

Recombinant Human glycerol-3-phosphate dehydrogenase 2, His-tagged

Cat. No. GPD2-106H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human mGPD comprises a 558 amino acid fragment (43-600) corresponding to the GlpA domain fragment of the mature mGPD protein and is expressed in E. coli with an amino-terminal hexahistidine tag.
Species	Human
Source	E.coli
ProteinLength	43-600 a.a.
Description	Mitochondrial glycerol-3-phosphate dehydrogenase (mGPD) is a Ca ²⁺ -sensitive, FAD-binding protein, located on the outer surface of the inner mitochondrial membrane. mGPD catalyses the oxidation of glycerol-3-phosphate to dihydroxyacetone phosphate (DHAP) with concomitant reduction of the enzyme-bound FAD. Two isoforms have been described for mGPD. Isoform 1 comprises 727aa residues, whereas isoform 2 lacks 126aa residues of the N-terminus. Deficiency of mGPD appears to contribute to the impairment of glucose-stimulated insulin release in several animal models of non-insulin dependent diabetes mellitus.
Purity	>95% by SDS-PAGE
Storage	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

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GENE INFORMATION

Gene Name	GPD2 glycerol-3-phosphate dehydrogenase 2 (mitochondrial) [Homo sapiens]
Synonyms	GPD2; glycerol-3-phosphate dehydrogenase 2 (mitochondrial); GDH2; GPDM; mGPDH; glycerol-3-phosphate dehydrogenase 2, mitochondrial; EC 1.1.5.3; GDH2; GPD-M; GPDH-M; GPDM; mGPDH; mtGPD; mitochondrial glycerophosphate dehydrogenase.
Gene ID	2820
mRNA Refseq	NM_000408
Protein Refseq	NP_000399
MIM	138430
UniProt ID	P43304
Chromosome Location	2q24.1
Pathway	Glycerophospholipid metabolism
Function	calcium ion binding; glycerol-3-phosphate dehydrogenase activity; oxidoreductase activity

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