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# PDK3 Antibody (Ascites)

**Mouse Monoclonal Antibody (Mab)**
**Catalog # AM2038a**

## Specification

### PDK3 Antibody (Ascites) - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | Q15120 |
| Other Accession | NP_005382.1 |
| Reactivity | **Human** |
| Host | **Mouse** |
| Clonality | **Monoclonal** |
| Isotype | **IgG2b** |
| Calculated MW | **46939** |

### PDK3 Antibody (Ascites) - Additional Information

**Gene ID** 5165

**Other Names**
[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 3, mitochondrial, Pyruvate dehydrogenase kinase isoform 3, PDK3, PDHK3

**Target/Specificity**
Purified His-tagged PDK3 protein(Fragment) was used to produced this monoclonal antibody.

**Dilution**
WB~~1:500~1000
E~~Use at an assay dependent concentration.

**Format**
Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
PDK3 Antibody (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

### PDK3 Antibody (Ascites) - Protein Information

**Name** PDK3

**Synonyms** PDHK3

**Function** Inhibits pyruvate dehydrogenase activity by phosphorylation of the E1 subunit PDHA1,

and thereby regulates glucose metabolism and aerobic respiration. Can also phosphorylate PDHA2. Decreases glucose utilization and increases fat metabolism in response to prolonged fasting, and as adaptation to a high-fat diet. Plays a role in glucose homeostasis and in maintaining normal blood glucose levels in function of nutrient levels and under starvation. Plays a role in the generation of reactive oxygen species.

**Cellular Location**
Mitochondrion matrix.

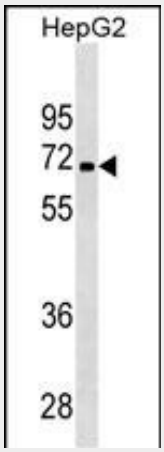
**Tissue Location**
Expressed in heart, skeletal muscle, spinal cord, as well as fetal and adult brain.

## PDK3 Antibody (Ascites) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## PDK3 Antibody (Ascites) - Images




PDK3 Antibody (Cat. #AM2038a) western blot analysis in HepG2 cell line lysates (35µg/lane).This demonstrates the PDK3 antibody detected the PDK3 protein (arrow).

## PDK3 Antibody (Ascites) - Background

The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2). It provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle, and thus is one of the major enzymes responsible for the regulation of glucose metabolism. The enzymatic activity of PDH is regulated by a phosphorylation/dephosphorylation cycle, and phosphorylation results in inactivation of PDH. The protein encoded

by this gene is one of the three pyruvate dehydrogenase kinases that inhibits the PDH complex by phosphorylation of the E1 alpha subunit. This gene is predominantly expressed in the heart and skeletal muscles. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

**PDK3 Antibody (Ascites) - References**

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