

# PDK1 Antibody

Rabbit mAb

Catalog # AP91356

## Product Information

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<b>Application</b>	WB, IP
<b>Primary Accession</b>	<a href="#">Q15118</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	Mitochondrial pyruvate dehydrogenase kinase isoenzyme 1; PDH kinase 1; Pdk1; Pyruvate dehydrogenase kinase isoform 1; Pyruvate dehydrogenase kinase, isoenzyme 1;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	49244

## Additional Information

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<b>Dilution</b>	WB 1:500~1:2000 IP 1:50
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human PDK1
<b>Description</b>	Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

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<b>Name</b>	PDK1
<b>Synonyms</b>	PDHK1
<b>Function</b>	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: <a href="#">7499431</a> , PubMed: <a href="#">18541534</a> , PubMed: <a href="#">22195962</a> , PubMed: <a href="#">26942675</a> , PubMed: <a href="#">17683942</a> ). 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: <a href="#">18541534</a> , PubMed: <a href="#">22195962</a> , PubMed: <a href="#">26942675</a> ). Plays an important role in cellular responses to hypoxia and is important for cell proliferation under hypoxia (PubMed: <a href="#">18541534</a> , PubMed: <a href="#">22195962</a> , PubMed: <a href="#">26942675</a> ).

**Cellular Location**

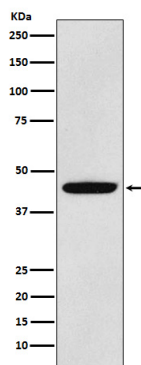
Mitochondrion matrix

**Tissue Location**

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

**Images**

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Western blot analysis of PDK1 expression in LNCaP cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.