Recombinant human PDH kinase 1/PDK1 protein

Catalog Number: PDK0904

PRODUCT INFORMATION

Expression system
E.coli

Domain
29-436aa

UniProt No.
Q15118

NCBI Accession No.
NP_002601

Alternative Names
Pyruvate dehydrogenase kinase 1, Pyruvate dehydrogenase kinase, PDHK1, Isozyme 1, Isoenzyme

PRODUCT SPECIFICATION

Molecular Weight
48.6 kDa (429aa)

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 7.0) containing 100mM NaCl, 0.5mM DTT, 0.1mM EDTA, 0.1mM PMSF, 1mM MgCl2, 40% glycerol

Purity
> 95% 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
PDK1 (pyruvate dehydrogenase kinase isoform 1) is involved in the regulation of enzymatic activity of mammalian pyruvate dehydrogenase (PDH) that is a part of a mitochondrial multienzyme complex to catalyze the oxidative decarboxylation of pyruvate and is one of the major enzymes responsible for the regulation of homeostasis of carbohydrate fuels in mammals. PDK1 has been found to serve as an effective therapeutic target for inhibition of glioblastoma growth. Recombinant human PDK1 protein, fused to His-tag at N-terminus, was

expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

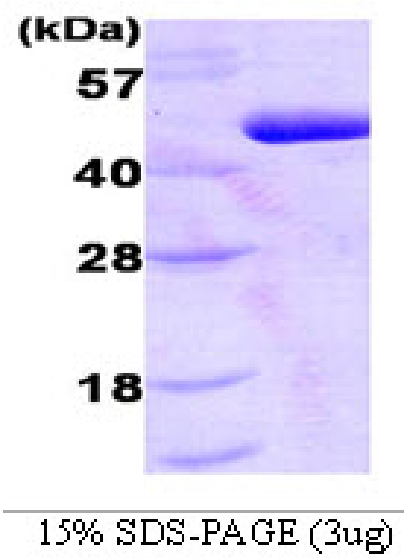
MGSSHHHHHH SSGLVPRGSH MSSDSGSSPA SERGVPGQVD FYARFSPSPL SMKQFLDFGS VNACEKTSFM FLRQELPVRL ANIMKEISLL PDNLLRTPSV QLVQSWYIQS LQELLDFKDK SAEDAKAIYD FTDTVIRIRN RHNDVIPTMA QGVIEYKESF GVDPVTSQNV QYFLDRFYMS RISIRMLLNQ HSLLFGGKGK GSPSHRKHIG SINPNCNVLE VIKDGYENAR RLCDLYYINS PELELEELNA KSPGQPIQVV YVPSHLYHMV FELFKNAMRA TMEHHANRGV YPPIQVHVTL GNEDLTVKMS DRGGGVPLRK IDRLFNYMYS TAPRPRVETS RAVPLAGFGY GLPISRLYAQ YFQGDLKLYS LEGYGTDAVI YIKALSTDSI ERLPVYNKAA WKHYNTNHEA DDWCVPSREP KDMTTFRSA

General References

Gudi R ., et al. (1995). J Biol chem. 270(48) : 28989-94
Xie Z., et al. (2006). BMC Cancer. 6 :77

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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