Recombinant DEN4C protein (His tag)

Catalog Number	547465
Species	Human
Expression System	E. coli
Accession	Q5VZ89
Molecular Weight	Predictes a molecular mass of 28.41 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1678-1909
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1678-1909 aa (Q5VZ89) 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	Introducing the DENN domain-containing protein 4C (DENND4C) fragment (residues 1678-1909), a 232-amino acid recombinant protein derived from Homo sapiens. This fragment is expertly engineered for stability and solubility, making it an ideal tool for structural studies and biochemical assays focused on RAB10 activation and insulin-responsive cellular processes. The full-length DENND4C protein functions as a guanine nucleotide exchange factor (GEF) that specifically activates RAB10 by promoting the exchange of GDP for GTP, converting RAB10 into its active GTP-bound state. This activity plays a critical role in insulin-mediated signaling, where it stimulates the delivery of SLC2A4/GLUT4 glucose transporter-enriched vesicles to the plasma membrane, facilitating glucose uptake. DENND4C is localized to cytoplasmic vesicle membranes, the cell membrane, and the cytosol, and it associates with SLC2A4/GLUT4 storage vesicles, underscoring its importance in metabolic regulation and vesicular trafficking pathways.