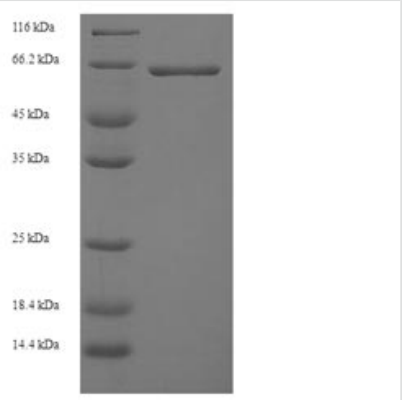
Recombinant Human Pyruvate kinase PKLR (PKLR)

Product Code	CSB-EP018071HU
Relevance	Plays a key role in glycolysis.
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.	P30613
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MSIQENISSLQLRSWVSKSQRDLAKSILIGAPGGPAGYLRRASVAQLTQELGTA FFQQQQLPAAMADTFLEHLCLLDIDSEPVAARSTSIIATIGPASRSVERLKEMIK AGMNIARLNFSHGSHEYHAESIANVREAVESFAGSPLSYRPVAIALDTKGPEIR TGILQGGPESEVELVKGSQVLVTVDPAFRTRGNANTVWVDYPNIVRVVPVGG RIYIDDGLISLVVQKIGPEGLVTQVENGGVLGSRKGVNLPGAQVDLPGLSEQDV RDLRFGVEHGVDIVFASFVRKASDVAAVRAALGPEGHGIKIISKIENHEGVKRF DEILEVSDGIMVARGDLGIEIPAEKVFLAQKMMIGRCNLAGKPVVCATQMLESM ITKPRPTRAETSDVANAVLDGADCIMLSGETAKGNFPVEAVKMQHAIAREAEA AVYHRQLFEELRRAAPLSRDPTEVTAIGAVEAAFKCCAAAIIVLTTTGRSAQLLS RYRPRAAVIAVTRSAQAARQVHLCRGVFPLLYREPPEAIWADDVDRRVQFGIE SGKLRGFLRVGDLVIVVTGWRPGSGYTNIMRVLSIS
Lead Time	3-7 business days
Research Area	Metabolism
Source	E.coli
Gene Names	PKLR
Protein Names	Recommended name: Pyruvate kinase isozymes R/L EC= 2.7.1.40Alternative name(s): Pyruvate kinase 1 R-type/L-type pyruvate kinase Red cell/liver pyruvate kinase
Expression Region	1-574aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	65.8kDa
Protein Description	Full Length

Image



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

Description

The expression region of this recombinant Human PKLR covers amino acids 1-574. This PKLR protein is theoretically predicted to have a molecular weight of 65.8 kDa. This PKLR recombinant protein is manufactured in e.coli. The PKLR coding gene included the N-terminal 6xHis tag, which simplifies the detection and purification processes of the recombinant PKLR protein in following stages of expression and purification.

Human pyruvate kinase isozyme R/L (PKLR) is primarily found in the liver and red blood cells. It is involved in the final step of glycolysis, where it catalyzes the conversion of phosphoenolpyruvate (PEP) to adenosine diphosphate (ADP), generating pyruvate and ATP. In red blood cells, PKLR is crucial for energy production and maintaining cell integrity. Research on PKLR includes investigations into its role in glycolytic regulation, metabolic disorders, and its significance in various tissues. Mutations in the PKLR gene can lead to pyruvate kinase deficiency, a condition associated with hemolytic anemia.