



PDK1 Monoclonal Antibody

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|---------------------------|--|
| Catalog No | YP-Ab-02337 |
| Isotype | IgG |
| Reactivity | Human;Rat;Monkey |
| Applications | WB;IHC;IF;FCM;ELISA |
| Gene Name | PDK1 |
| Protein Name | [Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1 mitochondrial |
| Immunogen | Purified recombinant fragment of human PDK1 expressed in E. Coli. |
| Specificity | PDK1 Monoclonal Antibody detects endogenous levels of PDK1 protein. |
| Formulation | Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol. |
| Source | Monoclonal, Mouse |
| Purification | Affinity purification |
| Dilution | Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications. |
| Concentration | 1 mg/ml |
| Purity | ≥90% |
| Storage Stability | -20°C/1 year |
| Synonyms | PDK1; PDHK1; [Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1; mitochondrial; Pyruvate dehydrogenase kinase isoform 1 |
| Observed Band | |
| Cell Pathway | Mitochondrion matrix . |
| Tissue Specificity | Expressed predominantly in the heart. Detected at lower levels in liver, skeletal muscle and pancreas. |
| Function | catalytic activity:ATP + [pyruvate dehydrogenase (acetyl-transferring)] = ADP + [pyruvate dehydrogenase (acetyl-transferring)] phosphate.,function:Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.,similarity:Belongs to the PDK/BCKDK protein kinase family.,similarity:Contains 1 histidine kinase domain.,tissue specificity:Expressed predominantly in the heart., |
| Background | Pyruvate dehydrogenase (PDH) is a mitochondrial multienzyme complex that catalyzes the oxidative decarboxylation of pyruvate and is one of the major enzymes responsible for the regulation of homeostasis of carbohydrate fuels in mammals. The enzymatic activity is regulated by a phosphorylation/dephosphorylation cycle. Phosphorylation of PDH by a specific pyruvate dehydrogenase kinase (PDK) results in inactivation. Multiple alternatively spliced transcript variants have been found for this gene. [provided |



by RefSeq, Jun 2013],

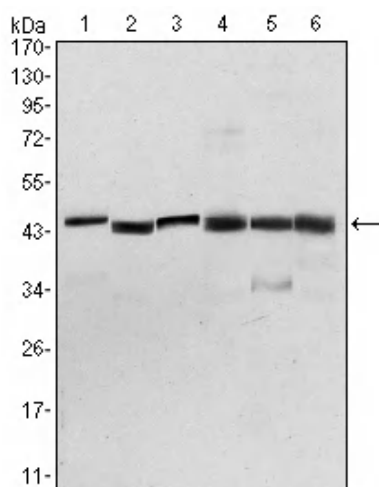
matters needing attention

Avoid repeated freezing and thawing!

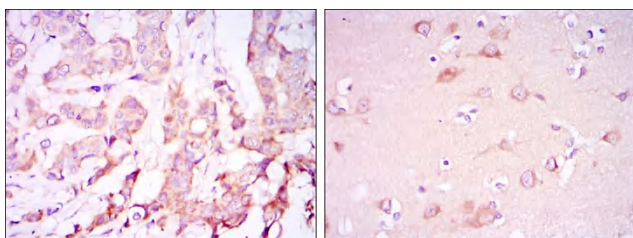
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

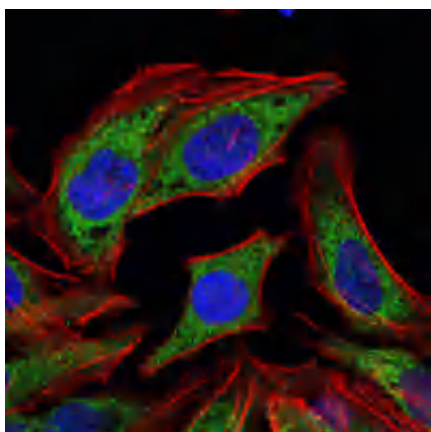
Products Images



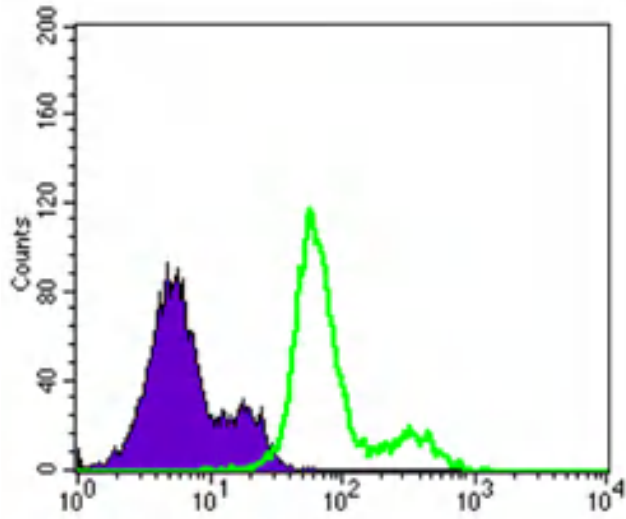
Western Blot analysis using PDK1 Monoclonal Antibody against NIH/3T3 (1), HeLa (2), Jurkat (3), HepG2 (4), PC-12 (5), and Cos7 (6) cell lysate.



Immunohistochemistry analysis of paraffin-embedded breast cancer tissues (left) and brain tissues (right) with DAB staining using PDK1 Monoclonal Antibody.



Immunofluorescence analysis of HELA cells using PDK1 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Lovo cells using PDK1 Monoclonal Antibody (green) and negative control (purple).