

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,





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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

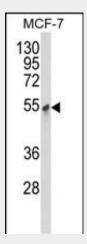
Expressed in heart, skeletal muscle, spinal cord, as well as fetal and adult brain.

PDK3 Antibody - Protocols

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

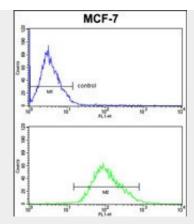
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.