

## Recombinant Human GPD2, His-tagged

**Cat. No.** GPD2-28583TH    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human GPD2 comprises a 558 amino acid fragment (43-600) corresponding to the GlpA domain fragment of the mature GPD2 protein, with an amino-terminal hexahistidine tag.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	43-600 a.a.
<b>Description</b>	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.
<b>Conjugation</b>	HIS
<b>Form</b>	Liquid
<b>Purity</b>	>95% by SDS-PAGE
<b>Storage buffer</b>	Preservative: None Constituents: 50% Glycerol, PBS
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

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**Sequence Similarities** Belongs to the FAD-dependent glycerol-3-phosphate dehydrogenase family. Contains 2 EF-hand domains.

## GENE INFORMATION

**Gene Name** GPD2 glycerol-3-phosphate dehydrogenase 2 (mitochondrial) [ Homo sapiens ]

**Official Symbol** GPD2

**Synonyms** GPD2; glycerol-3-phosphate dehydrogenase 2 (mitochondrial); glycerol-3-phosphate dehydrogenase, mitochondrial;

**Gene ID** 2820

**mRNA Refseq** NM\_000408

**Protein Refseq** NP\_000399

**MIM** 138430

**Uniprot ID** P43304

**Chromosome Location** 2q24.1

**Pathway** Fatty Acid Beta Oxidation, organism-specific biosystem; Fatty acid, triacylglycerol, and ketone body metabolism, organism-specific biosystem; Glycerophospholipid metabolism, organism-specific biosystem; Glycerophospholipid metabolism, conserved biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem;

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**Function**

calcium ion binding; glycerol-3-phosphate dehydrogenase [NAD+] activity; glycerol-3-phosphate dehydrogenase activity; oxidoreductase activity; sn-glycerol-3-phosphate:ubiquinone-8 oxidoreductase activity;

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