

## Product datasheet for **SC305013**

### PCB (PC) (NM\_022172) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCB (PC) (NM_022172) Human Untagged Clone
Tag:	Tag Free
Symbol:	PC
Synonyms:	PCB
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_022172, the custom clone sequence may differ by one or more nucleotides

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ATGCTGAAGTTCCGAACAGTCCATGGGGCCTGAGGCTCCTGGGAATCCGCCGAACCTCC
ACCGCCCCGCTGCCTCCCAAATGTCCGGCGCCTGGAGTATAAGCCATCAAGAAAGTC
ATGGTGGCCAACAGAGGTGAGATTGCCATCCGTGTGTTCCGGGCCTGCACGGAGCTGGGC
ATCCGCACCGTAGCCATCTACTCTGAGCAGGACACGGGCCAGATGCACCGGCAGAAAGCA
GATGAAGCCTATCTCATCGGCCCGGCCTGGCCCCGTGCAGGCCTACCTGCACATCCCA
GACATCATCAAGGTGGCCAAGGAGAACAACGTAGATGCAGTGCACCTGGCTACGGGTTT
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CCAAGCCCAGAAGTGGTCCGCAAGATGGGAGACAAGGTGGAGGCCCGGGCCATCGCCATT
GCTGCGGGTGTCCCGTTGTCCCTGGCAGATGCCCCCATCACGTCCCTGCATGAGGCC
CACGAGTTCTCCAACACCTACGGCTTCCCATCATCTTCAAGGCGGCCTATGGGGGTGGA
GGGCGTGGCATGAGGGTGGTGCACAGCTACGAGGAGCTGGAGGAGAATTACACCCGGGC
TACTCAGAGGCTCTGGCCGCCTTTGGGAATGGGGCGCTGTTTGTGGAGAAGTTCATCGAG
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GCCCACCTGGACCCGAGCTTCGGACTCGGCTCACCAGCGACTCTGTGAAACTCGCTAAA
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GAGGACCCCGCGCAGCTTCCAGCCGGACACCGCCGCTTGGAGTGTCCGGAGCGGA
GAGGGCATGGGCATCCGCTGGATAATGCTTCCGCCTTCAAGGAGCCGTATCTCGCC
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ACCAAGATGAGCAGGGCCCTTGGCGAGTCCGCGTCCGAGGTGTGAAGACCAACATCGCC
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TTCAGAGACATCTGCTGCGAGAGGGCCCTGAGGGCTTTGCTCGAGCTGTGCGGAACAC
CCGGGGCTGCTGCTGATGGACACGACCTTCAGGGACGCCACCAGTCACTGCTGGCCACT

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CGTGTGCGCACCCACGATCTCAAAAAGATCGCCCCCTATGTTGCCACAACCTCAGCAAG
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GAGTGGCCCTGGCGGGCGGCTGCAGGAGCTCCGGGAGCTCATCCCCAACATCCCTTTCCAG
ATGCTGCTGCGGGGGGCAATGCTGTGGGCTACACCAACTACCCAGACAACGTGGTCTTC
AAGTTCGTGAAGTGGCCAAAGAGAATGGCATGGATGTCTCCGTGTGTTGACTCCCTC
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CCCCTGGACACAGAGGTGCCATGGAGCGCGTGTGTTGACTACAGTGAGTACTGGGAGGG
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GAGGTGACGCCGGAAGATGTGCTCTCAGCAGCTATGTACCCCGATGTGTTTGCCCACTTC
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CACCCCAAGGCCCTAAAGGACGTGAAGGGCCAGATCGGGGCGCCCATGCCTGGGAAGGTG
ATAGACATCAAAGTGGTGGCAGGGGCCAAGGTGGCCAAGGGCCAGCCCCTGTGTGTGCTC
AGTGCCATGAAGATGGAGACTGTGGTGACCTCACCCATGGAGGGTACTGTCCGAAGGTT
CATGTGACCAAGGACATGACACTGGAAGGTGACGACCTCATCCTGGAGATCGAGTGA
    
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- Restriction Sites:** Please inquire
- ACCN:** NM\_022172
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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).

<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_022172.1</a> , <a href="#">NP_071504.1</a>
<b>RefSeq Size:</b>	4041 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>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (2) contains an alternate 5' non-coding exon resulting from the use of a more proximal promoter, hence has a distinct 5' UTR compared to transcript variant 1. Transcript variants 1-3 encode the same protein.</p>