

ALG14 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8903c

Specification

ALG14 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [Q96F25](#)

ALG14 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 199857

Other Names

UDP-N-acetylglucosamine transferase subunit ALG14 homolog, ALG14

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8903c](#) was selected from the Center region of human ALG14. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

ALG14 Antibody (Center) Blocking Peptide - Protein Information

Name ALG14 ([HGNC:28287](#))

Function

Part 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 oligosaccharides are transferred from the lipid to nascent proteins by oligosaccharyltransferases. Functions as a protein-membrane adapter recruiting ALG13 at the cytoplasmic face of the endoplasmic reticulum, where the 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

Endoplasmic reticulum membrane; Single-pass membrane protein

ALG14 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ALG14 Antibody (Center) Blocking Peptide - Images**ALG14 Antibody (Center) Blocking Peptide - Background**

ALG14 is involved in protein N-glycosylation. It is essential for the second step of the dolichol-linked oligosaccharide pathway. It anchors the catalytic subunit ALG13 to the ER.

ALG14 Antibody (Center) Blocking Peptide - References

Gao X.-D., et.al., J. Biol. Chem. 280:36254-36262(2005).