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Anti-PDK2 Antibody
Rabbit polyclonal antibody to PDK2
Catalog # AP60498

Specification

Anti-PDK2 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q15119
Other Accession	Q9JK42
Reactivity	**Human, Mouse, Rat, Monkey, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**46154**

Anti-PDK2 Antibody - Additional Information

Gene ID 5164

Other Names
PDHK2; [Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 2 mitochondrial; Pyruvate dehydrogenase kinase isoform 2; PDH kinase 2; PDKII

Target/Specificity
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PDK2. The exact sequence is proprietary.

Dilution
WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)
IHC~~1:100~500

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-PDK2 Antibody - Protein Information

Name PDK2

Synonyms PDHK2

Function
Kinase that plays a key role in the regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2. This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through the tricarboxylic acid cycle, down-regulates aerobic respiration and inhibits the formation of

acetyl-coenzyme A from pyruvate. Inhibition of pyruvate dehydrogenase decreases glucose utilization and increases fat metabolism. Mediates cellular responses to insulin. Plays an important role in maintaining normal blood glucose levels and in metabolic adaptation to nutrient availability. Via its regulation of pyruvate dehydrogenase activity, plays an important role in maintaining normal blood pH and in preventing the accumulation of ketone bodies under starvation. Plays a role in the regulation of cell proliferation and in resistance to apoptosis under oxidative stress. Plays a role in p53/TP53-mediated apoptosis.

Cellular Location
Mitochondrion matrix.

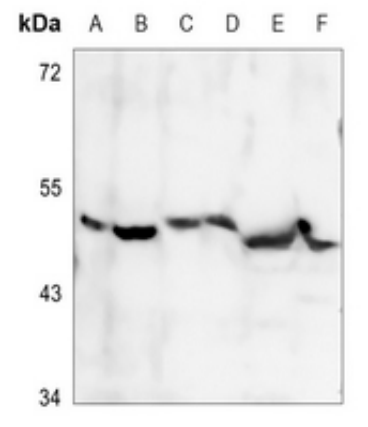
Tissue Location
Expressed in many tissues, with the highest level in heart and skeletal muscle, intermediate levels in brain, kidney, pancreas and liver, and low levels in placenta and lung

Anti-PDK2 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

Anti-PDK2 Antibody - Images



Western blot analysis of PDK2 expression in HEK293T (A), Hela (B), mouse liver (C), mouse kidney (D), rat liver (E), rat kidney (F) whole cell lysates.

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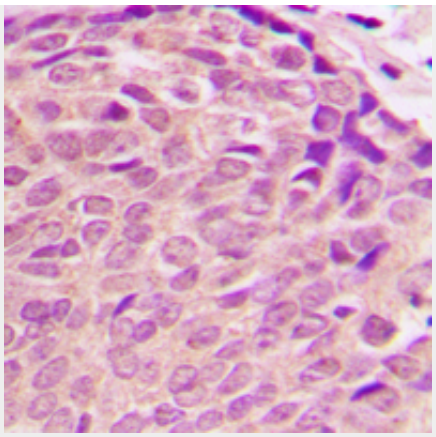

Immunohistochemical analysis of PDK2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-PDK2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PDK2. The exact sequence is proprietary.

Anti-PDK2 Antibody - Citations

- A multiplexed siRNA screen identifies key kinase signaling networks of brain glia