

ALG11 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP18142b

Specification

ALG11 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q2TAA5</u>

ALG11 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 440138

Other Names GDP-Man:Man(3)GlcNAc(2)-PP-Dol alpha-1, 2-mannosyltransferase, Asparagine-linked glycosylation protein 11 homolog, Glycolipid 2-alpha-mannosyltransferase, ALG11, GT8

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.

ALG11 Antibody (C-term) Blocking Peptide - Protein Information

Name ALG11 (HGNC:32456)

Synonyms GT8

Function

GDP-Man:Man(3)GlcNAc(2)-PP-Dol alpha-1,2-mannosyltransferase 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. Catalyzes, on the cytoplasmic face of the endoplasmic reticulum, the addition of the fourth and fifth mannose residues to the dolichol-linked oligosaccharide chain, to produce Man(5)GlcNAc(2)-PP-dolichol core oligosaccharide (PubMed:>20080937). Man(5)GlcNAc(2)-PP-dolichol is a substrate for ALG3, the following enzyme in the biosynthetic pathway (PubMed:10581255).

Cellular Location



Endoplasmic reticulum membrane; Single-pass membrane protein {ECO:0000250|UniProtKB:P53954}

ALG11 Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

ALG11 Antibody (C-term) Blocking Peptide - Images

ALG11 Antibody (C-term) Blocking Peptide - Background

This gene encodes aGDP-Man:Man3GlcNAc2-PP-dolichol-alpha1,2-mannosyltransferase which is localized to the cytosolic side of the endoplasmic reticulum(ER) and catalyzes the transfer of the fourth and fifth mannoseresidue from GDP-mannose (GDP-Man) to Man3GlcNAc2-PP-dolichol andMan4GlcNAc2-PP-dolichol resulting in the production ofMan5GlcNAc2-PP-dolichol. Mutations in this gene are associated withcongenital disorder of glycosylation type Ip (CDGIP). This geneoverlaps but is distinct from the UTP14, U3 small nucleolarribonucleoprotein, homolog C (yeast) gene. A pseudogene of theGDP-Man:Man3GlcNAc2-PP-dolichol-alpha1,2-mannosyltransferase hasbeen identified on chromosome 19.

ALG11 Antibody (C-term) Blocking Peptide - References

Rind, N., et al. Hum. Mol. Genet. 19(8):1413-1424(2010)Rohozinski, J., et al. Biol. Reprod. 74(4):644-651(2006)