

# Recombinant Full Length Human GPD2 Protein, GST-tagged

Cat. No. GPD2-5516HF    Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Human GPD2 full-length ORF ( AAH19874, 1 a.a. - 378 a.a.) recombinant protein with GST-tag at N-terminal.
<b>Species</b>	Human
<b>Source</b>	In Vitro Cell Free System
<b>ProteinLength</b>	378 amino acids
<b>Description</b>	Mitochondrial glycerophosphate dehydrogenase (EC 1.1.99.5), or GPD2, is located on the outer surface of the inner mitochondrial membrane and catalyzes the unidirectional conversion of glycerol-3-phosphate (G-3-P) to dihydroxyacetone phosphate (DHAP) with concomitant reduction of the enzyme-bound FAD. Together with a cytosolic NAD-linked GPD (GPD1; MIM 138420), GPD2 forms the glycerol phosphate shuttle, which uses the interconversion of G-3-P and DHAP to transfer reducing equivalents into mitochondria, resulting in the reoxidation of NADH formed during glycolysis.[supplied by OMIM
<b>Molecular Mass</b>	67.32 kDa
<b>AA Sequence</b>	MAFQKAVKGTLVGGGALATVLGLSQFAHYRRKQMNLAYVKAADCISEPVNREPPSR EAQLLTLQNTSEFDILVIGGGATGSGCALDAVTRGLKTALVERDDFSSGTSSRSTKLI HGGVRYLQKAIMKLDIEQYRMVKEALHERANLLEIAPHLSAPLPIMLPVYKWWQLPY YWVGIKLYDLVAGSNCLKSSYVLSKSRALHFPMQLQDKLVGAIVYYDQGHNARM NLAIALTAARYGAATANYMEVVSLLKKTDPQTGKVHVSGARCKDVLGTGQEFDVRAK

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

CVINATGPFTDSVRKMDDKDAAAICQPSAGVHIVMPGYYSPEMGLLDPATSDGRVI  
FFLPWQKMTIAGTTDTPDVTTHHPIPSEEDINFILNEV

**Applications**  
Enzyme-linked Immunoabsorbent Assay  
Western Blot (Recombinant protein)  
Antibody Production  
Protein Array

**Notes**  
Best use within three months from the date of receipt of this protein.

**Storage**  
Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

**Storage Buffer**  
50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

## 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; GPD-M; mtGPD; GPDH-M; mitochondrial glycerophosphate dehydrogenase; GDH2; GPDM; mGPDH;

**Gene ID**  
2820

**mRNA Refseq**  
NM\_000408

**Protein Refseq**  
NP\_000399

**MIM**  
138430

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



UniProt ID

P43304

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA