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

GPD1L Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10723a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8N335
Other Accession	Q3ULJ0, NP_055956.1
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28552
Calculated MW	38419
Antigen Region	44-73

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~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

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

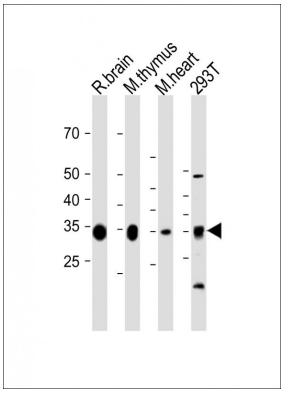
Background

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).

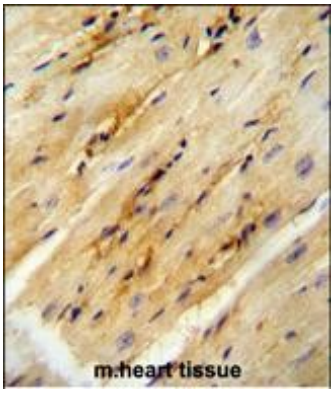
References

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)

Images

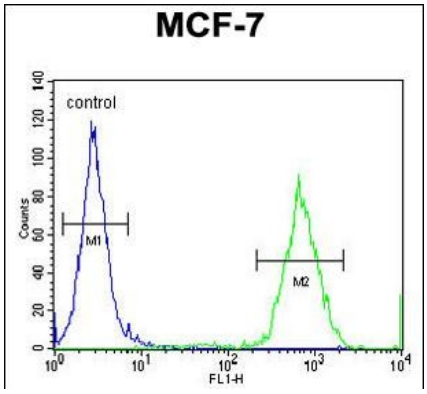


All lanes : Anti-GPD1L Antibody (N-term) at 1:1000 dilution Lane 1: Rat brain tissue lysate Lane 2: Mouse thymus tissue lysate Lane 3: Mouse heart tissue lysate Lane 4: 293T cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 100kDa Blocking/Dilution buffer: 5% NFDM/TBST.



GPD1L antibody (N-term) (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.

Citations

- Novel lipid metabolism-related gene signature associated with clinical and immune features in lung adenocarcinoma patients experiencing lymph node metastasis.
- β-Cyclodextrin/dialdehyde glucan-coated keratin nanoparticles for oral delivery of insulin

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