

PDK1 Antibody

Catalog No: #34944

Package Size: #34944-1 50ul #34944-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

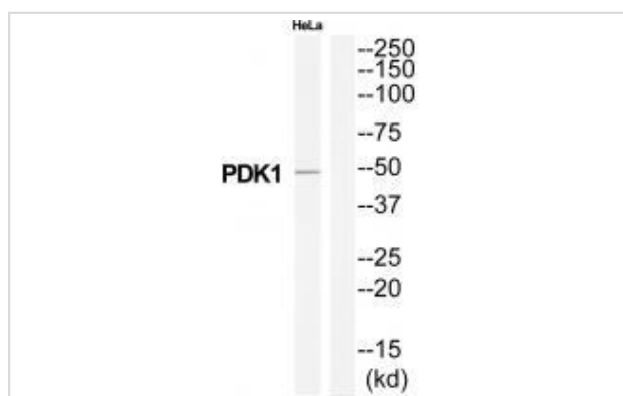
Description

Product Name	PDK1 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 Rt
Specificity	The antibody detects endogenous levels of total PDK1 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from Internal of human PDK1.
Target Name	PDK1
Other Names	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1; mitochondrial; mitochondrial pyruvate dehydrogenase; lipoamide; kinase isoenzyme 1
Accession No.	Swiss-Prot: Q15118NCBI Gene ID: 5163
Uniprot	Q15118
GeneID	5163;
SDS-PAGE MW	49kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), 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 HeLa cells, using PDK1 antibody #34944.

Background

Serine/threonine kinase that plays a key role in 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. Plays an important role in cellular responses to hypoxia and is important for cell proliferation under hypoxia. Protects cells against apoptosis in response to hypoxia and oxidative stress.

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

Ota T., Nat. Genet. 36:40-45(2004).

Burkard T.R., BMC Syst. Biol. 5:17-17(2011).

Note: This product is for in vitro research use only