

PDHK1(Phospho-Tyr243) Antibody

Catalog No: #11597

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

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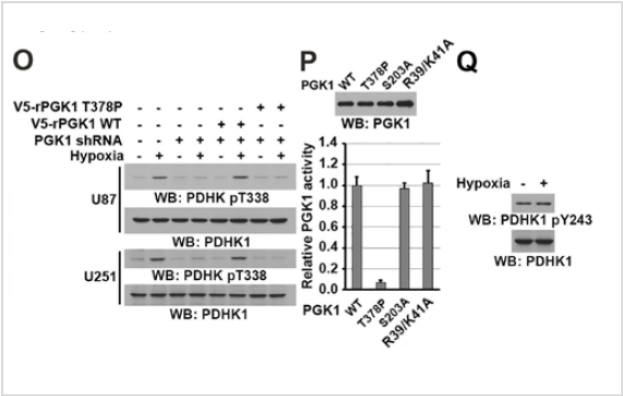
Description

|                       |                                                                                                                                                                                                                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | PDHK1(Phospho-Tyr243) Antibody                                                                                                                                                                                                                                                          |
| Host Species          | Rabbit                                                                                                                                                                                                                                                                                  |
| Clonality             | Polyclonal                                                                                                                                                                                                                                                                              |
| Purification          | Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.<br>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    | Human;Rat                                                                                                                                                                                                                                                                               |
| 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.                                                                                                                                                                                    |
| Conjugates            | Unconjugated                                                                                                                                                                                                                                                                            |
| 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 Mg2+ and Ca2+), 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 TeamGenome Res. 14:2121-2127(2004)

## Published Papers

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](#)

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](#)

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