

Product datasheet for **MC215702**

Pdk1 (NM_172665) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pdk1 (NM_172665) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pdk1
Synonyms:	B830012B01; D530020C15Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_172665, the custom clone sequence may differ by one or more nucleotides

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ATGAGGCTGGCAAGGCTGCTGCGGGGCGGCACGAGCGTCAGGCCGCTCTGCGCCGTCCTCCCTGCGCCAGCC
GTAGCCTGGCCTCGGCCTCGGGTTCGGGCGCGCGTCGGAGCTTGGCGTTCGGGCCAGGTGGACTTCTA
TGCGCGCTTCTCGCCGTCGCCACTCTCCATGAAGCAGTTCCTGGACTTCGGGTCACTGAATGCTTGTGAA
AAGACCTCGTTTATGTTTCTGCGACAAGAGTTGCCTGTTAGATTGGCAAATATAATGAAAGAAATCAGCC
TTCTCCCGATAATCTTCTCAGGACCCCATCCGTACAGCTGGTGCAAAGTTGGTATATCCAAAGCCTTCA
GGAGTTGCTTGATTTTAAAGACAAAAGTCTGAAGATGCTAAACTATTTATGAATTCACAGACACAGTG
ATAAGGATCAGAAACCGGCACAATGATGTCATTCCCACCATGGCCAGGGTGTGACTGAATACAAGGAGA
GCTTCGGGGTGGATCCTGTCAACAGCCAAAATGTTCACTACTTTTGGATCGATTCTACATGAGTCGCAT
CTCAATTAGAATGCTACTCAACCAGCACTCCTTATTGTTTCGGTGAAAAGGAAGTCCATCTCATCGAAAG
CACATTGGAAGCATAAATCCAACTGCGACGTGGTGGAGGTCATTAAAGATGGCTATGAGAACGCTAGGC
GGCTTTGTGATTTGTATTATGTTAACTCTCCTGAACCTGAACCTGAAGAACTAAATGCGAAATCACCAGG
ACAGACAATAAAGTGGTTTATGTACCATCCCATCTCTATCACATGGTGGTTTGAACCTGTTCAAGAATGCC
ATGAGAGCGACCATGGAGCACCACGCGGACAAAGCGTTTATCCCCGATTACAGTTACAGTCACGCTCG
GCGAGGAGGATCTGACTGTGAAGATGAGTGACCGGGGAGGCGGTGTTCCACTGAGGAAGATCGACAGACT
CTTCAACTACATGTACTCAACCGCACCCCGGCTCGTGTGAAACGTCCTGCTGTGCCCTGGCTGGG
TTTGTTACGGATTGCCCATATCACGCCTCTATGCACAGTACTTCCAGGGAGACCTAAAGCTGTATTCTT
TAGAGGGCTACGGGACAGATGCGGTTATCTACATTAAGGCTCTGTGACAGAATCCGTCGAGAGACTCCC
TGTGTACAATAAAGCCGCTGGAAGCATTACAAAGCCAACACGAGGCTGACGACTGGTGTGTGCCAGC
CGAGAGCCGAAAGATATGACCACATTCCGAAGCTCTTAA
  
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Restriction Sites: SgfI-MluI


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ACCN:	NM_172665
Insert Size:	1299 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	BC027196 , AAH27196
RefSeq Size:	3269 bp
RefSeq ORF:	1305 bp
Locus ID:	228026
UniProt ID:	Q8BFP9
Cytogenetics:	2 C3

Gene Summary:

Kinase that plays a key role in 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. Plays an important role in cellular responses to hypoxia and is important for cell proliferation under hypoxia. Protects cells against apoptosis in response to hypoxia and oxidative stress (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).