leads to impaired TCR down-modulation and recycling, affecting cytokine production in TH2 cells (PubMed:26774822).

Subcellular Localization: Cytoplasm, cytosol . Cytoplasmic vesicle, clathrin-coated vesicle .

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.