

Anti-PDK2 Monoclonal Antibody

Catalog # ABO14587

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	Q15119
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-PDK2 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	5164
Other Names	[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 2, mitochondrial, 2.7.11.2, Pyruvate dehydrogenase kinase isoform 2, PDH kinase 2, PDKII, PDK2, PDHK2
Calculated MW	46154
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:40 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AEOA-16
Immunogen	A synthesized peptide derived from human PDK2
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	PDK2
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Synonyms

PDHK2

Function

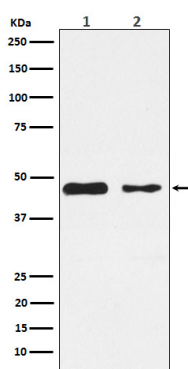
Kinase that plays a key role in the regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2. This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through the tricarboxylic acid cycle, down-regulates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

Images

Western blot analysis of PDK2 expression in (1) SH-SY5Y cell lysate; (2) Mouse heart lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.