

**DPAGT1 Antibody**  
**Catalog # ASC11373****Specification**

---

**DPAGT1 Antibody - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB, IHC, IF   |
| Primary Accession | <a href="#">Q9H3H5</a>  |
| Other Accession   | <a href="#">NP_001373</a> , <a href="#">42794009</a>  |
| Reactivity        | Human, Mouse  |
| Host              | Rabbit  |
| Clonality         | Polyclonal  |
| Isotype           | IgG   |
| Application Notes | DPAGT1 antibody can be used for detection of DPAGT1 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL. |

**DPAGT1 Antibody - Additional Information**Gene ID **1798****Target/Specificity**

DPAGT1; At least four isoforms of DPAGT1 are known to exist; this antibody will recognize the two longest isoforms. DPAGT1 antibody is predicted to not cross-react with UHRF1BP1.

**Reconstitution & Storage**

DPAGT1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

DPAGT1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**DPAGT1 Antibody - Protein Information****Name** GPT**Function**

Catalyzes the initial step of dolichol-linked oligosaccharide biosynthesis in N-linked protein glycosylation pathway: transfers GlcNAc-1-P from UDP-GlcNAc onto the carrier lipid dolichyl phosphate (P-dolichol), yielding GlcNAc-P-P-dolichol.

**Cellular Location**

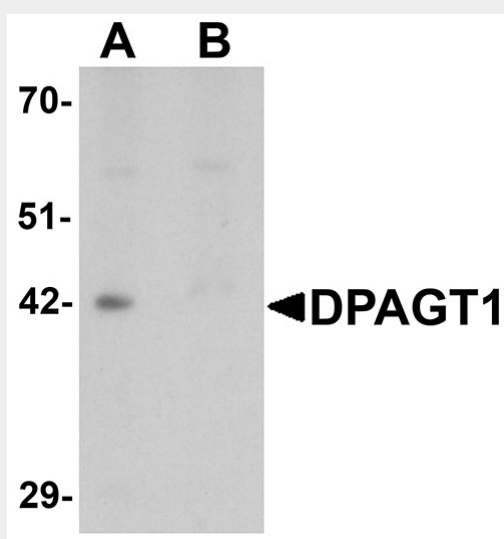
Endoplasmic reticulum membrane; Multi-pass membrane protein

## DPAGT1 Antibody - Protocols

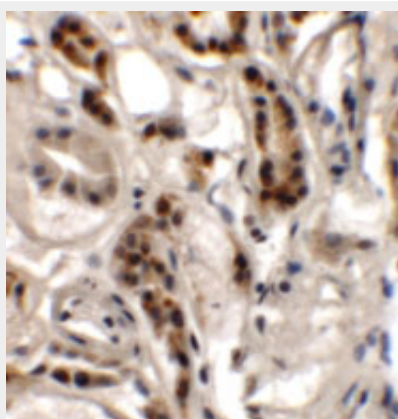
Provided below are standard protocols that you may find useful for product applications.

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

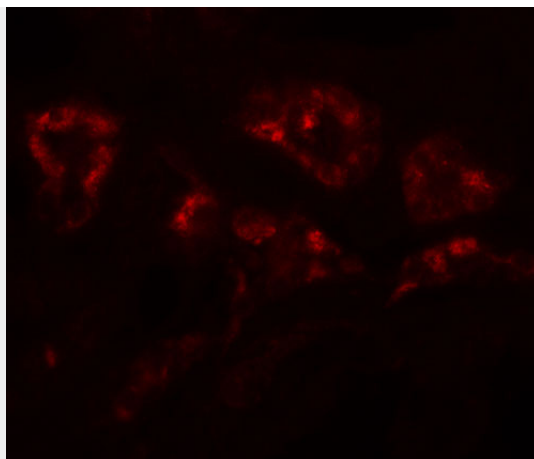
## DPAGT1 Antibody - Images



Western blot analysis of DPAGT1 in mouse kidney tissue lysate with DPAGT1 antibody at 1  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of DPAGT1 in human kidney tissue with DPAGT1 antibody at 2.5  $\mu$ g/mL.



Immunofluorescence of DPAGT1 in human kidney tissue with DPAGT1 antibody at 20 µg/mL.

### **DPAGT1 Antibody - Background**

**DPAGT1 Antibody:** The UDP-N-acetylglucosamine-dolichyl-phosphate N-acetyl-glucosaminophosphotransferase (DPAGT1) is an enzyme that catalyzes the first step in the dolichol-linked oligosaccharide pathway for glycoprotein biosynthesis. Mutations in this integral endoplasmic reticulum (ER) membrane protein enzyme belongs to the glycosyltransferase family 4 results in the congenital disorder of glycosylation type Ij with symptoms such as severe hypotonia, medically intractable seizures, mental retardation, microcephaly, and exotropia. Recent experiments have shown that DPAGT1 is a target of the Wnt/beta-catenin signaling pathway, with Wnt3a inducing higher DPAGT1 mRNA expression.

### **DPAGT1 Antibody - References**

Wu X, Rush JS, Karaoglu D, et al. Deficiency of UDP-GlcNAc:Dolichol Phosphate N-Acetylglucosamine-1 Phosphate Transferase (DPAGT1) causes a novel congenital disorder of glycosylation type Ij. Hum. Mutat. 2003; 22:144-50.  
Bretthauer RK. Structure, expression, and regulation of UDP-GlcNAc:dolichol phosphate GlcNAc-1-phosphate transferase (DPAGT1). Curr. Drug Targets 2009; 10:477-82  
Sengupta PK, Bouchie MP, and Kukuruzinska MA. N-glycosylation gene DPAGT1 is a target of the Wnt/beta-catenin signaling pathway. J. Biol. Chem. 2010; 285:31164-73.