Recombinant STT3A protein (His tag)

Catalog Number	544629
Synonyms	Oligosaccharyl transferase subunit STT3A; STT3-A; B5; Integral membrane protein 1; Transmembrane protein TMC
Species	Human
Expression System	E. coli
Accession	P46977
Molecular Weight	Predictes a molecular mass of 28.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	474-705
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 474-705 aa (P46977) 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 STT3A (474-705) Fragment is a high-purity protein product derived from the catalytic subunit of the oligosaccharyl transferase complex. This 232-amino acid fragment is engineered for stability and solubility, making it an ideal tool for structural studies, enzymatic assays, and investigating N-glycosylation mechanisms in vitro. Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit STT3A is a key catalytic component of the oligosaccharyl transferase (OST) complex located in the endoplasmic reticulum membrane. As a multi-pass membrane protein, it initiates protein N-glycosylation by transferring a defined glycan from dolichol-pyrophosphate to asparagine residues within Asn-X-Ser/Thr motifs in nascent polypeptides. STT3A-containing complexes mediate cotranslational glycosylation of most target sites and prevent hyperglycosylation by regulating facultative site accessibility during protein folding. This essential enzyme operates at the ER translocon complex and represents the predominant OST isoform for primary glycosylation events.