

### **GPD2 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12502B

### **Specification**

## **GPD2** Antibody (C-term) - Product Information

Application WB, IHC-P,E

Primary Accession P43304

Other Accession <u>Q64521</u>, <u>Q4R755</u>, <u>A6QLU1</u>

Reactivity Human

Predicted Bovine, Monkey, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 80853
Antigen Region 606-634

# GPD2 Antibody (C-term) - Additional Information

**Gene ID 2820** 

### **Other Names**

Glycerol-3-phosphate dehydrogenase, mitochondrial, GPD-M, GPDH-M, mtGPD, GPD2

## Target/Specificity

This GPD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 606-634 amino acids from the C-terminal region of human GPD2.

### **Dilution**

WB~~1:1000 IHC-P~~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**

GPD2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **GPD2** Antibody (C-term) - Protein Information

Name GPD2 (HGNC:4456)



**Function** Calcium-responsive mitochondrial glycerol-3-phosphate dehydrogenase which seems to be a key component of the pancreatic beta- cell glucose-sensing device.

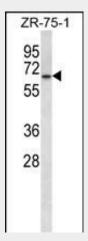
**Cellular Location** Mitochondrion.

# **GPD2** Antibody (C-term) - Protocols

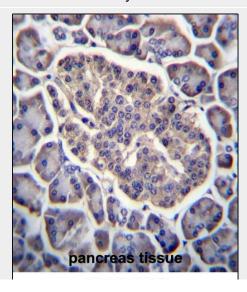
Provided below are standard protocols that you may find useful for product applications.

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

# GPD2 Antibody (C-term) - Images



GPD2 Antibody (C-term) (Cat. #AP12502b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the GPD2 antibody detected the GPD2 protein (arrow).





GPD2 Antibody (C-term) (Cat. #AP12502b)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GPD2 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## GPD2 Antibody (C-term) - Background

The protein encoded by this gene localizes to the inner mitochondrial membrane and catalyzes the conversion of glycerol-3-phosphate to dihydroxyacetone phosphate, using FAD as a cofactor. Along with GDP1, the encoded protein constitutes the glycerol phosphate shuttle, which reoxidizes NADH formed during glycolysis. Two transcript variants encoding the same protein have been found for this gene.

# **GPD2** Antibody (C-term) - References

Barber, M.J., et al. PLoS ONE 5 (3), E9763 (2010):
Marroni, F., et al. Circ Cardiovasc Genet 2(4):322-328(2009)
Daoud, H., et al. Hum. Genet. 124(6):649-658(2009)
Chowdhury, S.K., et al. Free Radic. Res. 41(10):1116-1124(2007)
Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)
GPD2 Antibody (C-term) - Citations

• Ataxin-1 regulates the cerebellar bioenergetics proteome through the GSK3β-mTOR pathway which is altered in Spinocerebellar ataxia type 1 (SCA1).