

# DPAGT1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13970a

#### **Product Information**

Application WB, E
Primary Accession Q9H3H5
Other Accession NP\_001373.2
Reactivity Human, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB32141Calculated MW46090Antigen Region28-57

## **Additional Information**

**Gene ID** 1798

Other Names UDP-N-acetylglucosamine--dolichyl-phosphate

N-acetylglucosaminephosphotransferase, GlcNAc-1-P transferase, G1PT, GPT,

N-acetylglucosamine-1-phosphate transferase, DPAGT1, DPAGT2

Target/Specificity This DPAGT1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 28-57 amino acids from the N-terminal

region of human DPAGT1.

**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** DPAGT1 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name GPT

Function UDP-N-acetylglucosamine--dolichyl-phosphate N-

acetylglucosaminephosphotransferase 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. Catalyzes the initial step of dolichol-linked oligosaccharide biosynthesis, transfering GlcNAc-1-P from cytosolic UDP-GlcNAc onto the carrier lipid dolichyl phosphate (P- dolichol), yielding GlcNAc-P-P-dolichol embedded in the cytoplasmic leaflet of the endoplasmic reticulum membrane.

**Cellular Location** 

Endoplasmic reticulum membrane {ECO:0000250 | UniProtKB:P23338}; Multi-pass membrane protein

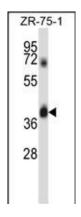
## **Background**

The protein encoded by this gene is an enzyme that catalyzes the first step in the dolichol-linked oligosaccharide pathway for glycoprotein biosynthesis. This enzyme belongs to the glycosyltransferase family 4. This protein is an integral membrane protein of the endoplasmic reticulum. The congenital disorder of glycosylation type Ij is caused by mutation in the gene encoding this enzyme.

## References

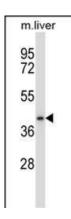
Sengupta, P.K., et al. J. Biol. Chem. 285(41):31164-31173(2010) Nita-Lazar, M., et al. Cancer Res. 69(14):5673-5680(2009) Bretthauer, R.K. Curr Drug Targets 10(6):477-482(2009) Lamesch, P., et al. Genomics 89(3):307-315(2007) Wu, X., et al. Hum. Mutat. 22(2):144-150(2003)

# **Images**



DPAGT1 Antibody (N-term) (Cat. #AP13970a) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the DPAGT1 antibody detected the DPAGT1 protein (arrow).

DPAGT1 Antibody (N-term) (Cat. #AP13970a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the DPAGT1 antibody detected the DPAGT1 protein (arrow).



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