Recombinant PITC1 protein (His tag)

Catalog Number	541507
Synonyms	Mammalian rdgB homolog beta; M-rdgB beta; MrdgBbeta; Retinal degeneration B homolog beta; RdgBbeta
Species	Human
Expression System	E. coli
Accession	Q9UKF7
Molecular Weight	Predictes a molecular mass of 31.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-251
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-251 aa (Q9UKF7) 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 Cytoplasmic Phosphatidylinositol Transfer Protein 1 (PITPNC1) Fragment (aa 1-251) is a high-quality protein product designed for structural and biochemical studies. This fragment represents a stable, soluble unit of the protein, ideal for investigating phosphatidylinositol and phosphatidic acid transfer mechanisms in cellular signaling pathways. Cytoplasmic Phosphatidylinositol Transfer Protein 1, encoded by the PITPNC1 gene, plays a critical role in lipid signaling by catalyzing the transfer of phosphatidylinositol (PI) and phosphatidic acid (PA) between membranes. It specifically binds to PA species generated through the phospholipase D pathway, with a preference for C16:0/16:1 and C16:1/18:1 PA molecular species. The protein is localized to the cytoplasm, where it facilitates membrane lipid dynamics essential for cellular signaling processes. Isoform 1 exhibits both PI and PA transfer activity, while Isoform 2 specifically transfers phosphatidylinositol, highlighting its importance in maintaining lipid homeostasis and signal transduction in human cells.