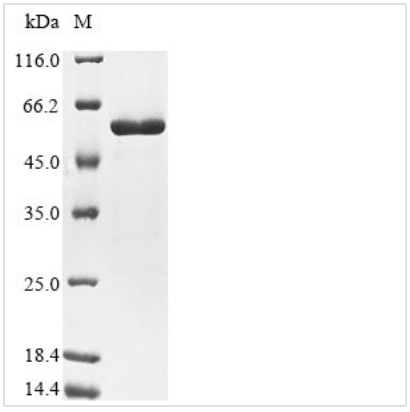
Recombinant Escherichia coli Pyruvate kinase I (pykF)

Product Code	CSB-EP364920ENV
Abbreviation	Recombinant E.coli pykF 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.	P0AD61
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 Protein
Immunogen Species	Escherichia coli (strain K12)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MKKTKIVCTIGPKTESEEMLAKMLDAGMNVMRLNFSHGDYAEHGQRIQNLRN VMSKTGKTAAILLDTKGPEIRTMKLEGGNDVSLKAGQTFTFTTDKSVIGNSEMV AVTYEGFTTDLSVGNTVLVDDGLIGMEVTAIEGNKVICKVLNNGDLGENKGVNL PGVSIALPALAEKDKQDLIFGCEQGVDFVAASFIRKRSDVIEIREHLKAHGGENI HIISKIENQEGLNNFDEILEASDGIMVARGDLGVEIPVEEVIFAQKMMIEKCIRAR KVVITATQMLDSMIKNPRPTRAEAGDVANAILDGTDAVMLSGESAKGKYPLEA VSIMATICERTDRVMNSRLEFNNDNRKLRITEAVCRGAVETAEKLDAPLIVVAT QGGKSARAVRKYFPDATILALTTNEKTAHQLVLSKGVVPQLVKEITSTDDFYRL GKELALQSGLAHKGDVVVMVSGALVPSGTTNTASVHVL
Research Area	Metabolism
Source	E.coli
Target Names	pykF
Expression Region	1-470aa
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	54.8 kDa
Protein Length	Full Length
Image	



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

Description

Amino acids 1-470 constitute the expression domain of recombinant Escherichia coli (strain K12) pykF. This pykF protein is theoretically predicted to have a molecular weight of 54.8 kDa. Expression of this pykF protein is conducted in e.coli. The pykF gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant pykF protein during the following stages.

Escherichia coli pyruvate kinase I (PykF) is a crucial enzyme in glycolysis, catalyzing the conversion of phosphoenolpyruvate to pyruvate and producing ATP. Its significance extends across diverse research domains. In metabolic engineering, PykF enhances compound production by influencing glycolytic pathways. Biotechnological applications leverage its role in cellular energy metabolism for optimizing processes in industrial settings. As a potential target for antibiotic development, inhibiting PykF could disrupt bacterial metabolism. Studies of PykF contribute to understanding bacterial physiology, adaptive responses to nutrient variations, and the broader landscape of functional genomics.

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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