
Product Data Sheet

Product Name: PDK1 Human
 Cat. No.: GP22576
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Pyruvate dehydrogenase kinase isoform 1; PDK1; Pyruvate dehydrogenase (lipoamide) kinase isozyme 1 mitochondrial.		
Amino Acid Sequence	MGSSHHHHHH SSGLVPRGSH MSSDSGSSPA SERGVPGQVD FYARFSPSPL SMKQFLDFGS VNACEKTSFM FLRQELPVRL ANIMKEISLLPDNLLRTPSV QLVQSWYIQS LQELDFKDK SAEDAKAIYD FTDTVIRIRN RHNDVIPTMA QGVIEYKESF GVDPVTSQNV QYFLDRFYMS RISIRMLLNQ HLLFGGKGGK GSPSHRKHIG SINPNCNVLE VIKDGYENAR RLCDLYYINS PELELEELNA KSPGQPIQVV YVPSHLYHMFELFKNAMRA TMEHHANRGV YPPIQVHVTL GNEDLTVKMS DRGGGVPLRK IDRLFNYMYS TAPRPRVETS RAVPLAGFGY GLPISRLYAQ YFQGDCLKLYS LEGYGTDAVI YIKALSTDSI ERLPVYNKAA WKHYNTNHEA DDWCVPSPREP KDMTFRSA.		
Formulation	PDK1 solution containing 20mM Tris pH-7, 0.5mM DTT, 0.1M NaCl, 0.1mM EDTA 0.1mM PMSF, 1mM MgCl ₂ and 40% glycerol.		

Introduction

PDK1 takes part in the regulation of enzymatic activity of mammalian pyruvate dehydrogenase which is 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 inhibits glioblastoma growth. PDK1 inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the e1 alpha subunit, therefore contributing to the regulation of glucose metabolism. PDK1 kinase activity is negatively regulated by binding to 14-3-3.

Stability

PDK1 Human Recombinant although stable at 4°C for 1 week, should be stored below -

Caution: Product has not been fully validated for medical applications. For research use only.

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18°C . Please prevent freeze thaw cycles.

Background

PDK1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 429 amino acids (29-436) and having a molecular mass of 48.6 kDa. PDK1 is fused to 20 a.a. His-Tag at N-terminus and purified by proprietary chromatographic techniques.

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