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Anti-PDK2 Antibody

Catalog # AP95997

Product Information

Application	WB, FC
Primary Accession	Q15119
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	46154

Additional Information

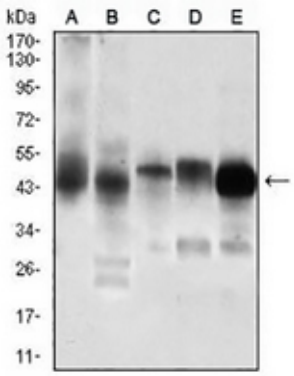
Gene ID	5164
Other Names	PDHK2; [Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 2, mitochondrial; Pyruvate dehydrogenase kinase isoform 2; PDH kinase 2; PDKII
Target/Specificity	Recombinant fusion protein of human PDK2 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG2b. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

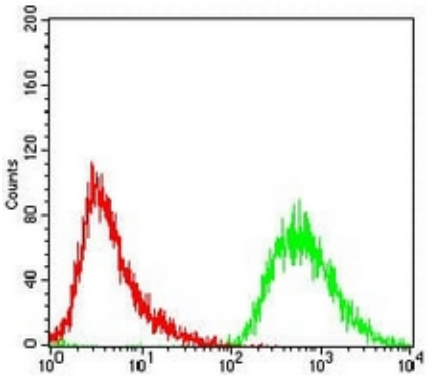
Name	PDK2
Synonyms	PDHK2
Function	Kinase that plays a key role in the regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2. This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through 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

Images



Western blot analysis of PDK2 expression in Jurkat (A), C6 (B), COS7 (C), K562 (D), A431 (E) whole cell lysates. (Predicted band size: 46 kD; Observed band size: 46 kD)



Flow cytometric analysis of A431 cells using Anti-PDK2 Antibody (green) and negative control (red).

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