

PDK1 Polyclonal Antibody
Catalog # AP71827**Specification****PDK1 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	Q15118
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

PDK1 Polyclonal Antibody - Additional Information**Gene ID** 5163**Other Names**

PDK1; PDHK1; [Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1; mitochondrial; Pyruvate dehydrogenase kinase isoform 1

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

PDK1 Polyclonal Antibody - Protein Information**Name** PDK1**Synonyms** PDHK1**Function**

Kinase that plays a key role in regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2 (PubMed: 7499431, PubMed: 18541534, PubMed: 22195962, PubMed: 26942675, PubMed: 17683942). 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 (PubMed: 18541534, PubMed: 22195962, PubMed: 26942675). Plays an important role in cellular responses to hypoxia and is

important for cell proliferation under hypoxia (PubMed:18541534, PubMed:22195962, PubMed:26942675).

Cellular Location

Mitochondrion matrix

Tissue Location

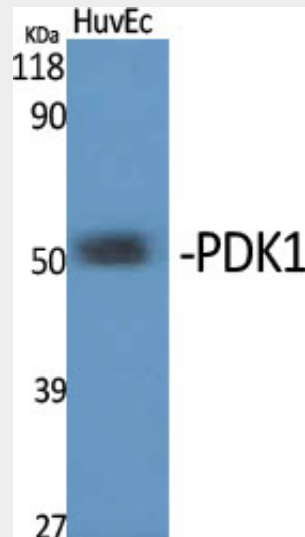
Expressed predominantly in the heart. Detected at lower levels in liver, skeletal muscle and pancreas

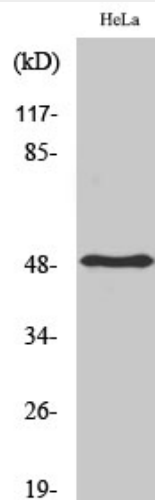
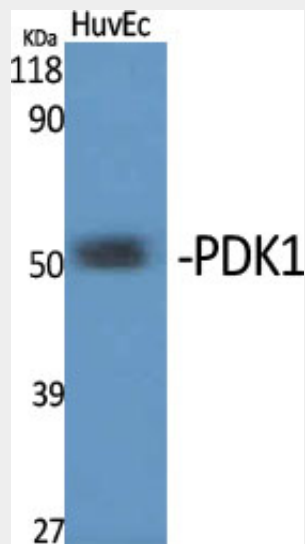
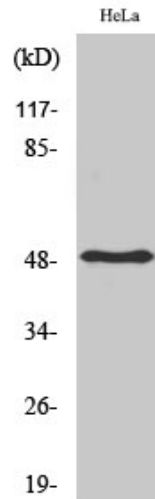
PDK1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PDK1 Polyclonal Antibody - Images





PDK1 Polyclonal Antibody - Background

Kinase that plays a key role in regulation of glucose and fatty acid metabolism and 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. Plays an important role in cellular responses to hypoxia and is important for cell proliferation under hypoxia. Protects cells against apoptosis in response to hypoxia and oxidative stress.