



Anti-GPD1 (full length) polyclonal antibody (DPAB-DC1411)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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.
Immunogen	GPD1 (AAH32234, 1 a.a. ~ 349 a.a) full-length recombinant protein with GST tag. The sequence is MASKKVCIVGSGNWGSIAKIVGGNAQFDPRVTMWVFEEDIGGKKLTEIINTQHEN VKYLPGHKLPPNVAVPDVVQAAEDADILIFVVPHQFIGKICDQLKGHLKANATGISLIK GVDEGPNGLKLISEVIGERLGPMSVLMGANIASEVADEKFCETTIGCKDPAQGQLLKE MQTPNFRITVVQEVDTVEICGTLKNVAVGAGFCDGLGFGDNTKAAVIRGLMEMIAFAK LFCSGPVSSATFLESCGVADLITTCYGGRNRKVAEAFARTGKSIEQLEKELLNGQKLQGP ETARELYSILQHKGLVDKFPLFMAVYKVCYEGQPVGFIHCLQNHPEHM
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl
Buffer	50 % glycerol

Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	GPD1 glycerol-3-phosphate dehydrogenase 1 (soluble) [Homo sapiens (human)]
Official Symbol	GPD1
Synonyms	GPD1; glycerol-3-phosphate dehydrogenase 1 (soluble); GPD-C; HTGT1; GPDH-C; glycerol-3-phosphate dehydrogenase [NAD(+)], cytoplasmic; glycerophosphate dehydrogenase; glycerol-3-phosphate dehydrogenase [NAD+], cytoplasmic;
Entrez Gene ID	2819
Protein Refseq	NP_001244128
UniProt ID	P21695
Chromosome Location	12q13.12
Pathway	Fatty acid, triacylglycerol, and ketone body metabolism; Glycerophospholipid metabolism; Metabolism; Phospholipid metabolism
Function	NAD binding; glycerol-3-phosphate dehydrogenase [NAD+] activity; glycerol-3-phosphate dehydrogenase activity; protein homodimerization activity
