

## Product datasheet for MR206565

### Pdk3 (NM\_145630) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pdk3 (NM_145630) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pdk3
Synonyms:	2610001M10Rik; AI035637
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206565 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGGCTCTTCTACCGGCTGCTCAAGCAGCCGGTCCCCAAGCAGATCGAGCGCTACTCCCGTTCTCCC  
CGTCGCCACTGTCTATCAAACAGTTCCTGGACTTCGGAAGGGATAATGCATGTGAAAAAAGTTCTATAT  
GTTTCTGCGCAAGGAACCTCCTGTGCGACTGGCTAACACCATGAGAGAGGTTAATCTCTTGCCGGATAAC  
TTGTTGAACCGCCCTCCGTGGGATTAGTTCAGAGCTGGTACATGCAGAGCTTCTTGAACCTTTAGAAAT  
ATGAAAAACAAGAGCCAGAAGACCCACGAGTTTTGGATAACTTTCTCAACGTTCTGATAAATATCAGAAA  
CAGACACAATGATGTTGTTCTACAATGGCCCAAGGCGTGATTGAGTACAAGGAAAAGTTCCGGGTTTGAT  
CCGTTCCATTAGCAGTAACATTCAATATTTCTGGATCGGTTTTATACCAACCGCATTTCTTTCCGCATGC  
TTATTAACCAGCACACACTTCTGTTTGGTGGTGACACTAACCCCTGCATCCGAAACATATAGGGAGTAT  
CGACCCCACTGTAATGTAGCTGATGTGGTTAAAGATGCATATGAAACAGCCAAGATGCTTTGTGAACAG  
TATTACCTGGTAGCTCCAGAGCTAGAAGTTGAAGAATCAATGCCAAAGCGCCAAACAAACCCATTACAGG  
TAGTTTATGTCCCGTCACATCTGTTTACATGCTATTTGAGCTGTTCAAGAACTCAATGAGGGCAACAGT  
TGAACATACATGAAGATAAAAAAGAAGGCTACCCAGCTGTTAAACTCTCGTTACTCTGGGTAAGAAGAC  
TTGTCCATTAAGATAAGTGACCTAGGTGGTGGAGTCCCACTTCGAAAAATAGACCGTCTTTTAACTACA  
TGTAACAACCTGCTCCTCGTCCCAGCCTGGAGCCTACAAGAGCGGCGCCCTTGGCTGGATTGGTTATGG  
CTTGCCAAATTTCTCGTCTGTATGCCAGATATTTTCAAGGAGATCTAAAAGTATTCCATGGAAGGAGTG  
GGTACCGATGCAGTCATTTATTTGAAGGCCCTTCAAGTGAATCCTTTGAGAGGCTGCCAGTTTTCAATA  
AGTCTGCATGGCGCCATTACAAGACCACTCCTGAAGCTGATGACTGGAGCAATCCAGCAGTGAACCAAG  
GGATGCATCAAAATACAAGGCTAAACAGGACAAGATCAAGAGTAATAGAAGCTTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR206565 protein sequence  
Red=Cloning site Green=Tags(s)

MRLFYRLKQPVPKQIERYSRFSPLSIKQFLDFGRDNACEKTSYMFLRKELPVRANTMREVNLLPDN  
 LLNRPSVGLVQSWYMQSFLLELEYENKSPEDPRVLDNFDNLNVLINIRNRHNDVVPTMAQGVIEYKEKFGFD  
 PFISSNIQYFLDRFYTNRISFRMLINQHTLLFGGDTNPAHPKHIGSIDPTCNVADVVKDAYETAKMLCEQ  
 YYLVAPELEVEEFNAKAPNKPIQVYVPSHLFHMLFELFKNSMRATVELHEDKKEGYPAVKTLVTLGKED  
 LSIKISDLGGGVPLRKIDRLFNYMYSTAPRPSLEPTRAAPLAGFGYGLPISRLYARYFQGLKLYSMEGV  
 GTDAVIYLKALSSSEFERLPVFNKSAWRHYKTTPEADDWSNPSSSEPRDASKYKAKQDKIKSNRTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_145630

**ORF Size:** 1248 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\\_145630.3](#)

**RefSeq Size:** 2000 bp

**RefSeq ORF:** 1248 bp

**Locus ID:** 236900

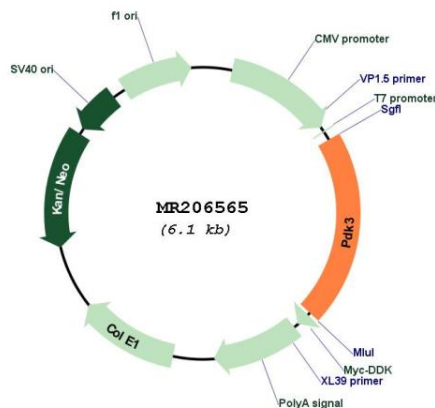
**UniProt ID:** [Q922H2](#)

**Cytogenetics:** X C3

**MW:** 47.9 kDa

**Gene Summary:** Inhibits pyruvate dehydrogenase activity by phosphorylation of the E1 subunit PDHA1, and thereby regulates glucose metabolism and aerobic respiration. Can also phosphorylate PDHA2. Decreases glucose utilization and increases fat metabolism in response to prolonged fasting, and as adaptation to a high-fat diet. Plays a role in glucose homeostasis and in maintaining normal blood glucose levels in function of nutrient levels and under starvation. Plays a role in the generation of reactive oxygen species (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR206565