



Mouse anti-Human GPD1 monoclonal antibody, clone 4D212D5 (CABT-B10353)

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

PRODUCT INFORMATION

| | |
|------------------------------|---|
| Immunogen | GPD1 (AAH32234, 1 a.a. ~ 350 a.a) full length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| Isotype | IgG1 |
| Source/Host | Mouse |
| Species Reactivity | Human |
| Clone | 4D212D5 |
| Conjugate | Unconjugated |
| Applications | WB, sELISA, ELISA |
| Sequence Similarities | MASKKVCIVGSGNWGSIAKIVGGNAAQLAQFDPRVTMWVFEEDIGGKKLTEIINTQHEN VKYLPGHKLPPNVVAVPDVVQAAEDADILIFVVPHQFIGKICDQLKGHLKANATGISLIK GVDEGPNGLKLISEVIGERLGPMSVLMGANIASEVADEKFCETTIGCKDPAQGQLLKE MQTPNFRITVVQEVDTVEICGTLKNVAVGAGFCDGLGFDNTKAAVIRGLMEMIAFAK LFCSGPVSSATFLES |
| Format | Liquid |
| Size | 100 µg |
| Buffer | In 1x PBS, pH 7.2 |
| Storage | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |

BACKGROUND

Introduction

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]

Keywords

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;

GENE INFORMATION

Entrez Gene ID

[2819](#)

UniProt ID

[P21695](#)

Pathway

Fatty acid, triacylglycerol, and ketone body metabolism, organism-specific biosystem; Glycerophospholipid metabolism, organism-specific biosystem; Glycerophospholipid metabolism, conserved biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Triacylglyceride Synthesis, organism-specific biosystem; Triglyceride Biosynthesis, organism-specific biosystem

Function

NAD binding; binding; glycerol-3-phosphate dehydrogenase [NAD+] activity; glycerol-3-phosphate dehydrogenase activity; protein homodimerization activity