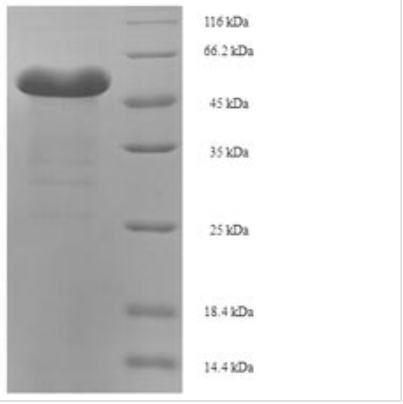
Recombinant Entamoeba histolytica Pyruvate, phosphate dikinase (PPDK), partial

Product Code	CSB-EP336270EKM
Relevance	Catalyzes the reversible phosphorylation of pyruvate and phosphate. In E.histolytica and C.symbiosus, PPDK functions in the direction of ATP synthesis.
Abbreviation	Recombinant Entamoeba histolytica PPDK protein, partial
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.	P37213
Product Type	Recombinant Proteins
Immunogen Species	Entamoeba histolytica
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MQRVYAFEDGDGTNKKLLGGKGAGLCTMTKIGLPVPQGFVITTEMCKQFIANGNKMPEGLMEEVKKEYQLVEKKSGKVFGGEENPLLVSVRSGAAMSMPGMMDTILNLGLNDKTVVALAKLTNNERFAYDSYRRFVSLFGKIALNACDEVYDKTLENKKVEKGVKLDTELDANDMKELAQVFIKKTEEFTKQPFPVDPYAQLEFAICAVFRSWMGKRAVDYRREFKITPEQADGTAVSVVSMVYGNMGNDSATGVCFTRDPGTGENMFFGEYLKNAQGEDVVAGIRTPQIISKMAEDRDLPGCYEQLLDIRKKLEGYFHEVQDFEFTIERKKLYMLQTRNGK
Research Area	Others
Source	E.coli
Target Names	PPDK
Protein Names	Recommended name: Pyruvate, phosphate dikinase EC= 2.7.9.1Alternative name(s): Pyruvate, orthophosphate dikinase
Expression Region	1-342aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	54.4kDa
Protein Length	Partial
Image	



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

Description

CUSABIO transfected the expression vector which inserted the recombinant DNA into the E.coli, cultured the cells, and then induced the transcription and translation of the cloned vector. The N-terminal 6xHis-SUMO tag sequence was appended to the gene coding for the E.coli of the Entamoeba histolytica PPDK protein to form the recombinant DNA. The recombinant Entamoeba histolytica PPDK was expressed as N-terminal 6xHis-SUMO-tagged fusion. The purity of the protein is greater than 90% assayed by SDS-PAGE. It has an apparent molecular weight of approximately 55 kDa.

PPDK is known for its role in C4 photosynthesis but has no established function in C3 plants. Cytosolic PPDK isoforms are generally expressed in non-photosynthetic organs of C3 and C4 plants. Some studies have shown that cyto-solic PPDK isinvolved in a metabolic response to water de?cit and low-oxygen stress in rice,an anoxia-tolerant species. As a critical enzyme for C4 photosynthesis, PPDK provides the primary acceptor for fixation of bicarbonate in mesophyll cells. Although first isolated in C4 plants, it is also present in C3 species. Studies suggested that PPDK may be important in supplying PEP to gluconeogenesis, and in ageing leaves it allows remobilisation of nitrogen to supply reproductive tissue.

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.