

### **GPD1L Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10723a

### Specification

# **GPD1L** Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>08N335</u> 03ULJ0, <u>NP\_055956.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 44-73

## **GPD1L** Antibody (N-term) - Additional Information

Gene ID 23171

**Other Names** Glycerol-3-phosphate dehydrogenase 1-like protein, GPD1-L, GPD1L, KIAA0089

Target/Specificity

This GPD1L antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 44-73 amino acids from the N-terminal region of human GPD1L.

**Dilution** WB~~1:2000 IHC-P~~1:50~100 FC~~1:10~50

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** 

GPD1L Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **GPD1L** Antibody (N-term) - Protein Information

Name GPD1L (HGNC:28956)

Synonyms KIAA0089



**Function** Plays a role in regulating cardiac sodium current; decreased enzymatic activity with resulting increased levels of glycerol 3- phosphate activating the DPD1L-dependent SCN5A phosphorylation pathway, may ultimately lead to decreased sodium current; cardiac sodium current may also be reduced due to alterations of NAD(H) balance induced by DPD1L.

#### **Cellular Location**

Cytoplasm. Note=Localized to the region of the plasma membrane

#### **Tissue Location**

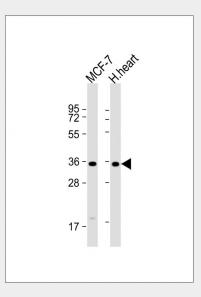
Most highly expressed in heart tissue, with lower levels in the skeletal muscle, kidney, lung and other organs

### **GPD1L Antibody (N-term) - Protocols**

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

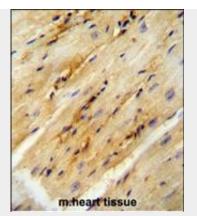
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **GPD1L Antibody (N-term) - Images**

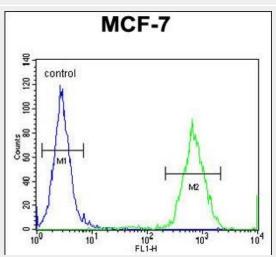


All lanes : Anti-GPD1L Antibody (N-term) at 1:1000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: human heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

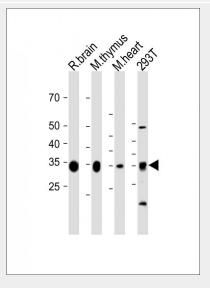




GPD1L antibody (N-term) (Cat. #AP10723a) immunohistochemistry analysis in formalin fixed and paraffin embedded mouse heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GPD1L antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GPD1L Antibody (N-term) (Cat. #AP10723a) flow cytometric analysis of MCF-7 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



All lanes : Anti-GPD1L Antibody (N-term) at 1:1000 dilution Lane 1: Rat brain tissue lysate Lane 2: Mouse thymus tissue lysate Lane 3: Mouse heart tissue lysate Lane 4: 293T cell lysate



Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 100kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# GPD1L Antibody (N-term) - Background

The protein encoded by this gene catalyzes the conversion of sn-glycerol 3-phosphate to glycerone phosphate. The encoded protein is found in the cytoplasm, associated with the plasma membrane, where it binds the sodium channel, voltage-gated, type V, alpha subunit (SCN5A). Defects in this gene are a cause of Brugada syndrome type 2 (BRS2) as well as sudden infant death syndrome (SIDS).

### **GPD1L** Antibody (N-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Liu, M., et al. Circ. Res. 105(8):737-745(2009) Valdivia, C.R., et al. Am. J. Physiol. Heart Circ. Physiol. 297 (4), H1446-H1452 (2009) : Makiyama, T., et al. Circ. J. 72(10):1705-1706(2008) London, B., et al. Circulation 116(20):2260-2268(2007)