10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DPAGT1 Rabbit pAb

Catalog # AP97911

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9H3H5
Other Accession	Q9H3H5
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46090
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DPAGT1
Epitope Specificity	301-408/408
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the glycosyltransferase 4 family.
DISEASE	Defects in DPAGT1 are the cause of congenital disorder of glycosylation type 1J (CDG1J) [MIM:608093]. CDGs are a family of severe inherited diseases caused by a defect in protein N-glycosylation. They are characterized by under-glycosylated serum proteins. These multisystem disorders present with a wide variety of clinical features, such as disorders of the nervous system development, psychomotor retardation, dysmorphic features, hypotonia, coagulation disorders, and immunodeficiency. The broad spectrum of features reflects the critical role of N-glycoproteins during embryonic development, differentiation, and maintenance of cell functions.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	1798
Other Names	ALG7; CDG-Ij; CDG1J; CMS13; CMSTA2; D11S366; DGPT; DPAGT; DPAGT2; G1PT; GPT; UAGT; UGAT; Gnpta; GPT_HUMAN; DPAGT1; GlcNAc-1-P transferase (G1PT | GPT); N-acetylglucosamine-1-phosphate transferase; 2.7.8.15; GPT_MOUSE; dolichyl-phosphate N-acetylglucosaminephosphotransferase 1; dolichyl-phosphate (UDP-N-acetylglucosamine) N-acetylglucosaminephosphotransferase 1

	(GlcNAc-1-P transferase); GlcNAc-1-P transferase 1; UDP-N-acetylglucosamine--dolichyl-phosphate N-acetylglucosaminephosphotransferase 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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, transferring 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.