abcam

Product datasheet

Recombinant human PKLR protein ab167971

1 Image

Description

Product name	Recombinant human PKLR protein
Biological activity	Specific activity: > 0.1 unit/mg. One unit will form 1.0 µmol of phosphoenolpyruvate to pyruvate per minute at pH 7.5 at 37°C.
Purity	> 90 % SDS-PAGE.
Expression system	Escherichia coli
Accession	P30613
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MGSSHHHHHHSSGLVPRGSHMLTQELGTAFFQQQQL PAAMADTFLEHLCL LDIDSEPVAARSTSIIATIGPASRSVERLKEMIKAGMNIA RLNFSHGSHE YHAESIANVREAVESFAGSPLSYRPVAIALDTKGPEIRT GILQGGPESEV ELVKGSQVLVTVDPAFRTRGNANTVWVDYPNIVRVVP VGGRIYIDDGLIS LVVQKIGPEGLVTQVENGGVLGSRKGVNLPGAQVDLP GLSEQDVRDLRFG VEHGVDIVFASFVRKASDVAAVRAALGPEGHGIKIISKI ENHEGVKRFDE ILEVSDGIMVARGDLGIEIPAEKVFLAQKMMIGRCNLAG KPVVCATQMLE SMITKPRPTRAETSDVANAVLDGADCIMLSGETAKGNF PVEAVKMQHAIA REAEAAVYHRQLFEELRRAAPLSRDPTEVTAIGAVEAA FKCCAAAIIVLT TTGRSAQLLSRYRPRAAVIAVTRSAQAARQVHLCRGV FPLLYREPPEAIW ADDVDRRVQFGIESGKLRGFLRVGDLVIVVTGWRPGS GYTNIMRVLSIS
Predicted molecular weight	59 kDa including tags

Amino acids	47 to 574
Tags	His tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of **ab167971** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Liquid

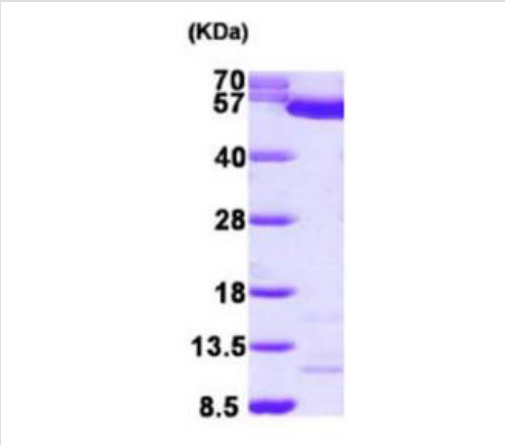
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.02% DTT, 0.32% Tris HCl, 10% Glycerol, 1.17% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Plays a key role in glycolysis.
Pathway	Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 5/5.
Involvement in disease	Defects in PKLR are the cause of pyruvate kinase hyperactivity (PKHYP) [MIM:102900]; also known as high red cell ATP syndrome. This autosomal dominant phenotype is characterized by increase of red blood cell ATP. Defects in PKLR are the cause of pyruvate kinase deficiency of red cells (PKRD) [MIM:266200]. A frequent cause of hereditary non-spherocytic hemolytic anemia. Clinically, pyruvate kinase-deficient patients suffer from a highly variable degree of chronic hemolysis, ranging from severe neonatal jaundice and fatal anemia at birth, severe transfusion-dependent chronic hemolysis, moderate hemolysis with exacerbation during infection, to a fully compensated hemolysis without apparent anemia.
Sequence similarities	Belongs to the pyruvate kinase family.

Images



SDS-PAGE - Recombinant human PKLR protein (ab167971)

15% SDS-Page analysis of ab167971 (3µg).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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