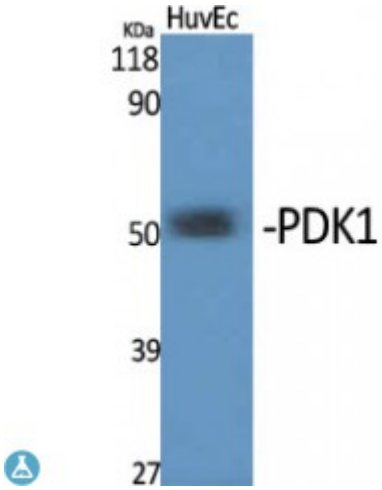
Anti-PDK1 antibody



Description	Rabbit polyclonal to PDK1.

Model	STJ95009
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human PDK1
Immunogen Region	80-160 aa, Internal
Gene ID	5163
Gene Symbol	PDK1
Dilution range	WB 1:500-1:2000ELISA 1:5000
Specificity	PDK1 Polyclonal Antibody detects endogenous levels of PDK1 protein.
Tissue Specificity	Expressed predominantly in the heart. Detected at lower levels in liver, skeletal muscle and pancreas.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Pyruvate dehydrogenase acetyl-transferring kinase isozyme 1, mitochondrial Pyruvate dehydrogenase kinase isoform 1 PDH kinase 1
Molecular Weight	50 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:8809OMIM:602524
Alternative Names	Pyruvate dehydrogenase acetyl-transferring kinase isozyme 1, mitochondrial Pyruvate dehydrogenase kinase isoform 1 PDH kinase 1
Function	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.
Cellular Localization	Mitochondrion matrix
Post-translational Modifications	Phosphorylated by constitutively activated ABL1, FGFR1, FLT3 and JAK2 (in vitro), and this may also occur in cancer cells that express constitutively activated ABL1, FGFR1, FLT3 and JAK2. Phosphorylation at Tyr-243 and Tyr-244 strongly increases kinase activity, while phosphorylation at Tyr-136 has a lesser effect.