Recombinant DEN5A protein (His tag)

Catalog Number	538262
Synonyms	Rab6-interacting protein 1; Rab6IP1
Species	Human
Expression System	E. coli
Accession	Q6IQ26
Molecular Weight	Predictes a molecular mass of 42.16 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	714-1066
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 714-1066 aa (Q6IQ26) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human DENND5A Fragment (714-1066): A high-purity protein fragment encompassing the RUN 1 and PLAT domains of DENN domain-containing protein 5A (Rab6IP1), designed for studying its role as a guanine nucleotide exchange factor (GEF) in RAB6A and RAB39 activation. This fragment serves as an essential tool for domain-specific functional assays and mechanistic insights into intracellular trafficking and neurite outgrowth regulation. DENN domain-containing protein 5A (DENND5A), also known as Rab6-interacting protein 1 (Rab6IP1), functions as a guanine nucleotide exchange factor (GEF) that activates RAB6A, RAB39A, and/or RAB39B by promoting GDP-to-GTP exchange, thereby converting inactive Rab proteins into their active GTP-bound forms. This protein is implicated in the negative regulation of neurite outgrowth, highlighting its significance in neuronal development and intracellular signaling pathways. Localized to the Golgi apparatus membrane, DENND5A plays a critical role in membrane trafficking and organelle dynamics. The recombinant fragment (residues 714-1066) includes the RUN 1 and PLAT domains, which are key for its GEF activity and interactions, making it invaluable for targeted research on Rab protein regulation and cellular processes.