

Product datasheet for **TP306538**

Glycerol 3 Phosphate Dehydrogenase (GPD1) (NM_005276) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human glycerol-3-phosphate dehydrogenase 1 (soluble) (GPD1), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC206538 protein sequence Red =Cloning site Green =Tags(s)

MASKKVCIVGSGNWGSAIAKIVGGNAAQLAQFDPRVTMWWFEEDIGGKCLTEIINTQHENVKYLPGHKLP
PNVVAVPDVVQAAEDADILIFVPHQFIGKICDQLKGHLKANATGISLIKGVDEGPNGLKLISEVIGERL
GIPMSVLMGANIASEVADEKFCETTIGCKDPAQGQLLKELMQTPNFRITVVQEVDTVEICGALKNVAVG
AGFCDGLGFGDNTKAAVIRLGLMEMIAFAKLFCSGPVSSATFLESCGVADLITTCYGGRRNRKVAEAFART
GKSIEQLEKELLNGQKLQGPETARELYSILQHKGLVDKFPFLMAVYKVCYEGQPVGEFIHCLQNHPEHM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	37.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_005267
Locus ID:	2819



[View online »](#)

UniProt ID: [P21695](#), [A0A024R138](#)

RefSeq Size: 3083

Cytogenetics: 12q13.12

RefSeq ORF: 1047

Synonyms: GPD-C; GPDH-C; HTGTI

Summary: This gene encodes a member of the NAD-dependent glycerol-3-phosphate dehydrogenase family. The encoded protein plays a critical role in carbohydrate and lipid metabolism by catalyzing the reversible conversion of dihydroxyacetone phosphate (DHAP) and reduced nicotine adenine dinucleotide (NADH) to glycerol-3-phosphate (G3P) and NAD⁺. The encoded cytosolic protein and mitochondrial glycerol-3-phosphate dehydrogenase also form a glycerol phosphate shuttle that facilitates the transfer of reducing equivalents from the cytosol to mitochondria. Mutations in this gene are a cause of transient infantile hypertriglyceridemia. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Mar 2012]

Protein Pathways: Glycerophospholipid metabolism

Product images:



Coomassie blue staining of purified GPD1 protein (Cat# TP306538). The protein was produced from HEK293T cells transfected with GPD1 cDNA clone (Cat# [RC206538]) using MegaTran 2.0 (Cat# [TT210002]).