

Datasheet for ABIN7142008
anti-PDK4 antibody (AA 143-333)



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2 Images

Overview

Quantity:	100 µg
Target:	PDK4
Binding Specificity:	AA 143-333
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PDK4 antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant Human [Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 4, mitochondrial protein (143-333AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PDK4
Alternative Name:	PDK4 (PDK4 Products)
Background:	Background: Kinase that plays a key role in regulation of glucose and fatty acid metabolism and

Target Details

homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2. This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through the tricarboxylic acid cycle, down-regulates aerobic respiration and inhibits the formation of acetyl-coenzyme A from pyruvate. Inhibition of pyruvate dehydrogenase decreases glucose utilization and increases fat metabolism in response to prolonged fasting and starvation. Plays an important role in maintaining normal blood glucose levels under starvation, and is involved in the insulin signaling cascade. Via its regulation of pyruvate dehydrogenase activity, plays an important role in maintaining normal blood pH and in preventing the accumulation of ketone bodies under starvation. In the fed state, mediates cellular responses to glucose levels and to a high-fat diet. Regulates both fatty acid oxidation and de novo fatty acid biosynthesis. Plays a role in the generation of reactive oxygen species. Protects detached epithelial cells against anoikis. Plays a role in cell proliferation via its role in regulating carbohydrate and fatty acid metabolism.

Aliases: [Pyruvate dehydrogenase [lipoamide]] kinase isozyme 4 antibody, FLJ40832 antibody, mitochondrial antibody, Pdk4 antibody, PDK4_HUMAN antibody, Pyruvate dehydrogenase [lipoamide] kinase isozyme 4 mitochondrial antibody, Pyruvate dehydrogenase kinase 4 antibody, Pyruvate dehydrogenase kinase isoenzyme 4 antibody, Pyruvate dehydrogenase kinase isoform 4 antibody, Pyruvate dehydrogenase kinase isozyme 4 antibody, Pyruvate dehydrogenase kinase isozyme 4 mitochondrial antibody

UniProt:	Q16654
Pathways:	PI3K-Akt Signaling , Hedgehog Signaling , Carbohydrate Homeostasis , Regulation of Carbohydrate Metabolic Process , Warburg Effect

Application Details

Application Notes:	Recommended dilution: IHC:1:20-1:200,
Restrictions:	For Research Use only

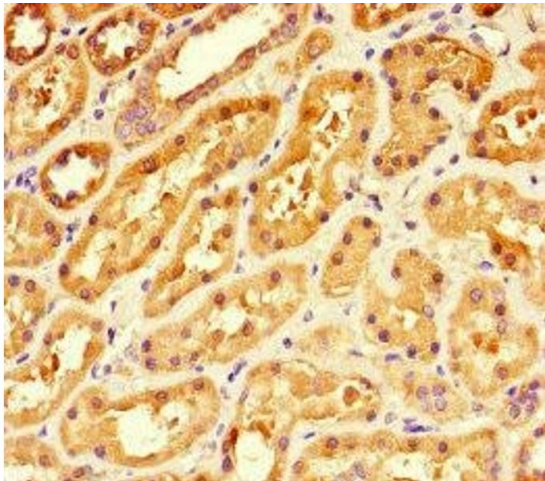
Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be

Handling

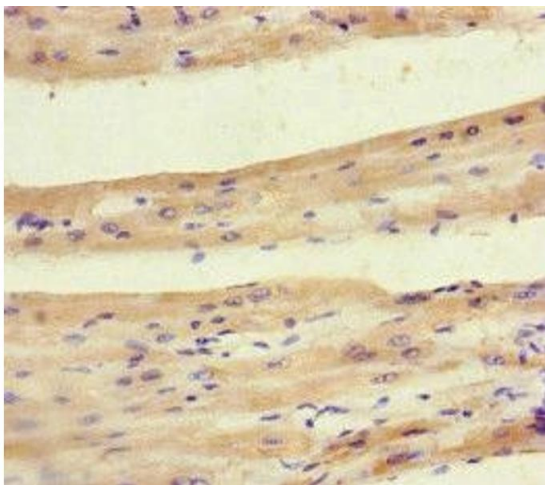
	handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human kidney tissue using ABIN7142008 at dilution of 1:100



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human heart tissue using ABIN7142008 at dilution of 1:100