

Product datasheet for RC206538L3

Glycerol 3 Phosphate Dehydrogenase (GPD1) (NM_005276) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glycerol 3 Phosphate Dehydrogenase (GPD1) (NM_005276) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	Glycerol 3 Phosphate Dehydrogenase
Synonyms:	GPD-C; GPDH-C; HTGTI
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC206538).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

ACCN:	NM_005276
ORF Size:	1047 bp



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OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_005276.2
RefSeq Size:	3083 bp
RefSeq ORF:	1050 bp
Locus ID:	2819
UniProt ID:	P21695
Cytogenetics:	12q13.12
Protein Pathways:	Glycerophospholipid metabolism
MW:	37.6 kDa
Gene 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 nicotinic 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]