

Recombinant Mouse Pdk2 Protein, Myc/DDK-tagged

Cat. No. Pdk2-4767M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of mouse full-length pyruvate dehydrogenase kinase, isoenzyme 2 (Pdk2), with C-terminal MYC/DDK tag, expressed in HEK293T cells.
Species	Mouse
Source	HEK293
Description	Kinase that plays a key role in the 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. Inhibition of pyruvate dehydrogenase decreases glucose utilization and increases fat metabolism. Mediates cellular responses to insulin. Plays an important role in maintaining normal blood glucose levels and in metabolic adaptation to nutrient availability. Via its regulation of pyruvate dehydrogenase activity, plays an important role in maintaining normal blood pH and in preventing the accumulation of ketone bodies under starvation. Plays a role in the regulation of cell proliferation and in resistance to apoptosis under oxidative stress. Plays a role in p53/TP53-mediated apoptosis.
Molecular Mass	46 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining

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Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade after receiving vials.
Concentration	>50 µg/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	Pdk2 pyruvate dehydrogenase kinase, isoenzyme 2 [Mus musculus (house mouse)]
Official Symbol	Pdk2
Synonyms	PDK2; pyruvate dehydrogenase kinase, isoenzyme 2; pyruvate dehydrogenase 2; pyruvate dehydrogenase kinase, isozyme 2; [Pyruvate dehydrogenase [lipoamide]] kinase isozyme 2, mitochondrial
Gene ID	18604
mRNA Refseq	NM_133667
Protein Refseq	NP_598428
UniProt ID	Q9JK42

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