

**PDK1 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS12905****Specification**

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**PDK1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q15118</a>
Reactivity	Human, Mouse, Rat, Rabbit, Monkey, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49kDa KDa

**PDK1 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

**Reconstitution & Storage**

Store at -20°C.

**Precautions**

PDK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PDK1 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

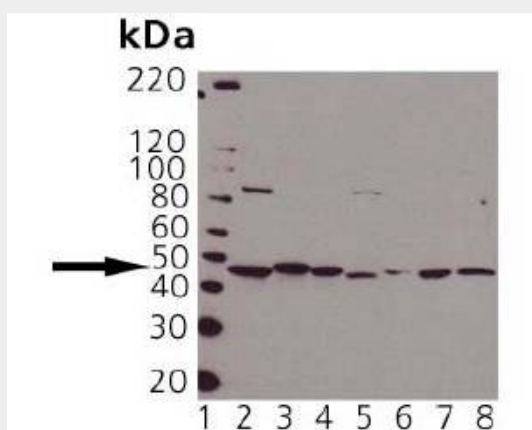
pancreas

### **PDK1 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 Antibody - Images**



Western blot of PDK1: Lane 1: MWM, Lane 2: HeLa, Lane 3: Rat Brain, Lane 4: Mouse Brain, Lane 5:...

### **PDK1 Antibody - Background**

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### **PDK1 Antibody - References**

Gudi R., et al. J. Biol. Chem. 270:28989-28994(1995).  
Li H., et al. Submitted (OCT-2005) to the EMBL/GenBank/DDBJ databases.  
Ota T., et al. Nat. Genet. 36:40-45(2004).  
Hillier L.W., et al. Nature 434:724-731(2005).  
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.