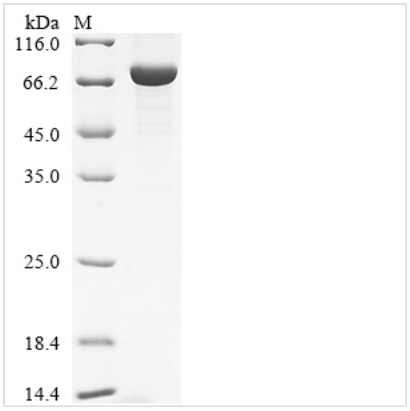
Recombinant Human Glycerol-3-phosphate dehydrogenase, mitochondrial (GPD2)

Product Code	CSB-EP009711HUb1
Abbreviation	Recombinant Human GPD2 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.	P43304
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Human Glycerol-3-phosphate dehydrogenase, mitochondrial(GPD2)
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ADCISEPVNREPPSREAQLLTLQNTSEFDILVIGGGATGSGCALDAVTRGLKTA LVERDDFSSGTSSRSTKLIHGGVRYLQKAIMKLDIEQYRMVKEALHERANLLEI APHLSAPLPIMLPVYKWWQLPYYWVGIKLYDLVAGSNCLKSSYVLSKSRALEH FPMLQKDKLVGAIVYYDGQHNDARMNLAIALTAARYGAATANYMEVVSLLKKT DPQTGKVRVSGARCKDVLTGQEFDVRAKCVINATGPFTDSVRKMDDKDAAAI CQPSAGVHIVMPGYYSPESMGLLDPATSDGRVIFFLPWQKMTIAGTTDTPTDV THHPIPSEEDINFILNEVRNYLSCDVEVRRGDVLAAWSGIRPLVTDPKSADTQSI SRNHVVDISESGLITIAGGKWTTYRSMAEDTINAAVKTHNLKAGPSRTVGLFLQ GGKDWSPTLYIRLVQDYGLESEVAQHLAATYGDKAFEVAKMASVTGKRWPIV GVRLVSEFPYIEAEVKYGIKEYACTAVDMISRRTRLAFLNVQAAEEALPRIVELM GRELNWDDYKKQEQLETARKFLYYEMGYKSRSEQLTDRSEISLLPSDIDRYKK RFHKFDADQKGFITIVDVQRVLESINVQMDENTLHEILNEVDLNKNGQVELNEF LQLMSAIQKGRVSGSRLAILMKTAEENLDRRVPIPVDRSCGGL
Research Area	Others
Source	E.coli
Target Names	GPD2
Expression Region	43-727aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	81.4 kDa

Protein Length	Full Length of Mature Protein

Image



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

Description

In the E. coli expression system, the recombinant human glycerol-3-phosphate dehydrogenase, mitochondrial (GPD2), is synthesized by incorporating the gene fragment encoding the full-length mature human GPD2 protein (43-727aa) into a suitable expression vector. The expression vector includes an N-terminal 10xHis-tag and a C-terminal Myc-tag downstream of the gene fragment to facilitate the purification and detection of the recombinant GPD2 protein. The constructed recombinant plasmid is then introduced into E. coli host cells via transformation, and selection is performed using appropriate markers to ensure the presence of the recombinant plasmid. The transformed E. coli cells are cultured in a growth medium optimized for protein expression, and induction of protein production is achieved by adding IPTG as an inducer. Following a suitable incubation period, the cells are harvested and lysed, releasing the intracellular contents containing the expressed recombinant GPD2 protein. The purification process allows for the isolation of the recombinant protein, which exhibits a high purity level of up to 90% as determined by SDS-PAGE analysis.

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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