

**PDK2 Antibody (clone 2G1)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14055****Specification**

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**PDK2 Antibody (clone 2G1) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q15119</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	46kDa KDa

**PDK2 Antibody (clone 2G1) - Additional Information****Gene ID** 5164**Other Names**

[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 2, mitochondrial, 2.7.11.2, Pyruvate dehydrogenase kinase isoform 2, PDH kinase 2, PDKII, PDK2, PDHK2

**Target/Specificity**

Human PDK2

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**

PDK2 Antibody (clone 2G1) is for research use only and not for use in diagnostic or therapeutic procedures.

**PDK2 Antibody (clone 2G1) - Protein Information****Name** PDK2**Synonyms** PDHK2**Function**

Kinase that plays a key role in the 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. Inhibition of pyruvate dehydrogenase decreases glucose utilization and increases fat metabolism. Mediates cellular responses to insulin. Plays an important role in maintaining normal blood glucose levels and in metabolic adaptation to nutrient availability. Via its regulation of pyruvate dehydrogenase activity, plays an important role in maintaining normal blood pH and in preventing the accumulation of ketone bodies under starvation. Plays a role in the regulation of cell proliferation and in resistance to apoptosis under oxidative stress.

Plays a role in p53/TP53-mediated apoptosis.

**Cellular Location**

Mitochondrion matrix.

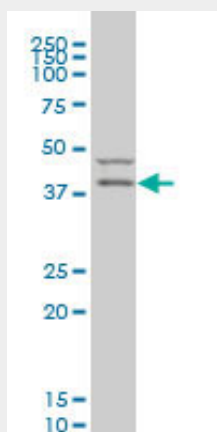
**Tissue Location**

Expressed in many tissues, with the highest level in heart and skeletal muscle, intermediate levels in brain, kidney, pancreas and liver, and low levels in placenta and lung

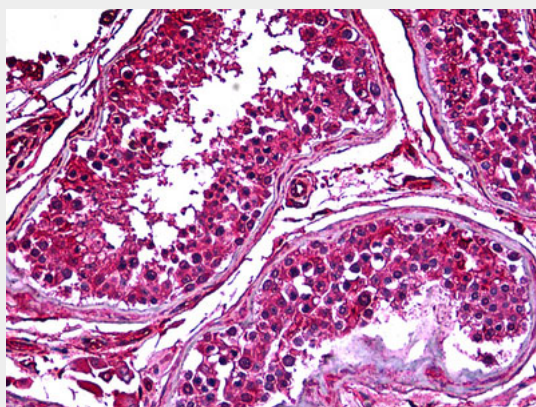
**PDK2 Antibody (clone 2G1) - Protocols**

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](#)

**PDK2 Antibody (clone 2G1) - Images**

PDK2 monoclonal antibody clone 2G1 Western blot of PDK2 expression in U-2 OS.



Anti-PDK2 antibody IHC of human testis.

**PDK2 Antibody (clone 2G1) - Background**

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**PDK2 Antibody (clone 2G1) - References**

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Ota T., et al. Nat. Genet. 36:40-45(2004).  
Zody M.C., et al. Nature 440:1045-1049(2006).  
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
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