

**ALG1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9324c**

**Specification**

**ALG1 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession [Q9BT22](#)

**ALG1 Antibody (Center) Blocking Peptide - Additional Information**

**Gene ID** 56052

**Other Names**

Chitobiosyldiphosphodolichol beta-mannosyltransferase, Asparagine-linked glycosylation protein 1 homolog, Beta-1, 4-mannosyltransferase, GDP-Man:GlcNAc2-PP-dolichol mannosyltransferase, GDP-mannose-dolichol diphosphochitobiose mannosyltransferase, Mannosyltransferase-1, MT-1, hMat-1, ALG1, HMAT1, HMT1

**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.

**ALG1 Antibody (Center) Blocking Peptide - Protein Information**

**Name** ALG1 ([HGNC:18294](#))

**Synonyms** HMAT1, HMT1

**Function**

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 first mannose residues to the dolichol-linked oligosaccharide chain, to produce Man1GlcNAc(2)-PP- dolichol core oligosaccharide. Man1GlcNAc(2)-PP-dolichol is a substrate for ALG2, the following enzyme in the biosynthetic pathway.

**Cellular Location**

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P16661}; Single-pass membrane protein {ECO:0000250|UniProtKB:P16661}

### **ALG1 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **ALG1 Antibody (Center) Blocking Peptide - Images**

### **ALG1 Antibody (Center) Blocking Peptide - Background**

The enzyme encoded by this protein catalyzes the first mannosylation step in the biosynthesis of lipid-linked oligosaccharides. This protein is mutated in congenital disorder of glycosylation type Ik.

### **ALG1 Antibody (Center) Blocking Peptide - References**

Grubenmann,C.E. Hum. Mol. Genet. 13 (5), 535-542 (2004)Kranz,C. Am. J. Hum. Genet. 74 (3), 545-551 (2004)Schwarz,M. Am. J. Hum. Genet. 74 (3), 472-481 (2004)