

Product information

PCK1, 1-622aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1372

Full name: Phosphoenolpyruvate carboxykinase 1

NCBI Accession No.: AAH23978

Synonyms: PEPCK-C, PEPCK1, PEPCKC

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.

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

Molecular Weight: 71.7 kDa (646aa)

Purity: > 90% by SDS - PAGE

Concentration: 0.5 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSHPMPQLQ NGLNLSAKVV QGSLDSLPGA VREFLENNAE LCQPDHIHIC DGSEEENGR LQMEEEGIL
 RRLKKYDNCW LALTDPRDVA RIESKTVIVT QEQRDTPVIP KTGLSQLGRW MSEEDFEKAF NARFPGCMKG RTMYVIPFSM GPLGSPLSKI
 GIELTDSPIV VASMRIMTRM GTPVLEALGD GEFVKCLHSV GCPLPLQKPL VNNWPCNPTEL TLIAHLPDRR EII SFGSGYG GNSLLGKKCF
 ALRMASRLAK EEGWLAEHML VLGITNPEGE KKYLAFAFAPS ACGKTNLMM NPSLPGWKVE CVGDDIAWMK FDAQGH LRAI NPENGGFVVA
 PGTSVKTNPN AIKTIQKNTI FTNVAETSDG GYVWEGIDEP LASGVTITSW KNKEWSEEDG EPCAHPNSRF CTPASQCP II DAAWESPEGV
 PIEGIIFGGR RPAGVPLVYE ALSWQHGVFV GAAMRSEATA AAEHKGK IIM HDPFAMRPFY GYNFGKYL AH WLSMAQH PAA KLPKIFHVNW
 FRKDKGKFL WPGFGNSRV LEWMFNRI DG 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.

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.

Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.