

ALG13 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17892c

Specification

ALG13 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O9NP73
Other Accession	O9D8C3 , NP_001161857.1 , NP_001034299.3
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	126056
Antigen Region	44-70

ALG13 Antibody (Center) - 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

Target/Specificity

This ALG13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 44-70 amino acids from the Central region of human ALG13.

Dilution

WB~~1:1000
E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ALG13 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ALG13 Antibody (Center) - 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

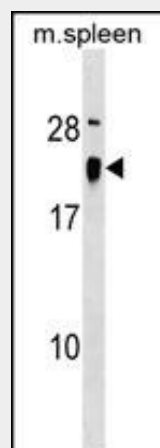
[Isoform 2]: Endoplasmic reticulum membrane; Peripheral membrane protein Note=Recruited to the cytosolic face of the endoplasmic reticulum membrane through its interaction with ALG14

ALG13 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ALG13 Antibody (Center) - Images



ALG13 Antibody (Center) (Cat. #AP17892c) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the ALG13 antibody detected the ALG13 protein (arrow).

ALG13 Antibody (Center) - 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) - 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)