Recombinant TMTC4 protein (His tag)

Catalog Number	545154
Synonyms	Transmembrane O-mannosyltransferase targeting cadherins 4; Transmembrane and tetratricopeptide repeat-containing 4
Species	Human
Expression System	E. coli
Accession	Q5T4D3
Molecular Weight	Predictes a molecular mass of 33.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	462-741
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 462-741 aa (Q5T4D3) 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 TMTC4 Fragment (aa 462-741) is a high-purity protein product designed for structural and biochemical studies. This fragment represents a stable and soluble region of Protein O-mannosyl-transferase TMTC4, optimized for research applications investigating O-mannosylation mechanisms. Protein O-mannosyl-transferase TMTC4 (EC 2.4.1.109) is a transmembrane enzyme that transfers mannosyl residues to serine or threonine hydroxyl groups. As part of the TMTC family, it functions as an O-mannosyl-transferase primarily targeting cadherin superfamily proteins, with each family member playing distinct roles in decorating cadherin domains with specific O-linked mannose glycans. The enzyme also demonstrates activity on other proteins such as PDIA3. TMTC4 is localized to the endoplasmic reticulum membrane as a multi-pass membrane protein, where it performs its glycosylation functions critical for protein modification and cellular processes.