

# Recombinant Human PDK1, His-tagged

**Cat. No.** PDK1-30240TH    **Lot. No.** (See product label)

## SPECIFICATION

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>   | Recombinant full length Human Mitochondrial Pyruvate dehydrogenase kinase 1 with His tag.                                                                                                                                                                                                                                                                                                                                        |
| <b>Species</b>            | Human                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>ProteinLength</b>      | 408 amino acids                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Description</b>        | 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. |
| <b>Conjugation</b>        | HIS                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Tissue specificity</b> | Expressed predominantly in the heart.                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Form</b>               | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage buffer</b>     | pH: 7.50 Constituents: 0.14% Sodium phosphate, 1.46% Sodium chloride, 30% Glycerol, 0.08% DTT, 0.02% EDTA, 0.05% Triton-X-100                                                                                                                                                                                                                                                                                                    |
| <b>Storage</b>            | Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.                                                                                                                                                                                                                                                                                                                                        |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Sequence Similarities** Belongs to the PDK/BCKDK protein kinase family.Contains 1 histidine kinase domain.

## GENE INFORMATION

|                            |                                                                                                                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | PDK1 pyruvate dehydrogenase kinase, isozyme 1 [ Homo sapiens ]                                                                                                                                                                                                          |
| <b>Official Symbol</b>     | PDK1                                                                                                                                                                                                                                                                    |
| <b>Synonyms</b>            | PDK1; pyruvate dehydrogenase kinase, isozyme 1; pyruvate dehydrogenase kinase, isoenzyme 1;                                                                                                                                                                             |
| <b>Gene ID</b>             | 5163                                                                                                                                                                                                                                                                    |
| <b>mRNA Refseq</b>         | NM_002610                                                                                                                                                                                                                                                               |
| <b>Protein Refseq</b>      | NP_002601                                                                                                                                                                                                                                                               |
| <b>MIM</b>                 | 602524                                                                                                                                                                                                                                                                  |
| <b>Uniprot ID</b>          | Q15118                                                                                                                                                                                                                                                                  |
| <b>Chromosome Location</b> | 2q31.1                                                                                                                                                                                                                                                                  |
| <b>Pathway</b>             | EPO Receptor Signaling, organism-specific biosystem; ErbB signaling pathway, organism-specific biosystem; Fc epsilon RI signaling pathway, organism-specific biosystem; Fc epsilon RI signaling pathway, conserved biosystem; Hepatitis C, organism-specific biosystem; |
| <b>Function</b>            | ATP binding; nucleotide binding; protein complex binding; protein heterodimerization activity; protein homodimerization activity;                                                                                                                                       |

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