

Product datasheet for **SC117281**

PCK2 (NM_004563) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCK2 (NM_004563) Human Untagged Clone
Tag:	Tag Free
Symbol:	PCK2
Synonyms:	PEPCK; PEPCK-M; PEPCK2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC117281 sequence for NM_004563 edited (data generated by NextGen Sequencing)

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ATGGCCGATTGTACCGCCCTGGCCTGCGGCTTAACTGGCATGGGCTGAGCCCCTTGGGC
TGGCCATCATGCCGTAGCATCCAGACCCCTGCGAGTGCTTAGTGGAGATCTGGGCCAGCTT
CCCCTGGCATTGAGATTTTGTAGAGCACAGTGCCCGCCTGTGCCAACCAGAGGGCAGC
CACATCTGTGATGGAAGTGAAGCTGAGAATACTGCCACACTGACCCTGCTGGAGCAGCAG
GGCCTCATCCGAAAGCTCCCCAAGTACAATAACTGCTGGCTGGCCCGCACAGACCCCAAG
GATGTGGCACGAGTAGAGAGCAAGACGGTGATTGTAACCTCTTCTCAGCGGGACACGGTA
CCTACTCCCGCCTGGTGGGCCCCGTGGGCAGCTGGGCAACTGGATGTCCCCAGCTGATTTT
CAGCGAGCTGTGGATGAGAGTTTCCAGGCTGCATGCAGGGCCGCACCATGTATGTGCTT
CCATTCAGCATGGGTCTGTGGGCTCCCCGCTGTCCCGCATCGGGGTGCAGCTCACTGAC
TCAGCCTATGTGGTGGCAAGCATGCGTATTATGACCCGACTGGGGACACCTGTGCTTCAG
GCCCTGGGAGATGGTGACTTTGTCAAGTGTCTGCACTCCGTGGCCAGCCCCCTGACAGGA
CAAGGGGAGCCAGTGAGCCAGTGGCCGTGCAACCCAGAGAAAACCTGATTGGCCACGTG
CCCAGCACGCGGAGATCATCTCCTTCGGCAGCGGCTATGGTGGCAACTCCCTGTGGGC
AAGAAGTGCTTTGCCCTACGCATCGCCTCTCGGCTGGCCCGGATGAGGGCTGGCTGGCA
GAGCACATGCTGATCCTGGGCATCACCAGCCCTGCAGGGAAGAAGCGCTATGTGGCAGCC
GCCTTCCCTAGTGCTGTGGCAAGCAACCTGGCTATGATGCGGCCTGCACTGCCAGGC
TGGAAAGTGGAGTGTGTGGGGATGATATTGCTTGGATGAGGTTTACAGTGAAGTTCGA
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ACCAATCCCAACGCCATGGCTACAATCCAGAGTAACACTATTTTTACCAATGTGGCTGAG
ACCAGTGTGGTGGCGTACTGGGAGGGCATTGACCAGCCTCTTCCACCTGGTGTACT
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CCAGAGGGTGTCCCCATTGACGCATCATCTTTGGTGGCCGAGACCCAAAGGGTACCC
CTGGTATACGAGGCCCTCAACTGGCGTCATGGGGTGTGGTGGGCAGCGCCATGCGCTCT
GAGTCCACTGCTGCAGCAGAACAAGGGAAGATCATCATGCACGACCCATTTGCCATG
CGGCCCTTTTTGGCTACAACCTCGGGCACTACCTGGAACACTGGCTGAGCATGGAAGGG
CGCAAGGGGGCCAGCTGCCCGTATCTTCCATGTCAACTGGTTCGGCGTGACGAGGCA
GGGCACTTCTGTGGCCAGGCTTTGGGAGAATGCTCGGGTGTAGACTGGATCTGCCGG
CGTTAGAGGGGGAGGACAGTGCAGGAGACACCCATTGGGCTGGTGCACAAAGGAAGGA
GCCTTGGATCTCAGCGGCCTCAGAGCTATAGACACCACTCAGCTGTTCTCCCTCCCAAG
GACTTCTGGGAACAGGAGTTTCGTGACATTCGGAGCTACCTGACAGAGCAGGTCAACCAG
GATCTGCCAAAGAGGTGTTGGCTGAGCTTGAGGCCCTGGAGAGACGTGTGCACAAAATG
TGA
```

Clone variation with respect to NM_004563.2

362 a=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004563 unedited
 CCATTTGTATACGACTACTATAGGGCGGCCGGAATTCGGCACGAGGCCCGGCTCCGCT
 CGGTTCTTGGCCACCCCGCAGCCCTGCCAGGTGCCATGGCCGATTGTACCGCCCTGG
 CCTGCGGCTTAACTGGCATGGGCTGAGCCCTTGGGCTGGCCATCATGCCGTAGCATCCA
 GACCCTGCGAGTGCTTAGTGGAGATCTGGGCCAGTTCCTCCACTGGCATTGAGATTTTGT
 AGAGCACAGTGGCCGCTGTGCCAACAGAGGGCATCCACATCTGTGATGGAAGTGGGC
 TGAGAATACTGCCACACTGACCCTGCTGGAGCAGCAGGGCCTCATCCGAAAGCTCCCAA
 GTACAATAACTGCTGGCTGGCCCGCACAGACCCCAAGGATGTGGCACGAGTAGAGAGCAA
 GACGGTGATTGTAACCTCTTCTCAGCGGGACACGGTACCACTCCCGCCTGGTGGGCCCCG
 TGGGCAGCTGGGCAACTGGATGTCCCCAGCTGATTTCCAGCGAGCTGTGGATGAGAGTT
 TCCAGGCTGCATGCAGGGCCGCACCATGTATGTGCTTCCATTCCAGCATGGGTCTGTGGG
 CTCCCCGCTGTCCCGCATCGGGGTGCAGCTCACTGACTCAGCCTATGTGGTGGCAAGCAT
 GCGTATTATGACCCGACTGGGGACACCTGTGCTTCAAGCCCTGNGAGATGGTGACTNTGT
 CAAGTGTCTGCACTCCGTGGGCCAGCCCTGACAGGACAAGNGAGCCAGTGAGCCAGTG
 GCCGTGCCACCCAGAGAAACCCTGATTGGTCACGTGCCCGACCAGCGGGAGATCATCTCC
 CTCGGCAGCGGCTATGGTGGGCACTCCCTGCTGGGNCAGAAGTGCTTTGCCCTACGCATC
 GNCTCTCGGCTGCCCCGNATGAGGNNCTGCTGCANACACATGCTGATCCTGGCATCAC
 AGACTGCAAGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004563 unedited
 GACCGCGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTGTGAAAATAGATAAG
 CATCTCTTATTATTGGACAGTCTTGTGGGAAGTCTATGGCACATTGAAGATGTTAGTT
 AATATCAAATTGCTCATATTTCTGCAAGGTGCCTTCCCTATTCCAGATGAGGGTGCTA
 TGTCTCTTGTAGACTAGGGCCTCAGGTCACATTTTGTGCACACGTCTCTCCAGGGCCT
 CAAGCTCAGCCAACACCTCTTTGGGCAGATCCTGGTTGACCTGCTCTGTGAGGTAGCTCC
 GAATGTACGAACCTCCTGTTCCAGAAGTCTTGGGGAGGGAGAACAGCTGAGTGGTGT
 CTATAGCTCTGAGGCCGCTGAGATCCAAGGCTCCTTCCCTTTGGCACCAGCCCAATGGGTG
 TCTCTCGGGCACTGTCTCCCCCTTAACCGCCGGCAGATCCAGTCTAGCACCCGAGCAT
 TCTCCCCAAAGCCTGGCCACAGGAAGTGCCTGCCTCGTCACGCCGAACAGTTGACAT
 GGAAGATACGGGGCAGCTGGGCCCCCTTGCGCCCTTCCATGCTCAGCCAGTGTTCAGGT
 AGTGCCCGAAGTTGTAGCCAAAAAAGGGCCGCATGGCAAATGGGTCGTGCATGATGATCT
 TCCCTTTGTGTTCTGCTGCAAGCAGTGGACTCAGAGCGCATGGCGCTGCCACAAAACCC
 CATGACGCCAGTTGAAGGCCTCGTATACCAGGGGTACCCCTTTGGGTCTGCGGCCACCA
 AGATGATGGCGTCAATGGGGACACCCCTCTGGGCCTNCCCAGCCTGGTCCATGATGGNG
 GCACTGGCGAGCCCGNGCAGAAATCGAGAGTTGGATGTGACAGGGCTCCTTGACAGTT
 NCCAGGTTGCCAGCAGNAGTACAGTACACCAGNTGAAAGCTGTCATGC

Restriction Sites:

NotI-NotI

ACCN:

NM_004563

Insert Size:

2000 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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.
RefSeq:	NM_004563.2 , NP_004554.2
RefSeq Size:	2221 bp
RefSeq ORF:	1923 bp
Locus ID:	5106
UniProt ID:	Q16822
Cytogenetics:	14q11.2-q12
Domains:	PEPCK
Protein Families:	ES Cell Differentiation/IPS
Protein Pathways:	Adipocytokine signaling pathway, Citrate cycle (TCA cycle), Glycolysis / Gluconeogenesis, Insulin signaling pathway, Metabolic pathways, PPAR signaling pathway, Pyruvate metabolism
Gene Summary:	<p>This gene encodes a mitochondrial enzyme that catalyzes the conversion of oxaloacetate to phosphoenolpyruvate in the presence of guanosine triphosphate (GTP). A cytosolic form of this protein is encoded by a different gene and is the key enzyme of gluconeogenesis in the liver. Alternatively spliced transcript variants have been described. [provided by RefSeq, Apr 2014]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).</p>