

PDHK1(Phospho-Tyr243) Antibody

Catalog No: #11597



Package Size: #11597-1 50ul #11597-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

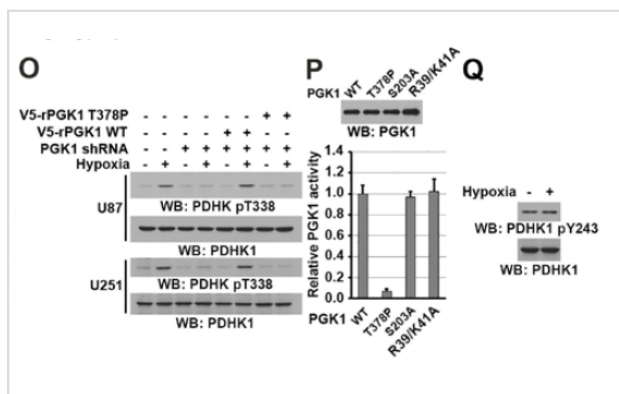
Description

Product Name	PDHK1(Phospho-Tyr243) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Rt
Specificity	The antibody detects endogenous level of PDHK1 only when phosphorylated at tyrosine 243.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 243(D-L-Y(p)-Y-I) derived from Human PDHK1.
Target Name	PDHK1
Modification	Phospho
Other Names	PDK1; PDH kinase 1
Accession No.	Swiss-Prot: Q15118NCBI Protein: NP_001265478.1
Target Species	Human
Calculated MW	49kd
Concentration	1.0mg/mL
Formulation	Supplied at 1.0mg/mL 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 for long term preservation (recommended). Store at 4°C for short term use.

Application Details

Western blotting: 1:500~1:1000

Images



U87 cells were stimulated with or without hypoxia for 6 h. Immunoblotting analyses of mitochondrial lysates were performed with the indicated antibodies

Background

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., Bowker-Kinley M.M., Kedishvili N.Y., Zhao Y., Popov K.M.J. *Biol. Chem.* 270:28989-28994(1995)

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

Published Papers

el at., Pyruvate dehydrogenase inactivation causes glycolytic phenotype in BAP1 mutant uveal melanoma. In *Oncogene* on 2022 Feb by Anna Han, Vivian Chua, et al.. PMID:35046531, , (2022)

[PMID:35046531](#)

Li X, et al. el at., Mitochondria-Translocated PGK1 Functions as a Protein Kinase to Coordinate Glycolysis and the TCA Cycle in Tumorigenesis., *Mol Cell.*, 3:61(5):705-19.(2016 Mar)

[PMID:26942675](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.