

Mouse Pdk3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14274b

Specification

Mouse Pdk3 Antibody (C-term) - Product Information

Application WB, IHC-P,E **Primary Accession** O922H2 Other Accession NP 663605.1 Reactivity Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 387-414

Mouse Pdk3 Antibody (C-term) - Additional Information

Gene ID 236900

Other Names

[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 3, mitochondrial, Pyruvate dehydrogenase kinase isoform 3, Pdk3

Target/Specificity

This Mouse Pdk3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 387-414 amino acids from the C-terminal region of mouse Pdk3.

Dilution

WB~~1:1000 IHC-P~~1:10~50

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

Mouse Pdk3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Pdk3 Antibody (C-term) - Protein Information

Name Pdk3





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 (By similarity).

Cellular Location

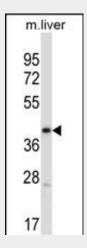
Mitochondrion matrix.

Mouse Pdk3 Antibody (C-term) - Protocols

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

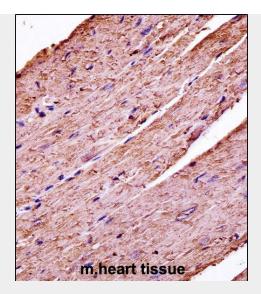
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Pdk3 Antibody (C-term) - Images



Mouse Pdk3 Antibody (C-term) (Cat. #AP14274b) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the Pdk3 antibody detected the Pdk3 protein (arrow).





Mouse Pdk3 Antibody (C-term) (AP14274b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Pdk3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Pdk3 Antibody (C-term) - Background

Pdk3 inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism (By similarity).

Mouse Pdk3 Antibody (C-term) - References

Pagliarini, D.J., et al. Cell 134(1):112-123(2008)
Blackshaw, S., et al. PLoS Biol. 2 (9), E247 (2004):
Visel, A., et al. Nucleic Acids Res. 32 (DATABASE ISSUE), D552-D556 (2004):
Mootha, V.K., et al. Cell 115(5):629-640(2003)
Mouse Pdk3 Antibody (C-term) - Citations

- BCKDK regulates the TCA cycle through PDC in the absence of PDK family during embryonic development
- Metabolomic profiling analysis reveals chamber-dependent metabolite patterns in the mouse heart.