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PDK3 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7040a

Specification

PDK3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q15120

PDK3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 5165

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7040a was selected from the N-term region of human PDK3 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PDK3 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

PDK3 Antibody (N-term) Blocking Peptide - Images

PDK3 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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).