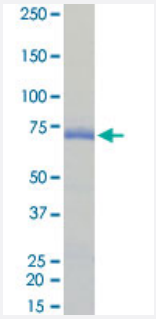
Bioactive Full-Length

PDK1 (Human) Recombinant Protein

Catalog # P5771 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

Specification

Product Description	Human PDK1 (NP_002601.1, 1 a.a. - 436 a.a.) full length recombinant protein with GST tag expressed in Baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	77
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	95 % by SDS-PAGE/CBB staining

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip™3000. Substrate : PDHKtide. ATP: 100 μM.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — PDK1

Entrez GeneID	5163
Protein Accession#	NP_002601.1
Gene Name	PDK1
Gene Alias	-
Gene Description	pyruvate dehydrogenase kinase, isozyme 1
Omim ID	602524
Gene Ontology	Hyperlink
Gene Summary	Pyruvate dehydrogenase (PDH) is a mitochondrial multienzyme complex that catalyzes the oxidative decarboxylation of pyruvate and is one of the major enzymes responsible for the regulation of homeostasis of carbohydrate fuels in mammals. The enzymatic activity is regulated by a phosphorylation/dephosphorylation cycle. Phosphorylation of PDH by a specific pyruvate dehydrogenase kinase (PDK) results in inactivation. [provided by RefSeq
Other Designations	mitochondrial pyruvate dehydrogenase kinase isoenzyme 1|pyruvate dehydrogenase kinase, isoenzyme 1

Pathway

- Fc epsilon RI signaling pathway
- Neurotrophin signaling pathway
- T cell receptor signaling pathway

Disease

- Diabetes Mellitus
- Genetic Predisposition to Disease