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Product datasheet for MG206565

Pdk3 (NM_145630) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pdk3 (NM_145630) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pdk3
Synonyms:	2610001M10Rik; AI035637
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG206565 representing NM_145630
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGCTCTTCTACCGGCTGCTCAAGCAGCCGGTCCCCAAGCAGATCGAGCGCTACTCCCGCTTCTCCC
CGTCGCCACTGTCTATCAAACAGTTCCTGGACTTCGGAAGGGATAATGCATGTGAAAAAACTTCCTATAT
GTTTCTGCGCAAGGAACTTCCTGTGCGACTGGCTAACACCATGAGAGAGGTTAATCTCTTGCCGGATAAC
TTGTTGAACCGCCCTTCCGTGGGATTAGTTCAGAGCTGGTACATGCAGAGCTTCCTTGAACTTTTAGAAT
ATGAAAACAAGAGCCCAGAAGACCCACGAGTTTTGGATAACTTTCTCAACGTTCTGATAAATATCAGAAA
CAGACACAATGATGTTGTTCCTACAATGGCCCAAGGCGTGATTGAGTACAAGGAAAAGTTCGGGTTTGAT
CCGTTCATTAGCAGTAACATTCAATATTTCCTGGATCGGTTTTATACCAACCGCATTTCTTTCCGCATGC
TTATTAACCAGCACACACTTCTGTTTGGTGGTGACACTAACCCTGCACATCCGAAACATATAGGGAGTAT
CGACCCCACCTGTAATGTAGCTGATGTGGTTAAAGATGCATATGAAACAGCCAAGATGCTTTGTGAACAG
TATTACCTGGTAGCTCCAGAGCTAGAAGTTGAAGAATTCAATGCCAAAGCGCCAAACAAACCCATTCAGG
TAGTTTATGTGCCGTCACATCTGTTTCACATGCTATTTGAGCTGTTCAAGAACTCAATGAGGGCAACAGT
TGAACTACATGAAGATAAAAAAGAAGGCTACCCAGCTGTTAAAACTCTCGTTACTCTGGGTAAAGAAGAC
TTGTCCATTAAGATAAGTGACCTAGGTGGTGGAGTCCCACTTCGAAAAATAGACCGTCTTTTTAACTACA
TGTACTCAACTGCTCCTCGTCCCAGCCTGGAGCCTACAAGAGCGGCGCCCTTGGCTGGATTTGGTTATGG
CTTGCCAATTTCTCGTCTGTATGCCAGATATTTTCAGGGAGATCTAAAACTGTATTCCATGGAAGGAGTG
GGTACCGATGCAGTCATTTATTTGAAGGCCCTTTCAAGTGAATCCTTTGAGAGGCTGCCAGTTTTCAATA
AGTCTGCATGGCGCCATTACAAGACCACTCCTGAAGCTGATGACTGGAGCAATCCCAGCAGTGAACCAAG
GGATGCATCAAAATACAAGGCTAAACAGGACAAGATCAAGAGTAATAGAACTTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

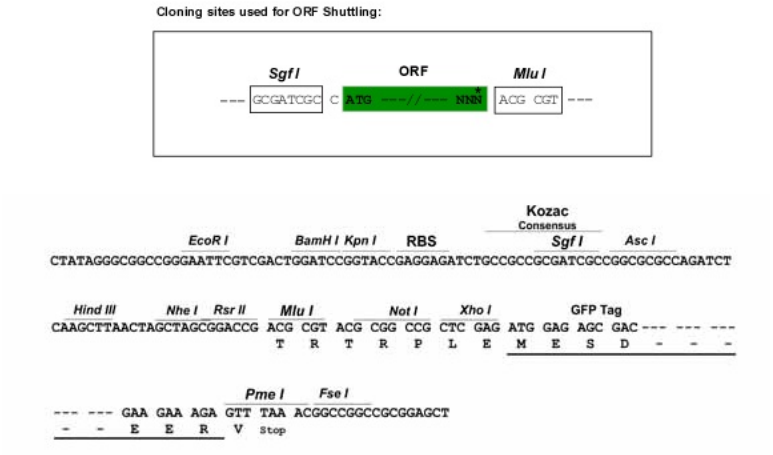
>MG206565 representing NM_145630
Red=Cloning site Green=Tags(s)

MRLFYRLLKQPVPKQIERYSRFSPSPLSIKQFLDFGRDNACEKTSYMFLRKELPVRLANTMREVNLLPDN
LLNRPSVGLVQSWYMQSFLELLEYENKSPEDPRVLDNFLNVLINIRNRHNDVVPTMAQGVIEYKEKFGFD
PFISSNIQYFLDRFYTNRISFRMLINQHTLLFGGDTNPAHPKHIGSIDPTCNVADVVKDAYETAKMLCEQ
YYLVAPELEVEEFNAKAPNKPIQVVYVPSHLFHMLFELFKNSMRATVELHEDKKEGYPAVKTLVTLGKED
LSIKISDLGGGVPLRKIDRLFNYMYSTAPRPSLEPTRAAPLAGFGYGLPISRLYARYFQGDLKLYSMEGV
GTDAVIYLKALSSESFERLPVFNKSAWRHYKTTPEADDWSNPSSEPRDASKYKAKQDKIKSNRTF

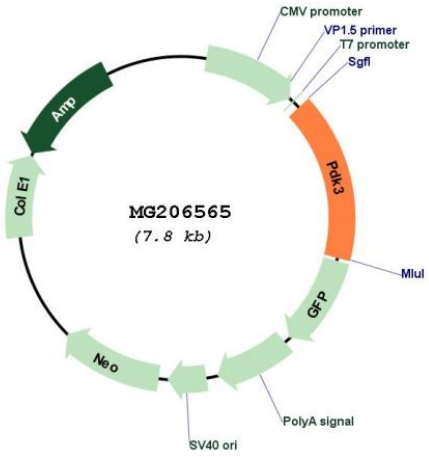
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_145630

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_145630.3
RefSeq Size:	2000 bp
RefSeq ORF:	1248 bp
Locus ID:	236900
UniProt ID:	Q922H2
Cytogenetics:	X C3
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]