

PDK3 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7040a

Specification

PDK3 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q15120
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

PDK3 Antibody (N-term) - 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 a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PDK3.

Dilution

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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PDK3 Antibody (N-term) - 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

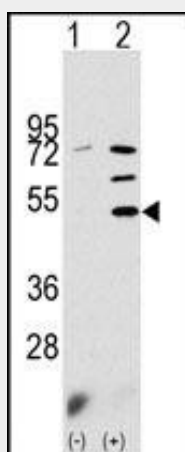
Expressed in heart, skeletal muscle, spinal cord, as well as fetal and adult brain.

PDK3 Antibody (N-term) - Protocols

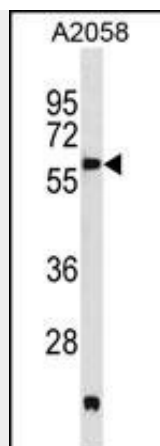
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PDK3 Antibody (N-term) - Images



Western blot analysis of PDK3 (arrow) using rabbit polyclonal PDK3 Antibody (N-term) (Cat# AP7040a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PDK3 gene (Lane 2) (Origene Technologies).



PDK3 Antibody (M1) (Cat. #AP7040a) western blot analysis in A2058 cell line lysates (35ug/lane). This demonstrates the PDK3 antibody detected the PDK3 protein (arrow).

PDK3 Antibody (N-term) - 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 (N-term) - 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 (N-term) - Citations

- [Hijacking of nucleotide biosynthesis and deamidation-mediated glycolysis by an oncogenic herpesvirus](#)
- [Phosphorylation status of pyruvate dehydrogenase distinguishes metabolic phenotypes of cultured rat brain astrocytes and neurons.](#)
- [Pyruvate dehydrogenase complex activity controls metabolic and malignant phenotype in cancer cells.](#)