

Recombinant Mouse DEN1B Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51589

Size: 10ug, 100ug

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

Synonym: Dennd1b

UniProt ID: Q3U1T9

UniProt Link: www.uniprot.org/uniprotkb/Q3U1T9/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 766 AA

Molecular Weight: 86 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDRRTRENPERTFDLVLKVKCHASENEDPEVLWKFPEDFGDQEV LQSVPKFCFPFDVERVSQNQV
GQHFTFVLTD MESKQRF GFCRLTSGGRICLCILSYLPWF EYVKLLNTLADYLAKELEEDLNETLKSL
YNHPVPKANTPVNLSVHSCFITPDITGLPTIPESRNLTEYFVAVDVNNMLRLYASMLHERRIIITSSKLS
TLTACLHGSAALLYPMYWQHIIYIPVLPPLLDDYCCAPMPYLIGIHSSLIERVKNKSLEDVVVLNVDNT
LESPFNDLSSLP SDVV SALKNKLKKQSTATGDGVARAFLRAQAALFGSYRDALRYKPGEPITFCEES
FVKHRSSVMKQFLETAVNLQLFKQFIDGRLAKLNAGRGFS DIFEEEITSGGFCGGSPRSYQQWVYTV
KKGGALFNTAVTKATPAVRTAYKFAKSHARLGLKEVKSRLKHKDNEEEYGTCSGLVQYTPVYTLHNE
KGENREKHKLSQTHLKRPHKSLDGTLYDDDDDDDDIERASKISSE DGEETRAYFYESDDDSVEAQVK
APYSGEMDLLGEILDTLSTHSSDQGKLAPAKSLDFFRSMDDIDYKPTNKSNAPENNLALLCASGDQ
GEWNLGQDD SALHGRQLPPSPRKRVS SGGLTESL FILKEESREKPLCADSVSGPTVVGKPAPTSGL
RSQPAAPEASQTERGRAEVKQTPGQAPLQSEDL SVPGPSRQSTFVPWEKAGKEDTKPSKDVGLL
QEVVSLCHMSCDFQQDLNISEESRSGNQ T

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) 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. Acts by promoting the exchange of GDP to GTP, converting inactive GDP-bound RAB35 into its active GTP-bound form. Plays a role in clathrin-mediated endocytosis. 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. Dysregulation leads to impaired TCR down-modulation and recycling, affecting cytokine production in TH2 cells.

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.