

## Product datasheet for SC118542

### PDK4 (NM\_002612) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PDK4 (NM_002612) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDK4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>&gt;OriGene ORF sequence for NM_002612 edited</p> <pre> ATGAAGGCGGCCGCTTCGTGCTGCGCAGCGCTGGCTCGCTCAACGGCGCCGGCCTGGTG CCCCGAGAGGTGGAGCATTCTCGCGCTACAGCCCGTCCCGCTGTCCATGAAGCAGCTA CTGGACTTTGGTTCAGAAAATGCATGTGAAAGAACTTCTTTGCATTTTTCGACAAGAA TTGCCTGTGAGACTCGCCAACATTCTGAAGGAAATTGATATCCTCCCGACCAATTAGTA AATACCTCTTCAGTGCAATTGGTTAAAAGCTGGTATATACAGAGCCTGATGGATTGGTG GAATTCATGAGAAAAGCCAGATGACCAGAAAGCATTATCAGACTTTGTAGATACACTC ATCAAAGTTCGAAATAGACACCATAATGTAGTCCCTACAATGGCACAAGGAATCATAGAG TATAAAGATGCCTGTACAGTTGACCCAGTCACCAATCAAATCTTCAATATTTCTGGAT CGATTTTACATGAACCGTATTTCTACTCGGATGCTGATGAACCAGCACATTCTTATATTT AGTGACTCACAGACAGGAAACCAAGCCACATTGGAAGCATTGATCCTAACTGTGATGTG GTAGCAGTGGTCCAAGATGCCTTTGAGTGTTCAAGGATGCTCTGTGATCAGTATTATTTA TCATCTCCAGAATTAAAGCTTACACAAGTGAATGGAAAATTTCCAGACCAACCAATTCAC ATCGTGTATGTTCTTCTCACCTCCATCATATGCTCTTTGAACTATTTAAGAATGCAATG CGGGCAACAGTTGAACACCAGGAAAATCAGCCTTCCCTTACACCAATAGAGGTTATTGTT GTCTTGGGAAAAGAAGACCTTACCATTAAAGATTTACAGACAGAGGAGGTGGTGTCCCTG AGAATTATTGACCGCCTCTTTAGTTATACATACTCCACTGCACCAACGCCTGTGATGGAT AATTCCCGGAATGCTCCTTTGGCTGGTTTGGTTACGGCTTGCCAATTTCTCGTCTGTAT GCCAAGTACTTTCAAGGAGATCTGAATCTCTACTTTATCAGGATATGGAACAGATGCT ATCATCTACTTAAAGGCTTTGTCTTCTGAGTCTATAGAAAACTTCCAGTTTTTAAACAAG TCAGCCTTCAAACATTATCAGATGAGCTCTGAGGCTGATGACTGGTGTATCCCAAGCAGG GAACCAAGAAGCTGGCAAAAGAAGTGGCCATGTGA </pre>


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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_002612 unedited</p> <pre> NGGGGGTGACATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGCTTGA ACTTGAGTCTCGAACCACTGCATCTCCGACCCTCTGCCAGACTCTTCACTCCGCGGCAC CCTCAAACCCAGCCAGGCCGGGGCGCACGAGCCAGCCAGCGCACCTGCAGTCTCGCC CGGACGCGCCGCGCCCTCGGAACCAAGCTCTGCTCCGAGCAGCCTTCGCCCCCAAGC CAGCCACAGTCCCGCCAGGCCGGGTGGCGTCAAGATGAAGCGGCCGCTTCGTGCTG CGCAGCGCTGGCTCGCTCAACGGCGCCGGCCTGGTGCCCCGAGAGGTGGAGCATTTCTCG CGCTACAGCCCGTCCCCGCTGTCCATGAAGCAGCTACTGGACTTTGGTTCAGAAATGCA TGTGAAAGAACTTCTTTTGCATTTTGGCACAAGAATTGCCTGTGAGACTCGCCAACATT CTGAAGGAAATTGATATCCTCCCGACCCAATTAGTAAATACCTCTTCAGTGCAATTGGTT AAAAGCTGGTATATACAGAGCCTGATGGATTTGGTGAATTCCATGAGAAAAGCCAGAT GACCAGAAAGCATTATCAGACTTTGTAGATACACTCATAAAGTTCGAAATAGACACCAT AATGTAGTCCCTACAATGGCACAAGGAATCATAGAGTATAAGATGCCTGTACAGTTGAC CCAGTCACCAATCAAAATCTTCAATATTTCTTGGATCGATTNTACATGAACCGTATTCT ACTCGGATGCTGATGAACCAGCACATTCTATATTTAGTACTCACAGACAGGNAACCC AGCCACATTGGAAGCATTGATCCTAACTGTGATGTGGTAGCAGTGGTCCAAGATGCCTT TTGAGTGTCAAG </pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002612
<b>Insert Size:</b>	3850 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_002612.2</a> , <a href="#">NP_002603.1</a>
<b>RefSeq Size:</b>	3634 bp

RefSeq ORF:	1236 bp
Locus ID:	5166
UniProt ID:	<u><a href="#">Q16654</a></u>
Cytogenetics:	7q21.3
Domains:	HATPase_c
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>This gene is a member of the PDK/BCKDK protein kinase family and encodes a mitochondrial protein with a histidine kinase domain. This protein is located in the matrix of the mitochondria and inhibits the pyruvate dehydrogenase complex by phosphorylating one of its subunits, thereby contributing to the regulation of glucose metabolism. Expression of this gene is regulated by glucocorticoids, retinoic acid and insulin. [provided by RefSeq, Jul 2008]</p>