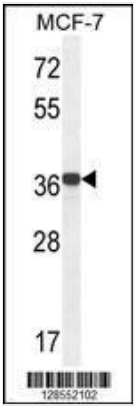
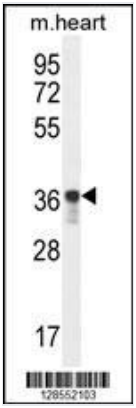
GPD1L Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

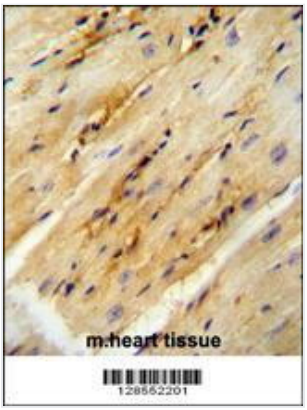
Product Name	GPD1L, Polyclonal Antibody
Full Product Name	GPD1L, NT (GPD1L, KIAA0089, Glycerol-3-phosphate dehydrogenase 1-like protein)
Product Gene Name	anti-GPD1L antibody
Product Synonym Names	Anti -GPD1L, NT (GPD1L, KIAA0089, Glycerol-3-phosphate dehydrogenase 1-like protein)
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2, 0.09% sodium azide.
Purity/Purification	Affinity Purified Purified by Protein A affinity chromatography.
Specificity	Human, mouse
Preparation and Storage	May be stored at 4 degree C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20 degree C. Aliquots are stable for 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	38,419 Da
Chromosome Location	Chromosome: 3; NC_000003.11 (32148003..32210207). Location: 3p22.3
OMIM	272120
3D Structure	ModBase 3D Structure for Q8N335
Immunogen	GPD1L antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 47-77 amino acids from the N-terminal region of human GPD1L.
Product Categories/Family for anti-GPD1L antibody	Antibodies; Abs to KIAA; orf
Applications Tested/Suitable for anti-GPD1L antibody	ELISA (EL/EIA), Western Blot (WB), Immunohistochemistry (IHC), Flow Cytometry (FC/FACS)
Application Notes for anti-GPD1L antibody	Suitable for use in Western Blot, Immunohistochemistry, Flow Cytometry, ELISA Dilution: ELISA: 1:1,000 Western Blot: 1:100-500 Immunohistochemistry: 1:50-100 Flow Cytometry: 1:10-50
Related Product Information for anti-GPD1L antibody	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).
Other Notes	Small volumes of anti-GPD1L antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for GPD1L purchase	MBS6004023 is an antibody targeting GPD1L. Also known as GPD1L, NT (GPD1L, KIAA0089, Glycerol-3-phosphate dehydrogenase 1-like protein). Reactive in Human, Mouse. Host: Rabbit.



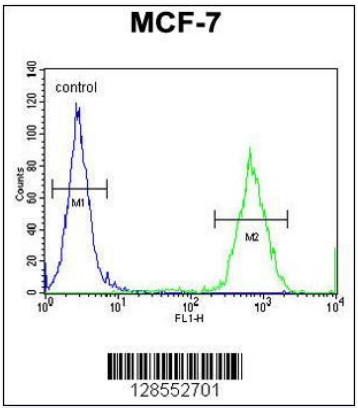
Western Blot (WB) of anti-GPD1L antibody
GPD1L Antibody (N-term) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the GPD1L antibody detected the GPD1L protein (arrow).



Western Blot (WB) of anti-GPD1L antibody
GPD1L Antibody (N-term) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the GPD1L antibody detected the GPD1L protein (arrow).



Immunohistochemistry (IHC) of anti-GPD1L antibody
GPD1L antibody (N-term) 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.



Flow Cytometry (FC/FACS) of anti-GPD1L antibody
GPD1L Antibody (N-term) 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.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GPD1L. It may not necessarily be applicable to this product.

NCBI GI #	24307999
NCBI GeneID	23171
NCBI Accession #	NP_055956.1
UniProt Primary Accession #	Q8N335
UniProt Secondary Accession #	Q14702; Q9BRM5; A8K9U3
UniProt Related Accession #	Q8N335
GenBank Nucleotide #	NM_015141.3
NCBI Official Full Name	glycerol-3-phosphate dehydrogenase 1-like protein
NCBI Official Synonym Full Names	glycerol-3-phosphate dehydrogenase 1-like
NCBI Official Symbol	GPD1L
NCBI Official Synonym Symbols	GPD1-L
UniProt Protein Name	Glycerol-3-phosphate dehydrogenase 1-like protein
Protein Family	Glycerol-3-phosphate dehydrogenase 1-like protein

UniProt Gene Name	GPD1L
UniProt Synonym Gene Names	KIAA0089; GPD1-L
UniProt Entry Name	GPD1L_HUMAN
NCBI Protein Information	glycerol-3-phosphate dehydrogenase 1-like protein
UniProt Comments for GPD1L	GPD1L: 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. Defects in GPD1L are the cause of Brugada syndrome type 2 (BRGDA2). An autosomal dominant tachyarrhythmia characterized by right bundle branch block and ST segment elevation on an electrocardiogram (ECG). It can cause the ventricles to beat so fast that the blood is prevented from circulating efficiently in the body. When this situation occurs (called ventricular fibrillation), the individual will faint and may die in a few minutes if the heart is not reset. Defects in GPD1L are a cause of sudden infant death syndrome (SIDS). SIDS is the sudden death of an infant younger than 1 year that remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of clinical history. Pathophysiologic mechanisms for SIDS may include respiratory dysfunction, cardiac dysrhythmias, cardiorespiratory instability, and inborn errors of metabolism, but definitive pathogenic mechanisms precipitating an infant sudden death remain elusive. Belongs to the NAD-dependent glycerol-3-phosphate dehydrogenase family. Protein type: Oxidoreductase; Lipid Metabolism - glycerophospholipid; EC 1.1.1.8 Chromosomal Location of Human Ortholog: 3p22.3 Cellular Component: glycerol-3-phosphate dehydrogenase complex; plasma membrane; cytosol Molecular Function: glycerol-3-phosphate dehydrogenase (NAD+) activity; protein homodimerization activity; sodium channel regulator activity; NAD binding Biological Process: NADH metabolic process; regulation of heart rate; NAD metabolic process; phospholipid metabolic process; carbohydrate metabolic process; glycerophospholipid biosynthetic process; negative regulation of peptidyl-serine phosphorylation; phosphatidic acid biosynthetic process; triacylglycerol biosynthetic process; cellular lipid metabolic process; glycerol-3-phosphate catabolic process Disease: Brugada Syndrome 2
Research Articles on GPD1L	**1.** Common variations in or near CASQ2, GPD1L, and NOS1AP are associated with increased risk of sudden cardiac death in patients with coronary artery disease
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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