

ARG40833 anti-PDK2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PDK2
Tested Reactivity	Hu, Rat
Predict Reactivity	Ms, Bov
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PDK2
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 379-392 of Human PDK2. (WRHYQTIQEAGDWC)
Conjugation	Un-conjugated
Alternate Names	PDHK2; PDKII; [Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 2, mitochondrial; EC 2.7.11.2; Pyruvate dehydrogenase kinase isoform 2; PDH kinase 2; PDKII

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

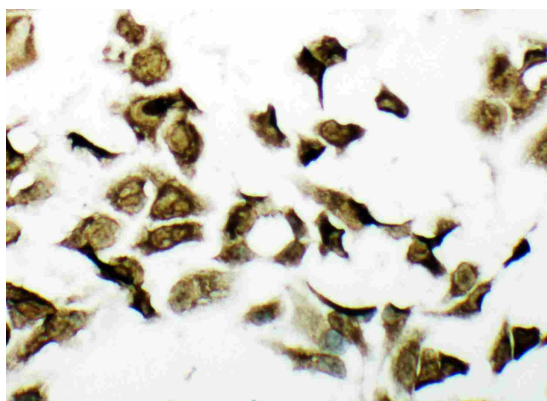
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

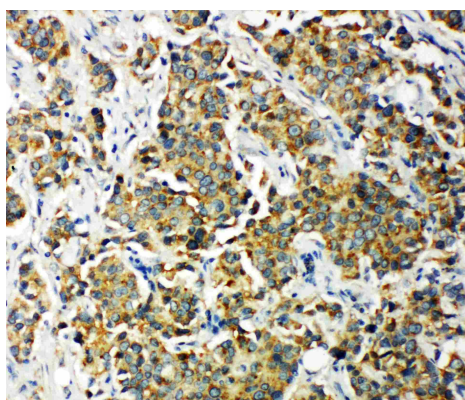
Gene Symbol	PK2
Gene Full Name	pyruvate dehydrogenase kinase, isozyme 2
Background	This gene encodes a member of the pyruvate dehydrogenase kinase family. The encoded protein phosphorylates pyruvate dehydrogenase, down-regulating the activity of the mitochondrial pyruvate dehydrogenase complex. Overexpression of this gene may play a role in both cancer and diabetes. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]
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. [UniProt]
Calculated Mw	46 kDa
Cellular Localization	Mitochondrion matrix. [UniProt]

Images



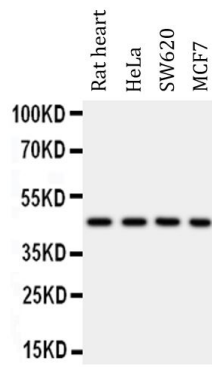
ARG40833 anti-PDK2 antibody ICC image

Immunocytochemistry: HeLa cells stained with ARG40833 anti-PDK2 antibody.



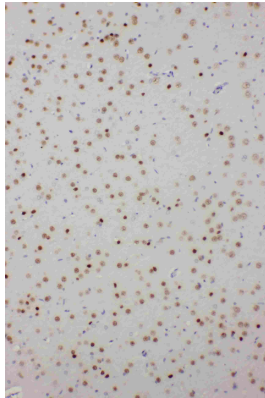
ARG40833 anti-PDK2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue stained with ARG40833 anti-PDK2 antibody.



ARG40833 anti-PDK2 antibody WB image

Western blot: Rat heart, HeLa, SW620 and MCF7 cell lysates stained with ARG40833 anti-PDK2 antibody.



ARG40833 anti-PDK2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain tissue stained with ARG40833 anti-PDK2 antibody.