

**Anti-PDK1 Monoclonal Antibody**  
Catalog # ABO14393**Specification****Anti-PDK1 Monoclonal Antibody - Product Information**

Application	WB, IP
Primary Accession	<a href="#">Q15118</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-PDK1 Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

**Anti-PDK1 Monoclonal Antibody - Additional Information**

Gene ID 5163

**Other Names**

[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 1, mitochondrial, 2.7.11.2, Pyruvate dehydrogenase kinase isoform 1, PDH kinase 1, PDK1, PDHK1

**Application Details**

WB 1:500-1:2000<br>IP 1:50

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human PDK1 Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-PDK1 Monoclonal 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. 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.

### Cellular Location

Mitochondrion matrix

### Tissue Location

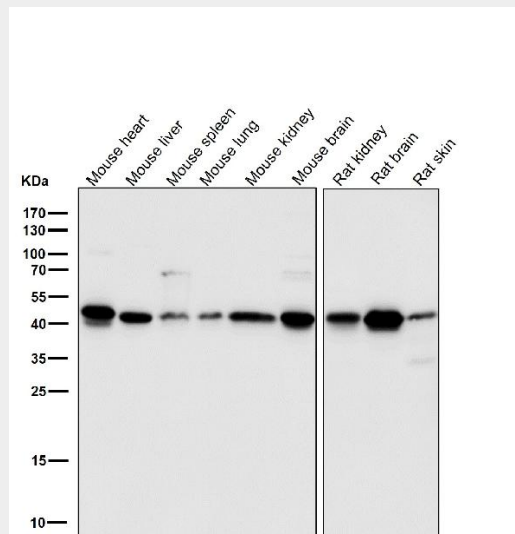
Expressed predominantly in the heart. Detected at lower levels in liver, skeletal muscle and pancreas

## Anti-PDK1 Monoclonal Antibody - Protocols

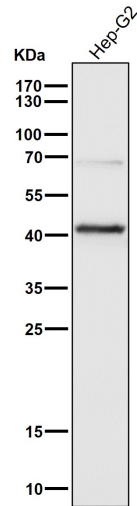
Provided below are standard protocols that you may find useful for product applications.

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

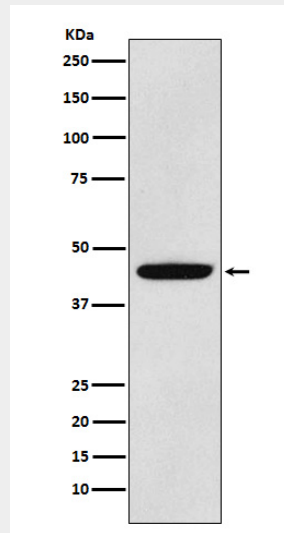
## Anti-PDK1 Monoclonal Antibody - Images



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Western blot analysis of PDK1 expression in LNCaP cell lysate.