

## PDK2 Antibody

Catalog No: #34945

Package Size: #34945-1 50ul #34945-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

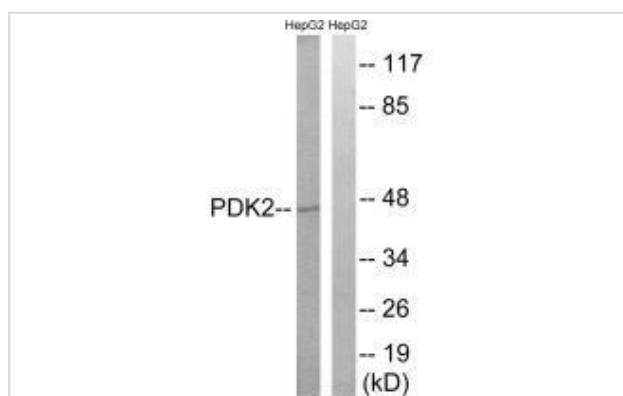
## Description

Product Name	PDK2 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total PDK2 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human PDK2.
Target Name	PDK2
Other Names	EC 2.7.11.2; kinase Pyruvate dehydrogenase kinase 2; PDK2; Pyruvate dehydrogenase [lipoamide] kinase isozyme 2; mitochondrial precursor
Accession No.	Swiss-Prot: Q15119NCBI Gene ID: 5164
Uniprot	Q15119
GeneID	5164;
SDS-PAGE MW	46kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

Western blotting: 1:500~1:3000

## Images



Western blot analysis of extracts from HepG2 cells, using PDK2 antibody #34945.

## Background

Serine/threonine 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.

Gudi R., J. Biol. Chem. 270:28989-28994(1995).

The MGC Project Team, Genome Res. 14:2121-2127(2004).

Greenman C., Nature 446:153-158(2007).

Note: This product is for in vitro research use only