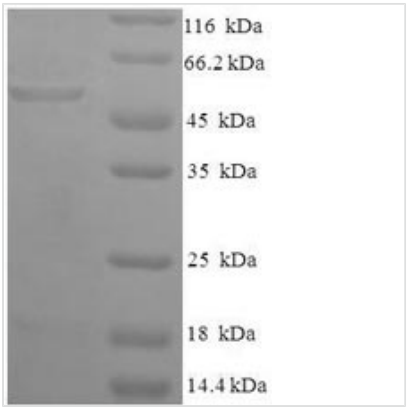
Recombinant Human Glycerol-3-phosphate dehydrogenase [NAD (+)], Cytoplasmic domain (GPD1)

Product Code	CSB-EP009709HU
Abbreviation	Recombinant Human GPD1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P21695
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MASKKVCIVGSGNWGSAIAKIVGGNAAQLAQFDPRVTMWVFEEDIGGKKLTEII NTQHENVKYLPGHKLPPNVVAVPDVVQAAEDADILIFVVPHQFIGKICDQLKGH LKANATGISLIKGVDEGPNGLKLISEVIGERLGIPMSVLMGANIASEVADEKFCE TTIGCKDPAQGQLLKELMQTPNFRITVVQEVDTVEICGALKNVVAVGAGFCDG LGFGDNTKAAVIRLGLMEMIAFAKLFCSGPVSSATFLESCGVADLITTCYGGRN RKVAEAFARTGKSIEQLEKELLNGQKLQGPETARELYSILQHKGLVDKFPLFMA VYKVCYEGQPVGEFIHCLQNHPEHM
Research Area	Signal Transduction
Source	E.coli
Target Names	GPD1
Expression Region	1-349aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	53.6kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

This Human GPD1 recombinant protein was produced in E.coli, where the gene sequence encoding Human GPD1 (1-349aa) was expressed with the N-terminal 6xHis-SUMO tag. The purity of this GPD1 protein was greater than 90% by SDS-PAGE.
GPD1 is an enzyme that catalyzes the conversion of glycerol-3-phosphate to dihydroxyacetone phosphate inside cells. This reaction is a critical step in the glycerolipid metabolism pathway. The enzyme plays a significant role in energy metabolism and fatty acid synthesis. The GPD1 protein is involved in regulating the synthesis of triglycerides, which is one way the body stores energy. It is also associated with glucose metabolism and insulin response, closely linked to the regulation of blood sugar levels. GPD1 protein is widely expressed in various tissues, including the liver, muscles, and adipose tissue. This reflects its different biological functions in different tissues. Some studies suggest that GPD1 is associated with metabolic diseases such as obesity and diabetes. Abnormal activity or expression levels of GPD1 may be related to the onset and development of these diseases.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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