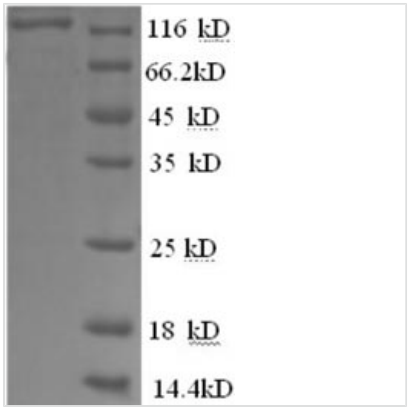
Recombinant Human Glycogen phosphorylase, liver form (PYGL), partial

Product Code	CSB-EP019122HU
Relevance	Phosphorylase is an important allosteric enzyme in carbohydrate metabolism. Enzymes from different sources differ in their regulatory mechanisms and in their natural substrates. However, all known phosphorylases share catalytic and structural properties.
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.	P06737
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AKPLTDQEKRRQISIRGIVGVENVAELKKSFNRHLHFTLVKDRNVATTRDYYFA LAHTVRDHLVGRWIRTQQHYYDKCPKRVYYLSLEFYMGRTLQNTMINLGLQN ACDEAIYQLGLDIEELEEIEEDAGLGNGGLGRLAACFLDSMATLGLAAYGYGIR YEYGIFNQKIRDGWQVEEADDWLRYGNPWEKSRPEFMLPVHFYGKVEHTNT GTKWIDTQVVLALPYDTPVPGYMNNTVNTMRLWSARAPNDFNLRDFNVGDYI QAVLDRNLAENISRVLYPNDNFFEGKELRLKQEYFVVAATLQDIIRRFKASKFG STRGAGTVFDAFPDQVAIQLNDTHPALAIPELMRIFVDIEKLPWSKAWELTQKT FAYTNHTVLPEALERWPVDLVEKLLPRHLEIIYEINQKHLDRIVALFPKDVDRLR RMSLIEEEGSKRINMAHLCIVGSHAVNGVAKIHSDIVKTKVFKDFSELEPDKFQ NKTNGITPRRWLLLCNPGLAELIAEKIGEDYVKDLSQLTKLHSFLGDDVFLRELA KVKQENKLKFSQFLETEYKVKINPSSMFDVQVKRIHEYKRQLLNCLHVITMYNR IKKDPKKLFVPRTVIIGGKAAPGYHMAKMIIKLITSVADVVNNDPMVGSKLKVIFL ENYRVSLAEKVIPATDLSEQISTAGTEASGTGNMKFMLNGALTIGTMDGANVE MAEEAGEENLFIFGMRIDDVAALDKKGYEAKEYYEALPELKLVIDQIDNGFFSP KQPDLFKDIINMLFYHDRFKVFADYEAYVKCQDKVSQLYMNPKAWNTMVLKNI AASGKFSSDRTIKEYAQNIWNVEPSDLKISLSNESNKVNG
Lead Time	3-7 business days
Research Area	Metabolism
Source	E.coli
Gene Names	PYGL
Expression Region	2-846aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged

Mol. Weight	123.9kDa
Protein Description	Partial

Image



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

Description

The expression region of this recombinant Human PYGL covers amino acids 2-846. This PYGL protein is expected to have a theoretical molecular weight of 123.9 kDa. The PYGL protein was expressed in e.coli. The PYGL coding gene included the N-terminal GST tag, which simplifies the detection and purification processes of the recombinant PYGL protein in following stages of expression and purification.

Glycogen phosphorylase, liver form (PYGL) is an enzyme crucial for glycogenolysis, the breakdown of glycogen into glucose-1-phosphate. The main function of PYGL is to mobilize glucose from glycogen stores, providing an essential energy source during periods of increased energy demand. In the liver, PYGL plays a key role in maintaining blood glucose levels by releasing glucose into the bloodstream. Research on PYGL involves understanding its regulation and involvement in metabolic processes. Dysregulation of PYGL has been associated with metabolic disorders such as glycogen storage diseases, where impaired glycogen breakdown leads to abnormal glycogen accumulation. Investigating PYGL function contributes to insights into metabolic homeostasis, glycogen metabolism, and the development of therapeutic strategies for related disorders.

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.