

# GPD2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12502B

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">P43304</a>
<b>Other Accession</b>	<a href="#">Q64521</a> , <a href="#">Q4R755</a> , <a href="#">A6QLU1</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Bovine, Monkey, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB31134
<b>Calculated MW</b>	80853
<b>Antigen Region</b>	606-634

## Additional Information

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<b>Gene ID</b>	2820
<b>Other Names</b>	Glycerol-3-phosphate dehydrogenase, mitochondrial, GPD-M, GPDH-M, mtGPD, GPD2
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	GPD2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	GPD2 ( <a href="#">HGNC:4456</a> )
<b>Function</b>	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.

## Background

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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.

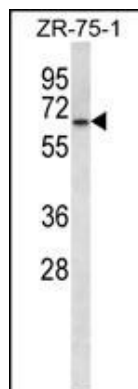
## References

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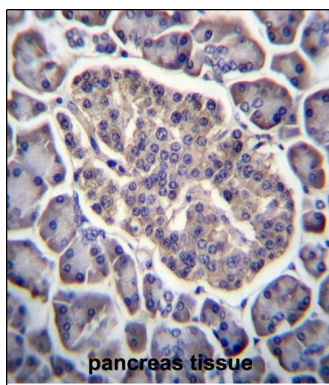
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Marroni, F., et al. Circ Cardiovasc Genet 2(4):322-328(2009)  
Daoud, H., et al. Hum. Genet. 124(6):649-658(2009)  
Chowdhury, S.K., et al. Free Radic. Res. 41(10):1116-1124(2007)  
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## Images

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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.

## Citations

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- [Ataxin-1 regulates the cerebellar bioenergetics proteome through the GSK3 \$\beta\$ -mTOR pathway which is altered in Spinocerebellar ataxia type 1 \(SCA1\).](#)