Recombinant human PCK1 protein

Catalog Number: ATGP1372

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-622aa

UniProt No.
P35558

NCBI Accession No.
AAH23978.1

Alternative Names
Phosphoenolpyruvate carboxykinase 1, Phosphoenolpyruvate carboxykinase 1, PEPCK-C, PEPCK1, PEPCKC

PRODUCT SPECIFICATION

Molecular Weight
71.7 kDa (646aa)

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

Purity
> 85% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
Phosphoenolpyruvate carboxykinase 1, also known as PCK1, is a main control point for the regulation of gluconeogenesis. PCK1 plays an important role in this process by stimulating hepatic glucose production. The expression of PCK1 can be regulated by insulin, glucocorticoids, glucagon, cAMP, and diet. Modulation of the signals governing PCK1 levels presents a potential therapeutic approach to the treatment of Insulin resistance and consequently obesity. Recombinant human PCK1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

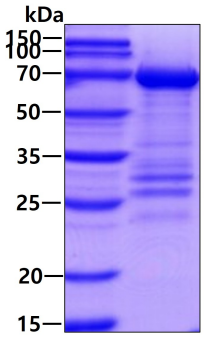
<MGSSHHHHHH SSGLVPRGSH MGSH>MPPQLQ NGLNLSAKVV QGSLDSLPQA VREFLENNAE LCQPDHIHIC DGSEEENGRL LGQMEEEGIL RRLKKYDNCW LALTDPRDVA RIESKTVIVT QEQRDTVPIP KTGLSQLGRW MSEEDFEKAF NARFPGCMKG RTMYVIPFSM GPLGSPLSKI GIELTDSPYV VASMRIMTRM GTPVLEALGD GEFVKCLHSV GCPLPLQKPL VNNWPCNPEL TLIAHLPDRR EIISFGSGYG GNSLLGKKCF ALRMASRLAK 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

General References

Barthel A., et al. (2003) Am J Physiol Endocrinol Metab. 285:685-692.
Wang Y., et al. (1991) J Cell Physiol. 147:374-382.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.