Mitochondrial glycerol-3-phosphate dehydrogenase (mGPD) | Human, Recombinant, *E. coli*
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Cat. No.: RCP9300 | Size: 10µg

**Synonym:** Glycerol-3-Phosphate Dehydrogenase 2, GPD2, Glycerophosphate Dehydrogenase-2 Ca(2+) - Responsive Mitochondrial FAD-Linked, Mitochondrial GPD, GPDM, GPD-M, GPDH-M, mtGPD, GDH2.

**Description:** Mitochondrial glycerol-3-phosphate dehydrogenase (mGPD) is a Ca²⁺-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.

*RANDOX* recombinant 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. This product is for research use only and is not intended for diagnostic or therapeutic use.

**Form:** Liquid.
Supplied in 1x Laemmli Buffer (25mM Tris-HCl pH6.8, 50mM DTT, 1% (w/v) SDS, 0.1% (w/v) Bromophenol Blue, 2.5% Glycerol).

**Purity:** Single band on Western blot.

**References:**