

PDK3 Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7040d

Specification

PDK3 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | FC, WB,E |
| Primary Accession | Q15120 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 46939 |

PDK3 Antibody - Additional Information

Gene ID 5165

Other Names

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

Target/Specificity

This PDK3 antibody is generated from rabbits immunized with human PDK3 recombinant protein.

Dilution

FC~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

PDK3 Antibody - 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.

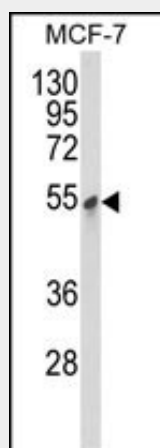
Tissue Location

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

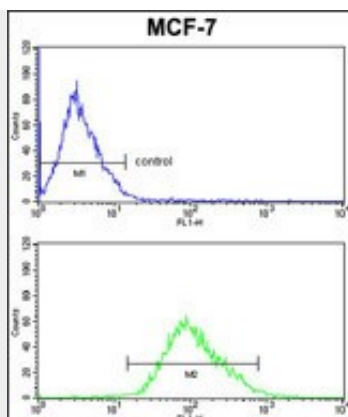
PDK3 Antibody - Protocols

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](#)

PDK3 Antibody - Images

Western blot analysis of PDK3 Antibody (Cat. #AP7040d) in MCF-7 cell line lysates (35ug/lane). PDK3 (arrow) was detected using the purified Pab.



PDK3 Antibody (Cat.#AP7040d) FC analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PDK3 Antibody - Background

PDK3 inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.

PDK3 Antibody - References

Baker, J.C., et al., J. Biol. Chem. 275(21):15773-15781 (2000).
Gudi, R., et al., J. Biol. Chem. 270(48):28989-28994 (1995).

PDK3 Antibody - Citations

- [Regulation of PDK mRNA by high fatty acid and glucose in pancreatic islets.](#)