Best Tools for immunology Research

PDK1 Polyclonal Antibody

Catalog No :	YT3644
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC
Target :	PDK1
Fields :	>>HIF-1 signaling pathway;>>Central carbon metabolism in cancer
Gene Name :	PDK1
Protein Name :	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1 mitochondrial
Human Gene Id :	5163
Human Swiss Prot No :	Q15118
Mouse Gene Id :	228026
Mouse Swiss Prot No :	Q8BFP9
Rat Swiss Prot No :	Q63065
Immunogen :	Synthesized peptide derived from PDK1 . at AA range: 80-160
Specificity :	PDK1 Polyclonal Antibody detects endogenous levels of PDK1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 50kD

Cell Pathway : T_Cell_Receptor;Fc epsilon RI;Neurotrophin;

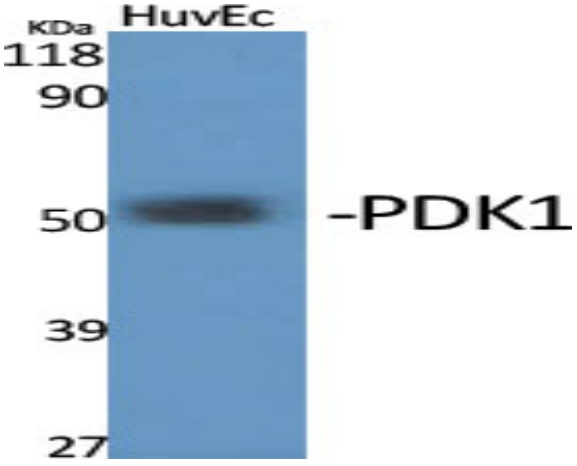
Background : Pyruvate dehydrogenase (PDH) is a mitochondrial multienzyme complex that catalyzes the oxidative decarboxylation of pyruvate and is one of the major enzymes responsible for the regulation of homeostasis of carbohydrate fuels in mammals. The enzymatic activity is regulated by a phosphorylation/dephosphorylation 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],

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.,

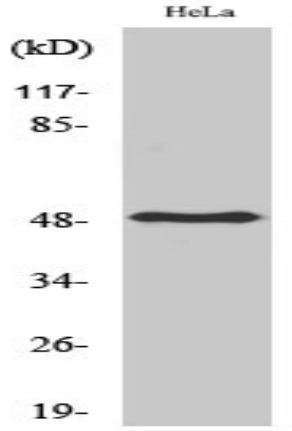
Subcellular Location : Mitochondrion matrix .

Expression : Expressed predominantly in the heart. Detected at lower levels in liver, skeletal muscle and pancreas.

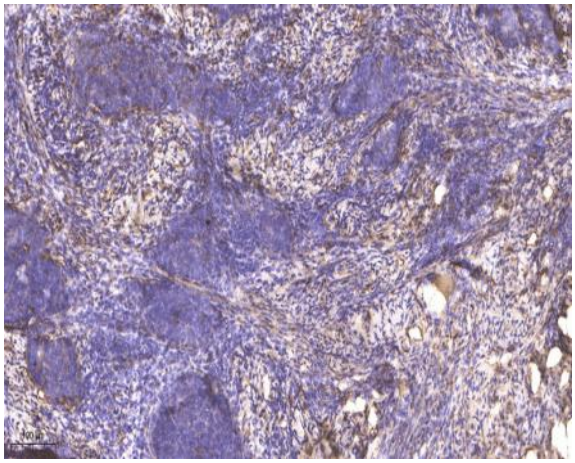
Products Images



Western Blot analysis of various cells using PDK1 Polyclonal Antibody



Western Blot analysis of Hela cells using PDK1 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded human cervical carcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).