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ALG6 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP22095c

Specification

ALG6 Blocking Peptide (Center) - Product Information

Primary Accession	Q9Y672
Other Accession	Q3TAE8, Q5NVS8, Q3T1L5

ALG6 Blocking Peptide (Center) - Additional Information

Gene ID 29929

Other Names
Dolichyl pyrophosphate Man9GlcNAc2 alpha-1, 3-glucosyltransferase, 2.4.1.267, 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, ALG6

Target/Specificity
The synthetic peptide sequence is selected from aa 261-274 of HUMAN ALG6

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.

ALG6 Blocking Peptide (Center) - Protein Information

Name ALG6 (HGNC:23157)

Function
Dolichyl pyrophosphate Man9GlcNAc2 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 first glucose residue from dolichyl phosphate glucose (Dol-P- Glc) onto the lipid-linked oligosaccharide intermediate Man(9)GlcNAc(2)-PP-Dol to produce Glc(1)Man(9)GlcNAc(2)-PP-Dol. Glc(1)Man(9)GlcNAc(2)-PP-Dol is a substrate for ALG8, the following enzyme in the biosynthetic pathway.

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

ALG6 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

ALG6 Blocking Peptide (Center) - Images

ALG6 Blocking Peptide (Center) - Background

Adds the first glucose residue to the lipid-linked oligosaccharide precursor for N-linked glycosylation. Transfers glucose from dolichyl phosphate glucose (Dol-P-Glc) onto the lipid-linked oligosaccharide Man(9)GlcNAc(2)-PP-Dol.

ALG6 Blocking Peptide (Center) - References

Imbach T.,et al.Proc. Natl. Acad. Sci. U.S.A. 96:6982-6987(1999).
Mao Y.M.,et al.Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.