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ALG8 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18533a

Product Information

Application	WB, E
Primary Accession	Q9BVK2
Other Accession	Q6P8H8, Q0P5D9, NP_076984.2
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38577
Calculated MW	60088
Antigen Region	15-41

Additional Information

Gene ID	79053
Other Names	Probable dolichyl pyrophosphate Glc1Man9GlcNAc2 alpha-1, 3-glucosyltransferase, Asparagine-linked glycosylation protein 8 homolog, Dol-P-Glc:Glc(1)Man(9)GlcNAc(2)-PP-dolichyl alpha-1, 3-glucosyltransferase, Dolichyl-P-Glc:Glc1Man9GlcNAc2-PP-dolichyl glucosyltransferase, ALG8
Target/Specificity	This ALG8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15-41 amino acids from the N-terminal region of human ALG8.
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	ALG8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ALG8 {ECO:0000303|PubMed:28375157, ECO:0000312|HGNC:HGNC:23161}

Function	Dolichyl pyrophosphate Glc1Man9GlcNAc2 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 second glucose residue from dolichyl phosphate glucose (Dol-P- Glc) onto the lipid-linked oligosaccharide intermediate Glc(1)Man(9)GlcNAc(2)-PP-Dol to produce Glc(2)Man(9)GlcNAc(2)-PP-Dol. Glc(2)Man(9)GlcNAc(2)-PP-Dol is a substrate for ALG10, the following enzyme in the biosynthetic pathway (PubMed:12480927, PubMed:15235028). Required for PKD1/Polycystin-1 maturation and localization to the plasma membrane of the primary cilia (By similarity).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein

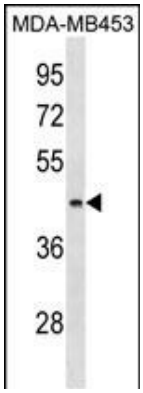
Background

This gene encodes a member of the ALG6/ALG8 glucosyltransferase family. The encoded protein catalyzes the addition of the second glucose residue to the lipid-linked oligosaccharide precursor for N-linked glycosylation of proteins. Mutations in this gene have been associated with congenital disorder of glycosylation type Ih (CDG-Ih). Alternatively spliced transcript variants encoding different isoforms have been identified.

References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Stolting, T., et al. Mol. Genet. Metab. 98(3):305-309(2009)
Jaeken, J., et al. Curr. Opin. Pediatr. 16(4):434-439(2004)
Schollen, E., et al. J. Med. Genet. 41(7):550-556(2004)
Jaeken, J. J. Inherit. Metab. Dis. 27(3):423-426(2004)

Images



ALG8 Antibody (N-term) (Cat. #AP18533a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane).This demonstrates the ALG8 antibody detected the ALG8 protein (arrow).