



**Mitochondrial glycerol-3-phosphate dehydrogenase (mGPD)**

**Human, Recombinant, *E. coli***

**Cat. No.:** RCP9301  
RCP9302  
RCP9303

**Size:** 10µg  
100µg  
1000µg

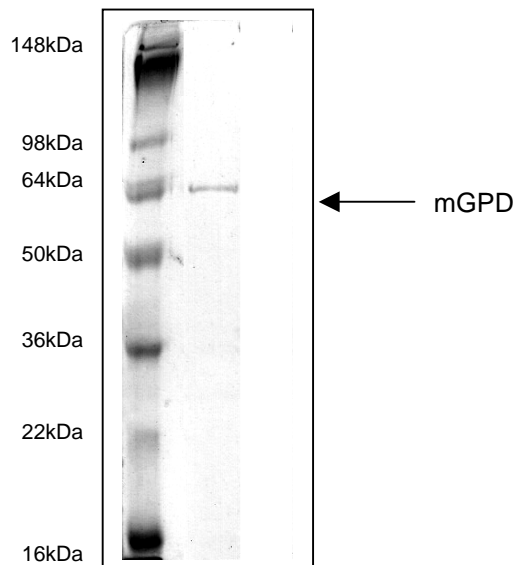
**Synonym:** Glycerol-3-Phosphate Dehydrogenase 2, GPD2, Glycerophosphate Dehydrogenase-2 Ca(2<sup>+</sup>) - Responsive Mitochondrial FAD-Linked, Mitochondrial GPD, GPDM, GPD-M, GPDH-M, mtGPD, GDH2.

**Description:** Mitochondrial glycerol-3-phosphate dehydrogenase (mGPD) is a Ca<sup>2+</sup>-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

**Purity:** >95% by SDS-PAGE



**References:** Brown, L.J. *et al.*, *Gene* 1996 **172 (2)** : 309-12.  
Ferrer J. *et al.*, *Diabetes* 1996 **45 (2)** : 262-6.