

Product datasheet for **RG227065**

PDK3 (NM_001142386) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDK3 (NM_001142386) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDK3
Synonyms:	CMTX6; GS1-358P8.4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG227065 representing NM_001142386 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGCTGTTCCGGTGGCTGCTGAAGCAGCCGGTGCCCAAGCAGATCGAGCGCTACTCGCGCTTTTCGC
CGTCGCCGCTCTCCATCAAACAATTCCTGGACTCGGGAGAGATAATGCATGTGAGAAAACCTCATATAT
GTTTCTACGAAAGGAACCTCCTGTGCGGCTGGCTAACACAATGAGAGAAGTTAATCTTCTGCCGATAAT
TACTTAAACCGCCCTCAGTGGGATTGGTTCAGAGTTGGTATATGCAGAGTTTCTTGAACCTTTAGAAAT
ATGAAAATAAGAGCCCTGAGGATCCACAGTCTTGGATAACTTTCTACAAGTTCTGATTAAGTCAGAAA
TAGACACAATGATGTGGTTCCTACAATGGCACAAGGAGTGATTGAATACAAGGAGAAGTTTGGGTTTGAT
CCTTTCATTAGCACTAACATCCAATATTTCTGGATCGGTTTTATACCAACCGCATCTCTTCCGCATGC
TTATTAATCAGCACACACTTCTGTTTGGGGTGACACTAATCCTGTTTCCTAAACACATAGGAAGTAT
CGATCCCACCTGTAACTGGCGGATGTGGTGAAAGATGCATATGAAACAGCCAAGATGCTGTGTGAACAG
TATTACCTGGTAGCTCCAGAGCTGGAAGTTGAAGAATTCATGCCAAAGCGCCAGACAAACCTATTCAGG
TGGTTTATGTGCCCTCACATCTGTTTCATATGCTATTTGAGTTGTTCAAGAACTCAATGAGAGCGACAGT
TGAACCTATGAAGACAGAAAAGAGGGCTACCCGTGCTGTTAAAACCTCGTTACTTTGGGTAAGAAGAC
TTATCCATTAAGATCAGTGACCTAGTGGTGGTGTCCCACTTCGAAAAATAGATCGTCTTTTAACTACA
TGTATTCTACTGCTCCTAGACCCAGCCTGGAGCCTACCAGAGCTGCCCTTTGGCTGGATTGGTTATGG
TTTGCCAAATTTCCGCTGTATGCTAGATATTTCAAGGAGATCTGAAACTGTATTCCATGGAAGGAGTG
GGTACTGATGCTGCATTTATTTGAAGGCTCTTCAAGTGAGTCAATTTGAGAGACTTCCAGTTTTTAATA
AGTCCGCATGGCGCCATTACAAGACCACGCTGAAGCCGATGATTGGAGCAATCCAGCAGTGAACCCAG
GGATGCTTCAAAATACAAAGCAAAACAAGACAAGATCAAGACTAATAGAACTTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG227065 representing NM_001142386
 Red=Cloning site Green=Tags(s)

MRLFRWLLKQVPVKQIERYSRFSPLSIKQFLDFGRDNACEKTSYMFLRKELPVRLANTMREVNLLPDN
 LLNRPSVGLVQSWYMQSFLELLEYENKSPEDPQVLDNQLVLIKVRNRHNDVVPTMAQGVIEYKEKFGFD
 PFISTNIQYFLDRFYTNRISFRMLINQHTLLFGGDTNPVHPKHIGSIDPTCNVADVVKDAYETAKMLCEQ
 YYLVAPELEVEEFNAKAPDKPIQVYVPSHLFHMLFELFKNSMRATVELYEDRKEGYPAVKTLVTLGKED
 LSIKISDLGGGVPLRKIDRLFNYMYSTAPRPSLEPTRAAPLAGFGYGLPI SRLYARYFQGLKLYSMEGV
 GTDAVIYLKALSSSEFERLPVFNKSAWRHYKTTPEADDWSNPSSSEPRDASKYKAKQDKIKTNRTF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001142386

ORF Size: 1245 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001142386.3](#)

RefSeq Size: 2162 bp

RefSeq ORF: 1248 bp

Locus ID: 5165

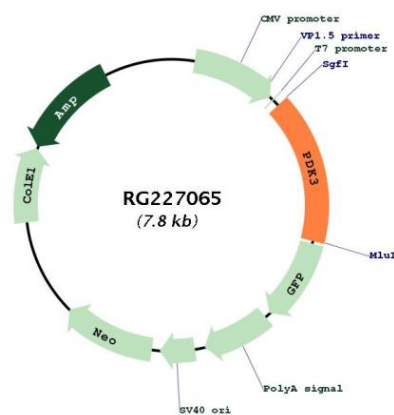
UniProt ID: [Q15120](#)

Cytogenetics: Xp22.11

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO₂. It provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle, and thus is one of the major enzymes responsible for the regulation of glucose metabolism. The enzymatic activity of PDH is regulated by a phosphorylation/dephosphorylation cycle, and phosphorylation results in inactivation of PDH. The protein encoded by this gene is one of the three pyruvate dehydrogenase kinases that inhibits the PDH complex by phosphorylation of the E1 alpha subunit. This gene is predominantly expressed in the heart and skeletal muscles. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010]

Product images:



Circular map for RG227065