



PDK1 Monoclonal Antibody

Catalog No	YP-mAb-02743
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PDK1
Immunogen	Synthesized peptide derived from PDK1 . at AA range: 80-160
Specificity	PDK1 Monoclonal Antibody detects endogenous levels of PDK1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 1;mitochondrial; EC:2.7.11.2;PDH kinase 1;PDHK1;PDK1;[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1 mitochondrial;[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1;Pyruvate dehydrogenase kinase isoform 1
Observed Band	50kD
Calculated Molecular Weight	50kD
Cell Pathway	Mitochondrion matrix .
Tissue Specificity	Expressed predominantly in the heart. Detected at lower levels in liver, skeletal muscle and pancreas.
Function	catalytic activity:ATP + [pyruvate dehydrogenase (acetyl-transferring)] = ADP + [pyruvate dehydrogenase (acetyl-transferring)] phosphate.,function:Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism., similarity:Belongs to the PDK/BCKDK protein kinase family.,similarity:Contains 1 histidine kinase domain.,tissue specificity:Expressed predominantly in the heart.,



Background

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. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jun 2013],

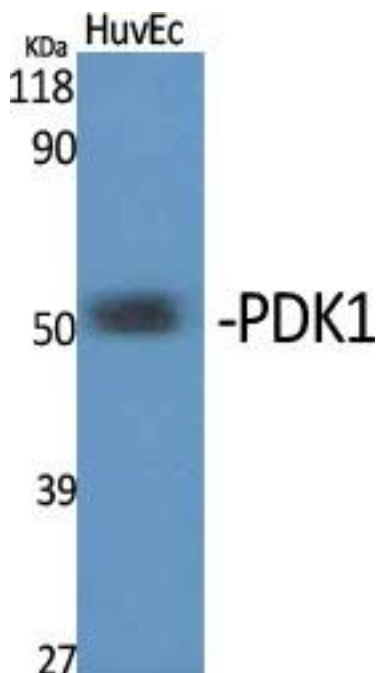
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using PDK1 Monoclonal Antibody