

# ALG8 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP18533a

## **Specification**

# ALG8 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

O9BVK2

# ALG8 Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID** 79053

#### **Other Names**

Probable dolichyl pyrophosphate Glc1Man9GlcNAc2 alpha-1, 3-glucosyltransferase, Asparagine-linked glycosylation protein 8 homolog, Dol-P-Glc:Glc(1)Man(9)GlcNAc(2)-PP-dolichyl alpha-1, 3-glucosyltransferase, Dolichyl-P-Glc:Glc1Man9GlcNAc2-PP-dolichyl glucosyltransferase, ALG8

#### **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.

### ALG8 Antibody (N-term) Blocking Peptide - Protein Information

Name ALG8 {ECO:0000303|PubMed:28375157, ECO:0000312|HGNC:HGNC:23161}

### **Function**

Dolichyl pyrophosphate Glc1Man9GlcNAc2 alpha-1,3- 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 second glucose residue from dolichyl phosphate glucose (Dol-P- Glc) onto the lipid-linked oligosaccharide intermediate Glc(1)Man(9)GlcNAc(2)-PP-Dol to produce Glc(2)Man(9)GlcNAc(2)-PP-Dol. Glc(2)Man(9)GlcNAc(2)-PP-Dol is a substrate for ALG10, the following enzyme in the biosynthetic pathway (PubMed:<a href="http://www.uniprot.org/citations/12480927" target="\_blank">12480927</a>, PubMed:<a href="http://www.uniprot.org/citations/15235028" target="\_blank">15235028</a>). Required for PKD1/Polycystin-1 maturation and localization to the plasma membrane of the primary cilia (By similarity).



### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein

## ALG8 Antibody (N-term) Blocking Peptide - Protocols

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

### • Blocking Peptides

**ALG8 Antibody (N-term) Blocking Peptide - Images** 

# ALG8 Antibody (N-term) Blocking Peptide - Background

This gene encodes a member of the ALG6/ALG8glucosyltransferase family. The encoded protein catalyzes theaddition of the second glucose residue to the lipid-linkedoligosaccharide precursor for N-linked glycosylation of proteins. Mutations in this gene have been associated with congenital disorder of glycosylation type Ih (CDG-Ih). Alternatively spliced transcript variants encoding different isoforms have been identified.

# ALG8 Antibody (N-term) Blocking Peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Stolting, T., et al. Mol. Genet. Metab. 98(3):305-309(2009)Jaeken, J., et al. Curr. Opin. Pediatr. 16(4):434-439(2004)Schollen, E., et al. J. Med. Genet. 41(7):550-556(2004)Jaeken, J. J. Inherit. Metab. Dis. 27(3):423-426(2004)