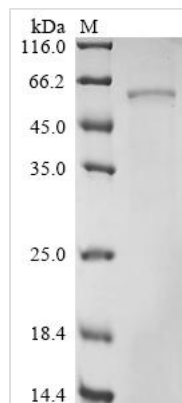




Recombinant Rat Glucose-6-phosphate isomerase (Gpi)

Product Code	CSB-YP744065RA
Abbreviation	Recombinant Rat Gpi 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.	Q6P6V0
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 Rat Glucose-6-phosphate isomerase(Gpi)
Immunogen Species	Rattus norvegicus (Rat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AALTRNPEFQKLLEWHRANSANLKLRELFADPERFNHFSNLNLTNHHGILLD YSKNLVNKEVLHMLVDLAKSRGVEAARDNMFSGLKINSTEDRAVLHVALRNRS NRSIMMDGKDVMPEVNKVLDMKSFCQVRSGDWKGYTGKAITDIINIGIGGS DLGPLMVTEALPKPYSKGGPRVWFVSNIDGTHIAKTLANLNPESSLFIIASKTFTT QETITNAETAKEWFLQAAKDPSAVAKHFVALSTNTDKVKEFGIDPKNMFEEWD WVGGRYSLWSAIGLSIALHVGFDHFEQLLSGAHWMDQHFMKTPLDKNAPVLL ALLGIWYINFYGCETHAMLPYDQYMHRFAAYFQQGDMESNGKYITKSGARVD YQTGPIVWGEPTNGQHAFYQLIHQGTKMIPCDFLIPVQTQHPIRNLHKKILL ANFLAQTEALMKGKSPEEARKELQAAGKSPEELEKLLPHKVFEGNRPTNSIVF TKLTPFILGALIAMYEHKIFVQGIWDINSFDQWGVELGKQLAKKIEPELDGSSAV TSHDSSTNGLIGFIKLQRDTKID
Research Area	Cancer
Source	Yeast
Target Names	Gpi
Expression Region	2-558aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 6xHis-tagged
Mol. Weight	63.8 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

The production of the recombinant rat glucose-6-phosphate isomerase (Gpi) involves expressing a vector construct in yeast cells. This construct is created by cloning the gene fragment encoding the full-length mature rat Gpi protein (2-558aa) with a C-terminal 6xHis-tag into a plasmid vector. The resulting vector construct, containing the desired gene, is then transfected into the yeast cells. Special antibiotic selection is applied to choose the transfected yeast cells, which are subsequently cultured under suitable conditions. The induction reagents facilitate the expression of the recombinant rat Gpi protein within the yeast cells. Following expression, the yeast cells are harvested and lysed to release the cellular contents, including the recombinant Gpi protein. Purification of the recombinant Gpi protein is performed from the cell lysate, with its purity exceeding 90% as confirmed by SDS-PAGE analysis. On the gel, the recombinant Gpi protein appears as a band with a molecular weight of 64 kDa.

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

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.