

Product datasheet for **RC238610**

PCK2 (NM_001291556) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCK2 (NM_001291556) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCK2
Synonyms:	PEPCK; PEPCK-M; PEPCK2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238610 representing NM_001291556
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTC**CCCCAGCTGATTTCCAGCGAGCTGTGGATGAGAGGTTTCCAGGCTGCATGCAGGGCCGCACCATGT**
 ATGTGCTTCCATT**CAGCATGGGTCTGTGGGCTCCCCGCTGTCCCGCATCGGGGTGCAGCTCACTGACTC**
 AGCCTATGTGGTGGCAAGCATGCGTATTATGACCCGACTGGGGACACCTGTGCTT**CAGGCCCTGGGAGAT**
 GGTGACTTTGTCAAGTGTCTGACTCCGTGGGCCAGCCCTGACAGGACAAGGGGAGCCAGT**GAGCCAGT**
 GGCCGTGCAACCCAGAGAAAACCCTGATTGGCCACGTGCCGACCAGCGGGAGATCATCTCCTT**CGGCAG**
 CGGCTATGGTGGCAACTCCCTGCTGGGCAAGAAGTGT**TTGCCCTACGCATCGCCTCTCGGCTGGCCCG**
 GATGAGGGCTGGTGGCAGAGCACATGCTGATCCTGGGCATCACCAGCCCTGCAGGAAGAAGCGCTATG
 TGGCAGCCGCTTCCCTAGTGCCTGTGGCAAGACCAACCTGGCTATGATGCGGCCTGACTGCCAGGCTG
 GAAAGTGGAGTGTGTGGGGATGATATTGCTTGGATGAGGTTT**GACAGTGAAGTTCGACTCCGGGCCATC**
 AACCTGAGAACGGCTTCTTTGGGGTGGCCCTGGTACCTCTGCCACCACCAATCCCAACGCCATGGCTA
 CAATCCAGAGTAACACTATTTTTACCAATGTGGCTGAGACCAGT**GATGGTGGCGTGTACTGGGAGGGCAT**
 TGACCAGCCTCTTCCACCTGGTGTACTGTGACCTCCTGGCTGGGCAAACCCTGGAAACCTGGT**GACAAG**
 GAGCCCTGTGCACATCCCAACTCTCGATTTTGTGCCCCGGCTCGCCAGT**GCCCCATATGGACCCAGCCT**
 GGGAGGCCCCAGAGGGTGTCCCCATTGACGCCATCATCTTTGGTGGCCGAGACCCAAAGGGTACCCTT
 GGTATACGAGGCCTTCAACTGGCGTCATGGGGTGT**TTGTGGGAGCGCCATGCGCTCTGAGTCCACTGCT**
 GCAGCAGAACACAAAGGGAAGATCATATGCACGACCCATTTGCCATGCGGCCCTTTT**TTGGCTACA**
 TCGGGCACTACCTGGAACACTGGCTGAGCATGGAAGGGCGCAAGGGGGCCAGCTGCCCGTATCTTCCA
 TGTCAACTGGTTCGGCGCTGACGAGGCAGGGCACTTCTGTGGCCAGGCTTTGGGAGAAATGCTCGGGT
 CTAGACTGGATCTGCCGGCGTTAGAGGGGAGGACAGT**GCCCGAGAGACACCCATTGGGCTGGTGC**
 AGGAAGGAGCCTTGGATCTCAGCGGCCTCAGAGCTATAGACACCACTCAGCTGTTCTCCCTCCCAAGGA
 CTTCTGGGAACAGGAGGTTCTGACATTCGGAGCTACCTGACAGAGCAGGTCAACCAGGATCTGCCCAA
 GAGGTGTTGGCTGAGCTT**GAGGCCCTGGAGAGACGTGTGCACAAAATG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238610 representing NM_001291556
 Red=Cloning site Green=Tags(s)

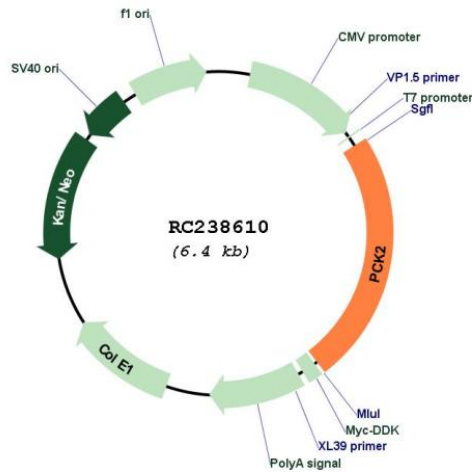
MSPAD**FQRAVDERFP**GC**MQGR**TM**YVLPFS**MG**PVGSPLSR**IG**VQLTDS**AY**VVASMRI**MT**RLGTP**V**LQALGD**
 G**DFVK**CL**HSVQ**PL**TGQ**EP**VSQW**PC**NPEK**TL**IGHV**PD**QREIIS**FG**SGYGG**NS**LLGK**CF**ALRI**AS**RLAR**
 DE**GLW**AE**HMLIL**GIT**SPAG**K**KRYV**AA**AFPS**AC**GKTNL**AM**MRPAL**P**GWK**VE**CVGDD**I**AWM**RF**DSE**GR**LRAI**
 NP**ENG**FG**VAP**GT**SATT**NP**NAMATI**Q**SNTIF**T**NAETS**D**GGVY**WE**GIDQ**PL**PPG**VT**VT**SW**L**G**KPW**K**PGDK**
 EP**CA**HP**NSRF**CA**PAR**Q**CPIM**DP**AWE**AP**EGVP**IDA**IFG**RR**PKG**V**PLV**YE**AFN**WR**HGV**F**VGS**AM**RSE**TA
 AA**EHK**GI**IM**H**DP**F**AM**RP**FFG**YN**F**G**H**Y**L**EW**LS**ME**GR**K**GA**Q**L**PR**IF**H**VN**W**F**RR**DE**AG**H**FL**W**PG**F**GEN**ARV**
 LD**W**IC**RR**LE**G**ED**S**ARE**TP**I**GL**V**PK**E**GAL**DL**SGL**RA**ID**TT**QL**F**SL**PK**D**FW**EQ**EV**RD**IR**S**YL**TE**Q**VN**Q**D**LP**K**
 EV**LAE**LE**AL**ERR**VHKM**

TRTRPLEQKLISEED**LA**AND**ILDYK**DDDD**KV**

Restriction Sites:

Sgfl-MluI

Plasmid Map:



ACCN: NM_001291556

ORF Size: 1518 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:	<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_001291556.2
RefSeq Size:	2214 bp
RefSeq ORF:	1521 bp
Locus ID:	5106
UniProt ID:	Q16822
Cytogenetics:	14q11.2-q12
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
MW:	56.4 kDa
Gene Summary:	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]