

## Glycerol-3-phosphate Dehydrogenase [NAD<sup>+</sup>], Cytoplasmic

Cat. No. CBCRY30 Lot. No. (See product label)

### SPECIFICATION

<b>Source</b>	E.coli
<b>Background</b>	Homo sapiens L-alpha-glycerol-3-phosphate dehydro-genase 1 (GPD1) catalyzes the reversible biological conversion of dihydroxyacetone (DHAP) to glycerol-3-phosphate. The GPD1 protein was expressed in Escherichia coli, and purified as a fusion protein with glutathione S-transferase.
<b>Protein Classification</b>	Oxidoreductase
<b>Structure Weight</b>	39164.02 Da
<b>Polymer</b>	1
<b>Molecule</b>	Glycerol-3-phosphate dehydrogenase [NAD <sup>+</sup> ], cytoplasmic
<b>Chain Length</b>	354 amino acids
<b>PDB ID</b>	1X0X
<b>MMDB ID</b>	<a href="#">38469</a>
<b>Method</b>	X-Ray Diffraction
<b>Resolution</b>	2.75Å

 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

<b>Ligand Chemical Component</b>	NAD; Sulfate ion
<b>Reference</b>	Ou, X., Ji, C., Han, X., Zhao, X., Li, X., Mao, Y., Wong, L.L., Bartlam, M., Rao, Z. (2006) Crystal Structures of Human Glycerol 3-phosphate Dehydrogenase 1 (GPD1) J.Mol.Biol. 357: 858-869

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">GPD1</a>
<b>Synonyms</b>	FLJ26652; glycerol-3-phosphate dehydro-genase, soluble; glycerol-3-phosphate dehydrogenase 1 (soluble); EC 1.1.1.8; GPD-C; GPDH-C
<b>UniProt ID</b>	<a href="#">P21695</a>
<b>Gene ID</b>	<a href="#">2819</a>
<b>Chromosome Location</b>	12q12-q13
<b>Function</b>	NAD or NADH binding; binding; glycerol-3-phosphate dehydrogenase (NAD+) activity; glycerol-3-phosphate dehydrogenase activity; protein homodimerization activity

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