

## Product datasheet for RC202481

### PCB (PC) (NM\_022172) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCB (PC) (NM_022172) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCB
Synonyms:	PCB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202481 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGAAGTTCGAACAGTCCATGGGGCCTGAGGCTCCTGGGAATCCGCCGAACCTCCACCGCCCCG  
CTGCCTCCCCAAATGTCCGGCCTGGAGTATAAGCCATCAAGAAAGTCATGGTGGCAACAGAGGTGA  
GATTGCCATCCGTGTGTTCCGGCCTGCACGGAGCTGGGCATCCGCACCGTAGCCATCTACTCTGAGCAG  
GACACGGGCCAGATGCACCGGCAGAAAGCAGATGAAGCCTATCTCATCGCCCGCGCCTGGCCCCGTGC  
AGGCCTACCTGCACATCCAGACATCATCAAGGTGGCCAAGGAGAACAACGTAGATGCAGTGCACCTGG  
CTACGGGTTCTCTCTGAGCGAGCGGACTTCGCCAGGCCTGCCAGGATGCAGGGGTCCGGTTTATTGGG  
CCAAGCCAGAAGTGGTCCGCAAGATGGGAGACAAGGTGGAGGCCCGGGCCATCGCCATTGCTGCGGGT  
TTCCCCTGTCCCTGGCAGATGCCCCATCACGTCCCTGCATGAGGCCACGAGTTCTCCAACACCTA  
CGGCTTCCCCATCATCTCAAGGCGCCTATGGGGTGGAGGGCGTGGCATGAGGGTGGTGCACAGCTAC  
GAGGAGCTGGAGGAGAATTACACCGGGCCTACTCAGAGGCTCTGGCCGCTTTGGGAATGGGGCGCTGT  
TTGTGGAGAAGTTCATCGAGAAGCCACGGCACATCGAGGTGCAGATCTTGGGGGACCAGTATGGGAACAT  
CCTGCACCTGTACGAGCGAGACTGCTCCATCCAGCGCGGCACCAGAAGTGGTGCAGATTGCCCCCGCC  
GCCACCTGGACCCGAGCTTCGGACTCGGCTCACCAGCGACTCTGTAAACTCGCTAAACAGGTGGGCT  
ACGAGAACGCAGGCACCGTGGAGTTCCTGGTGGACAGGCACGGCAAGCACTACTTCATCGAGGTCAACTC  
CCGCTGCAGGTGGAGCACACGGTCACAGAGGAGATCACCGACGTAGACCTGGTCCATGCTCAGATCCAC  
GTGGCTGAGGGCAGGAGCCTACCCGACCTGGGCTGCGGCAGGAGAACATCCGCATCAACGGGTGTGCCA  
TCCAGTGCCGGTACCACCGAGGACCCGCGCAGCTTCCAGCCGGACACCGCCGATTGAGGTGTT  
CCGGAGCGGAGAGGGCATGGGCATCCGCTGGATAATGCTTCCGCTTCCAAGGAGCCGTCATCTCGCC  
CACTACGACTCCCTGCTGGTCAAAGTCATTGCCACGGCAAGACCACCCACGGCCGCCACCAAGATGA  
GCAGGGCCCTTGGGAGTTCGCGTCCGAGGTGTAAGACCAACATCGCCTTCTGCAGAATGTGCTCAA  
CAACCAGCAGTTCCTGGCAGGCACTGTGGACCCAGTTCATCGACGAGAACCAGAGCTGTTCCAGCTG



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CGGCCTGCACAGAACCGGGCCAAAAGCTGTTGCACTACCTCGGCCATGTCATGGTAAACGGTCCAACCA  
 CCCCATTCCCCTCAAGGCCAGCCCAGCCCACGGACCCCGTTGCCCTGCAGTGCCCATAGGCCCGCC  
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 ACTGGAAGGTGACGACCTCATCCTGGAGATCGAG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202481 protein sequence  
 Red=Cloning site Green=Tags(s)

MLKFRTVHGGLRLLGIRRTSTAPAASPNVRRLEYKPIKKVMVANRGEIAIRVFRACTELGIRTVAIYSEQ  
 DTGQMRHQKADEAYLIGRGLAPVQAYLHIPDIIKVAKENNVDAVHPGYGFLSERADFAQCQDAGVRFIG  
 PSPEVVRKMGDKVEARAIAAAGVPVPGTDAPITSLHEAHEFSNTYGFPIIFKAAAYGGGRMRVHVSY  
 EELEENYTRAYSEALAAFNGALFVEKFIEKPRHIEVQILGDQYGNILHLHYERDCSIQRRHQKVEIAPA  
 AHLDPQLRTRLTSDSVKLAQVGYENAGTVEFLVDRHGKHYFIEVNSRLQVEHTVTEEITDVLVHAQIH  
 VAEGRSLPDLGLRQENIRINGCAIQCRVTTEPARSFQPDGRIEVFRSGEGMGIRLDNASAFQGAVISP  
 HYDSSLVKVIAHGKDHTAATKMSRALAEFRVRGVKTNIAFLQNVLNNQQFLAGTVDTQFIDENPELFLQ  
 RPAQNRAQKLLHYLGHVMVNGPTTPIPVKASPSPTDPVVPAPVIGPPPAGFRDILLREGPEGFARAVRNH  
 PGLLLMDTTFRDAHQSLLATRVRTHDLKKIAPYVAHNFSKLFSMENWGGATFDVAMRFLYECWRRLQEL  
 RELIPNIPFQMLLRGANAVGYTNYPDNVVFKECEVAKENGMDVFRVFDLSLNYLPNMLLGMEAAGSAGGVV  
 EAAISYTGVDVADPSRTKYSLQYYMGLAEELVRAGTHILCIKDMAGLLKPTACTMLVSSLRDRFPDLPLHI  
 HTHDTSAGVAAMLACAQAGADVVDVAADSMGSMGTSQPSMGALVACTRGTPLDTEVPMERVFYSEYWEG  
 ARGLYAAFDCTATMKSNSDVEYENIIPGGQYTNLHFQAHSMGLGSKFKEVKKAYEANQMLGDLIKVTPS  
 SKIVGDLAQFMVQNGLSRAEAEQAEEELSFPRSVVEFLQGYIGVPHGGFPEPFRSKVLKDLPRVEGRPGA  
 SLPPLDLQALEKELVDRHGEEVTPEDVLSAAMYPDVFAHFKDFATATFGPLDSLNTLRLFLQGPKIAEEFEV  
 ELERGKTLHIKALAVSDLNRAGQRQVFFELNGQLRSILVKDTQAMKEMHFHPKALKDVKGQIGAPMPGKV  
 IDIKVVAGAKVAKGQPLCVLSAMKMETVVTSPMEGTVRKVHVTKDMTLEGDDLILEIE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6168\\_g10.zip](https://cdn.origene.com/chromatograms/mk6168_g10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

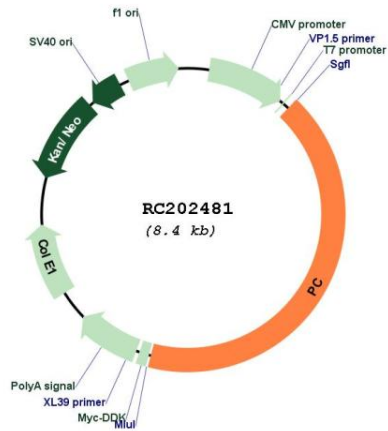


ACCN: NM\_022172

ORF Size: 3534 bp

<b>OTI Disclaimer:</b>	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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_022172.3</a>
<b>RefSeq Size:</b>	3959 bp
<b>RefSeq ORF:</b>	3537 bp
<b>Locus ID:</b>	5091
<b>UniProt ID:</b>	<a href="#">P11498</a>
<b>Cytogenetics:</b>	11q13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Citrate cycle (TCA cycle), Metabolic pathways, Pyruvate metabolism
<b>MW:</b>	129.6 kDa
<b>Gene Summary:</b>	This gene encodes pyruvate carboxylase, which requires biotin and ATP to catalyse the carboxylation of pyruvate to oxaloacetate. The active enzyme is a homotetramer arranged in a tetrahedron which is located exclusively in the mitochondrial matrix. Pyruvate carboxylase is involved in gluconeogenesis, lipogenesis, insulin secretion and synthesis of the neurotransmitter glutamate. Mutations in this gene have been associated with pyruvate carboxylase deficiency. Alternatively spliced transcript variants with different 5' UTRs, but encoding the same protein, have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC202481