

# GPD2 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant GPD2. Catalog # AT2243a

## **Specification**

# GPD2 Antibody (monoclonal) (M02) - Product Information

**Application** WB, E **Primary Accession** P43304 Other Accession BC019874 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 kappa Calculated MW 80853

## GPD2 Antibody (monoclonal) (M02) - Additional Information

#### **Gene ID 2820**

#### **Other Names**

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

#### Target/Specificity

GPD2 (AAH19874, 1 a.a.  $\sim$  378 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

#### **Dilution**

WB~~1:500~1000

#### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2.

## **Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## **Precautions**

GPD2 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

# GPD2 Antibody (monoclonal) (M02) - Protocols

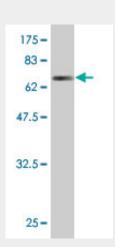
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

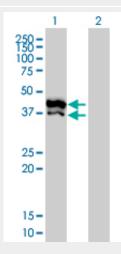


- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# GPD2 Antibody (monoclonal) (M02) - Images



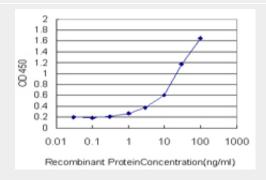
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (67.32 KDa).



Western Blot analysis of GPD2 expression in transfected 293T cell line by GPD2 monoclonal antibody (M02), clone 2C11-1F4.

Lane 1: GPD2 transfected lysate(41 KDa).

Lane 2: Non-transfected lysate.





# Detection limit for recombinant GST tagged GPD2 is approximately 1ng/ml as a capture antibody. GPD2 Antibody (monoclonal) (M02) - 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 (monoclonal) (M02) - References

A genome-wide association scan of RR and QT interval duration in 3 European genetically isolated populations: the EUROSPAN project. Marroni F, et al. Circ Cardiovasc Genet, 2009 Aug. PMID 20031603. Haploinsufficiency of the GPD2 gene in a patient with nonsyndromic mental retardation. Daoud H, et al. Hum Genet, 2009 Jan. PMID 19011903. Increased expression of mitochondrial glycerophosphate dehydrogenase and antioxidant enzymes in prostate cancer cell lines/cancer. Chowdhury SK, et al. Free Radic Res, 2007 Oct. PMID 17886033. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560. Transcriptome analysis of human gastric cancer. Oh JH, et al. Mamm Genome, 2005 Dec. PMID 16341674.