

Product datasheet for TP506400

OriGene Technologies, Inc.

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Pdk2 (NM_133667) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse pyruvate dehydrogenase kinase, isoenzyme 2 (Pdk2),

with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA Clone

>MR206400 protein sequence Red=Cloning site Green=Tags(s)

or AA Sequence: Red=Cloning site Green=Tags(s)

MRWVRALLKNASLAGAPKYIEHFSKFSPSPLSMKQFLDFGSSNACEKTSFTFLRQELPVRLANIMKEINL LPDRVLGTPSVQLVQSWYVQSLLDIMEFLDKDPEDHRTLSQFTDALVTIRNRHNDVVPTMAQGVLEYKDT YGDDPVSNQNIQYFLDRFYLSRISIRMLINQHTLIFDGSTNPAHPKHIGSIDPNCSVSDVVKDAYDMAKL LCDKYYMASPDLEIQEVNATNANQPIHMVYVPSHLYHMLFELFKNAMRATVESHESSLTLPPIKIMVALG EEDLSIKMSDRGGGVPLRKIERLFSYMYSTAPTPQPGTGGTPLAGFGYGLPISRLYAKYFQGDLQLFSME

GFGTDAVIYLKALSTDSVERLPVYNKSAWRHYQTIQEAGDWCVPSTEPKNTSTYRVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 46 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: <u>NP 598428</u>

 Locus ID:
 18604

 UniProt ID:
 Q9JK42





Pdk2 (NM_133667) Mouse Recombinant Protein - TP506400

RefSeq Size: 2279

Cytogenetics: 11 59.01 cM

RefSeq ORF: 1224

Summary: 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.

[UniProtKB/Swiss-Prot Function]