

## **ALG13 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17892c

## **Specification**

## **ALG13 Antibody (Center) - Product Information**

Application WB,E
Primary Accession Q9NP73

Other Accession <u>O9D8C3</u>, <u>NP 001161857.1</u>, <u>NP 001034299.3</u>

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 (<u>HGNC:30881</u>)



**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**

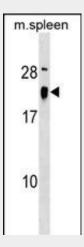
[Isoform 2]: Endoplasmic reticulum membrane; Peripheral membrane protein Note=Recruited to the cytosolic face of the endoplasmic reticulum membrane through its interaction with ALG14

## **ALG13 Antibody (Center) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- 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





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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)