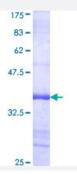


# PDK1 (Human) Recombinant Protein (Q01)

Catalog # H00005163-Q01 Size 25 ug, 10 ug

# **Applications**



| Specification                    |  |
|----------------------------------|--|
| Product Description              | Human PDK1 partial ORF ( AAH39158, 203 a.a 302 a.a.) recombinant protein with GST-tag at N-t erminal.    |
| Sequence                         | GGKGKGSPSHRKHIGSINPNCNVLEVIKDGYENARRLCDLYYINSPELELEELNAKSPGQPIQVVYV<br>PSHLYHMVFELFKNAMRATMEHHANRGVYPPIQ |
| Host                             | Wheat Germ (in vitro)  |
| Theoretical MW (kDa)             | 36.63  |
| Interspecies Antigen<br>Sequence | Mouse (94); Rat (96)   |
| Preparation Method               | in vitro wheat germ expression system  |
| Purification                     | Glutathione Sepharose 4 Fast Flow  |
| Quality Control Testing          | 12.5% SDS-PAGE Stained with Coomassie Blue.  |
| Storage Buffer                   | 50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.                                 |
| Storage Instruction              | Store at -80°C. Aliquot to avoid repeated freezing and thawing.  |
| Note                             | Best use within three months from the date of receipt of this protein.                                   |



# **Applications**

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

| Gene Info — PDK1    |  |
|---------------------|--|
| Entrez GenelD       | <u>5163</u>  |
| GeneBank Accession# | BC039158   |
| Protein Accession#  | AAH39158   |
| Gene Name           | PDK1   |
| Gene Alias          | -  |
| Gene Description    | pyruvate dehydrogenase kinase, isozyme 1   |
| Omim ID             | 602524   |
| Gene Ontology       | <u>Hyperlink</u>   |
| Gene Summary        | Pyruvate dehydrogenase (PDH) is a mitochondrial multienzyme complex that catalyzes the oxidati ve decarboxylation of pyruvate and is one of the major enzymes responsible for the regulation of h omeostasis of carbohydrate fuels in mammals. The enzymatic activity is regulated by a phosphory lation/dephosphorylation cycle. Phosphorylation of PDH by a specific pyruvate dehydrogenase kin ase (PDK) results in inactivation. [provided by RefSeq |
| Other Designations  | mitochondrial pyruvate dehydrogenase kinase isoenzyme 1 pyruvate dehydrogenase kinase, isoe nzyme 1  |

### **Publication Reference**



#### **Product Information**

 Activation of 3-phosphoinositide-dependent kinase 1 (PDK1) and serum- and glucocorticoid-induced protein kinase 1 (SGK1) by short-chain sphingolipid C4-ceramide rescues the trafficking defect of ΔF508-cystic fibrosis transmembrane conductance regulator (ΔF508-CFTR).

Caohuy H, Yang Q, Eudy Y, Ha TA, Xu AE, Glover M, Frizzell RA, Jozwik C, Pollard HB.

The Journal of Biological Chemistry 2014 Dec; 289(52):35953.

Application: KA, Recombinant protein

### Pathway

- Fc epsilon RI signaling pathway
- Neurotrophin signaling pathway
- T cell receptor signaling pathway

#### Disease

- Diabetes Mellitus
- Genetic Predisposition to Disease