Recombinant DEN2C protein (His tag)

Catalog Number	549517
Species	Human
Expression System	E. coli
Accession	Q68D51
Molecular Weight	Predictes a molecular mass of 52.03 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	489-928
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 489-928 aa (Q68D51) 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 DENN domain-containing protein 2C fragment (amino acids 489-928) from Homo sapiens, encompassing the complete uDENN, cDENN, and dDENN functional domains. This 440-amino acid fragment serves as an essential tool for investigating the guanine nucleotide exchange factor activity and RAB9A/B activation mechanisms of DENND2C. The full-length DENN domain-containing protein 2C (encoded by DENND2C) functions as a guanine nucleotide exchange factor that activates RAB9A and RAB9B. It promotes the exchange of GDP to GTP, converting inactive GDP-bound Rab proteins into their active GTP-bound form, as demonstrated in published research (ECO:0000269|PubMed:20937701). This protein plays a crucial role in regulating Rab GTPase activity, which is fundamental to intracellular vesicle trafficking and membrane transport processes. The provided fragment strategically includes all three DENN domains (uDENN, cDENN, dDENN) that are essential for the protein's GEF activity, making it particularly valuable for structure-function studies and mechanistic investigations of Rab protein activation.