

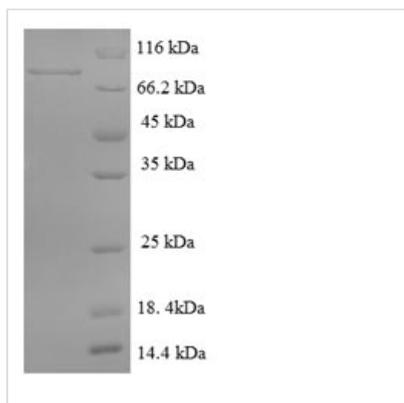


Recombinant Human DENN domain-containing protein 1A (DENND1A)

Product Code	CSB-EP823472HU
Relevance	Guanine nucleotide exchange factor (GEF) regulating clathrin-mediated endocytosis through RAB35 activation. Promotes the exchange of GDP to GTP, converting inactive GDP-bound RAB35 into its active GTP-bound form. Regulates clathrin-mediated endocytosis of synaptic vesicles.
Abbreviation	Recombinant Human DENND1A protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8TEH3
Alias	Connecdenn 1 ;Connecdenn;Protein FAM31A
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MGSRIKQNPETTFEVYVEVAYPRTGGTSLSDPEVQRQFPEDYSDQEVLQTLTKF CFPFYVDSLTVSQVGQNFVLTLDIDSKQRFGFCRLSSGAKSCFCILSYLPWFE VFYKLLNILADYTTKRQENQWNELLETLHKLPIPDGVSVHLSVHSYFTVPDTR ELPSIPENRNLTEYFVAVDVNNMLHLYASMLYERRILIICSKLSTLTACIHGSAAM LYPMYWQHVIYIPVLPPLLDYCCAPMPYLIIGIHLSLMEKVRNMLDDVVILNVD TNTLETPFDDLQSLPNDVISSLKNRLKKVSTTTGDGVARAFLKAQAAFFGSYRN ALKIEPEEPITFCEEAFVSHYRSGAMRQFLQATQLQLFKQFIDGRLDLLNSGE GFSDVFEIEINMGEYAGSDKLYHQWLSTVRKGS GAILNTVKTKANPAMKTVYK FAKDHA KMGIKEVKNRLKQKDIAENG CAPTPEEQLPKTAPSPLVEAKDPKLRE DRRPITVHFGQVRPPRPHVVKRPKSNIAVEGRRTSVPSPEQNTIATPATLHILQ KSITHFAAKFPTRGWTSSSH
Research Area	Neuroscience
Source	E.coli
Target Names	DENND1A
Expression Region	1-559aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	79.4kDa
Protein Length	Full Length of Isoform 2



Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Amino acids 1-559 form the expressed segment for recombinant Human DENND1A. The calculated molecular weight for this DENND1A protein is 79.4 kDa. This DENND1A protein is produced using e.coli expression system. Fusion of the N-terminal 6xHis-SUMO tag into the DENND1A encoding gene fragment was conducted, allowing for easier detection and purification of the DENND1A protein in subsequent stages.

Human DENN domain-containing protein 1A (DENND1A) primarily functions as a guanine nucleotide exchange factor (GEF) for Rab GTPases, playing a pivotal role in regulating intracellular membrane trafficking and vesicle transport. In cellular and molecular investigations, the study of DENND1A provides crucial insights into the dynamic processes of cellular organelle trafficking and vesicular formation. DENND1A's involvement in insulin granule trafficking connects it with diabetes research, while its association with cancer implicates it in cell migration and invasion. Exploring DENND1A opens avenues for understanding membrane dynamics, cellular signaling, and the pathophysiology of diseases related to vesicular trafficking, offering potential applications in diabetes and cancer research.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.