Recombinant ALG6 protein (His tag)

Catalog Number	539332
Synonyms	Asparagine-linked glycosylation protein 6 homolog; Dol-P-Glc:Man(9)GlcNAc(2)-PP-Dol alpha-1,3-glucosyltransferase; Dolichyl-P-Glc:Man9GlcNAc2-PP-dolichyl glucosyltransferase
Species	Human
Expression System	E. coli
Accession	Q9Y672
Molecular Weight	Predictes a molecular mass of 12.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	25-114
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 25-114 aa (Q9Y672) 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 ALG6 Protein Fragment (aa 25-114) - a high-purity, soluble fragment of Dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase, engineered for structural and biochemical studies of N-glycosylation pathway enzymes. ALG6 (Dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase) is an essential endoplasmic reticulum membrane enzyme in the dolichol-linked oligosaccharide biosynthetic pathway for protein N-glycosylation. It catalyzes the addition of the first glucose residue from dolichyl phosphate glucose onto the Man9GlcNAc2-PP-Dol intermediate to form Glc1Man9GlcNAc2-PP-Dol, which serves as the substrate for ALG8 in the subsequent glycosylation step. As a multi-pass membrane protein localized to the endoplasmic reticulum, ALG6 plays a critical role in ensuring proper oligosaccharide precursor assembly before transfer to nascent proteins by oligosaccharyltransferases.