

ALG10 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9961a

Specification

ALG10 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [Q5BKT4](#)

ALG10 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 84920

Other Names

Dol-P-Glc:Glc(2)Man(9)GlcNAc(2)-PP-Dol alpha-1, 2-glucosyltransferase, Alpha-1, 2-glucosyltransferase ALG10-A, Alpha-2-glucosyltransferase ALG10-A, Asparagine-linked glycosylation protein 10 homolog A, ALG10, ALG10A

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ALG10 Antibody (N-term) Blocking Peptide - Protein Information

Name ALG10 ([HGNC:23162](#))

Function

Dol-P-Glc:Glc(2)Man(9)GlcNAc(2)-PP-Dol alpha-1,2- glucosyltransferase that operates in the biosynthetic pathway of dolichol-linked oligosaccharides, the glycan precursors employed in protein asparagine (N)-glycosylation. The assembly of dolichol-linked oligosaccharides begins on the cytosolic side of the endoplasmic reticulum membrane and finishes in its lumen. The sequential addition of sugars to dolichol pyrophosphate produces dolichol-linked oligosaccharides containing fourteen sugars, including two GlcNAcs, nine mannoses and three glucoses. Once assembled, the oligosaccharide is transferred from the lipid to nascent proteins by oligosaccharyltransferases. In the lumen of the endoplasmic reticulum, adds the third and last glucose residue from dolichyl phosphate glucose (Dol-P-Glc) onto the lipid-linked oligosaccharide intermediate Glc(2)Man(9)GlcNAc(2)-PP-Dol to produce Glc(3)Man(9)GlcNAc(2)-PP-Dol.

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q5I7T1}; Multi-pass membrane protein

ALG10 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

ALG10 Antibody (N-term) Blocking Peptide - Images

ALG10 Antibody (N-term) Blocking Peptide - Background

ALG10 encodes a membrane-associated protein that adds the third glucose residue to the lipid-linked oligosaccharide precursor for N-linked glycosylation. That is, it transfers the terminal glucose from dolichyl phosphate glucose (Dol-P-Glc) onto the lipid-linked oligosaccharide Glc2Man9GlcNAc(2)-PP-Dol. The rat protein homolog was shown to specifically modulate the gating function of the rat neuronal ether-a-go-go (EAG) potassium ion channel.

ALG10 Antibody (N-term) Blocking Peptide - References

Chapuis, J., et al. Mol. Psychiatry 14(11):1004-1016(2009) Seshadri, S., et al. BMC Med. Genet. 8 SUPPL 1, S15 (2007) Kupershmidt, S., et al. FASEB J. 17(15):2263-2265(2003)