abcam

Product datasheet

Recombinant Human PCK1/PEPC protein ab119469

1 Image

Description

Product name Recombinant Human PCK1/PEPC protein

Purity > 90 % SDS-PAGE.

ab119469 was purified using conventional chromatography.

Expression system Escherichia coli

Accession P35558

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MGSSHHHHHH SSGLVPRGSH MGSHMPPQLQ

NGLNLSAKVV QGSLDSLPQA VREFLENNAE LCQPDHIHIC DGSEEENGRL LGQMEEEGIL

RRLKKYDNCW LALTDPRDVA RIESKTVIVT QEQRDTVPIP

KTGLSQLGRW MSEEDFEKAF NARFPGCMKG

 ${\sf RTMYVIPFSM} \ {\sf GPLGSPLSKI} \ {\sf GIELTDSPYV} \ {\sf VASMRIMTRM}$

GTPVLEALGD GEFVKCLHSV GCPLPLQKPL

VNNWPCNPEL TLIAHLPDRR EIISFGSGYG GNSLLGKKCF

ALRMASRLAK EEGWLAEHML VLGITNPEGE KKYLAAAFPS ACGKTNLAMM NPSLPGWKVE CVGDDIAWMK FDAQGHLRAI NPENGFFGVA

PGTSVKTNPN AIKTIQKNTI FTNVAETSDG GVYWEGIDEP

LASGVTITSW KNKEWSSEDG EPCAHPNSRF

CTPASQCPII DAAWESPEGV PIEGIIFGGR RPAGVPLVYE

ALSWQHGVFV GAAMRSEATA AAEHKGKIIM HDPFAMRPFF GYNFGKYLAH WLSMAQHPAA KLPKIFHVNW FRKDKEGKFL WPGFGENSRV

LEWMFNRIDG KASTKLTPIG YIPKEDALNL KGLGHINMME LFSISKEFWE KEVEDIEKYL EDQVNADLPC EIEREILALK

QRISQM

Predicted molecular weight 72 kDa including tags

Amino acids 1 to 622

Tags His tag N-Terminus

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Specifications

Our **Abpromise guarantee** covers the use of **ab119469** 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

Form Liquid

Additional notes This product was previously labelled as PCK1

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 long

term. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.02% DTT, 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium

chloride

General Info

Function Catalyzes the conversion of oxaloacetate (OAA) to phosphoenolpyruvate (PEP), the rate-limiting

step in the metabolic pathway that produces glucose from lactate and other precursors derived

from the citric acid cycle.

Tissue specificity Major sites of expression are liver, kidney and adipocytes.

Pathway Carbohydrate biosynthesis; gluconeogenesis.

Involvement in diseaseDefects in PCK1 are the cause of cytosolic phosphoenolpyruvate carboxykinase deficiency

(cytosolic PEPCK deficiency) [MIM:261680]. PEPCK deficiency is a metabolic disorder resulting from impaired gluconeogenesis. It is a rare disease with less than 10 cases reported in the

literature. Clinical characteristics include hypotonia, hepatomegaly, failure to thrive, lactic acidosis and hypoglycemia. Autoposy reveals fatty infiltration of both the liver and kidneys. The disorder is

transmitted as an autosomal recessive trait.

Sequence similarities Belongs to the phosphoenolpyruvate carboxykinase [GTP] family.

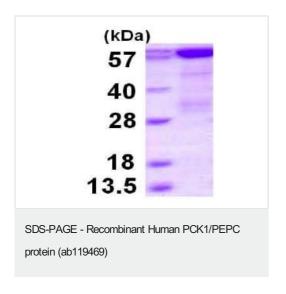
Post-translational

modifications

Acetylation is increased on addition of glucose and appears to regulate the protein stability.

Cellular localization Cytoplasm.

Images



15% SDS-PAGE analysis of ab119469 (3µg)

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

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