

ALG13 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17892c

Specification

ALG13 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [Q9NP73](#)

ALG13 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 79868

Other Names

Putative bifunctional UDP-N-acetylglucosamine transferase and deubiquitinase ALG13, Asparagine-linked glycosylation 13 homolog, Glycosyltransferase 28 domain-containing protein 1, UDP-N-acetylglucosamine transferase subunit ALG13 homolog, ALG13, CXorf45, GLT28D1

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.

ALG13 Antibody (Center) Blocking Peptide - Protein Information

Name ALG13 ([HGNC:30881](#))

Function

Catalytic subunit of the UDP-N-acetylglucosamine transferase complex 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. On the cytoplasmic face of the endoplasmic reticulum, the dimeric ALG13/ALG14 complex catalyzes the second step of dolichol pyrophosphate biosynthesis, transferring a beta1,4-linked N-acetylglucosamine (GlcNAc) from UDP-GlcNAc to GlcNAc-pyrophosphatedolichol (Gn-PDol) to produce N,N'-diacetylchitobiosyl diphosphodolichol. N,N'- diacetylchitobiosyl diphosphodolichol is a substrate for ALG1, the following enzyme in the biosynthetic pathway.

Cellular Location

[Isoform 2]: Endoplasmic reticulum membrane; Peripheral membrane protein Note=Recruited to

the cytosolic face of the endoplasmic reticulum membrane through its interaction with ALG14

ALG13 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ALG13 Antibody (Center) Blocking Peptide - Images

ALG13 Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene is a subunit of a bipartite UDP-N-acetylglucosamine transferase. It heterodimerizes with asparagine-linked glycosylation 14 homolog to form a functional UDP-GlcNAc glycosyltransferase that catalyzes the second sugar addition of the highly conserved oligosaccharide precursor in endoplasmic reticulum N-linked glycosylation. Multiple transcript variants encoding different isoforms have been found for this gene.

ALG13 Antibody (Center) Blocking Peptide - References

Averbeck, N., et al. J. Biol. Chem. 282(40):29081-29088(2007) Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005) Gao, X.D., et al. J. Biol. Chem. 280(43):36254-36262(2005) Epplen, C., et al. Hum. Genet. 93(1):35-41(1994)