10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PDK1 Antibody

Rabbit mAb
Catalog # AP91356

Product Information

Application	WB, IP
Primary Accession	Q15118
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Mitochondrial pyruvate dehydrogenase kinase isoenzyme 1; PDH kinase 1; Pdk1; Pyruvate dehydrogenase kinase isoform 1; Pyruvate dehydrogenase kinase, isoenzyme 1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	49244

Additional Information

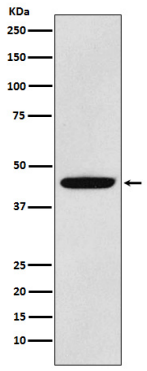
Dilution	WB 1:500~1:2000 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PDK1
Description	Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.
Storage Condition and Buffer	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

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

Images



Western blot analysis of PDK1 expression in LNCaP cell lysate.

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