

Product datasheet for **SC320313**

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:	PCB
Synonyms:	PCB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_022172.2
CAGCAGCGGTAGAGGCGGCGGAGGACTGGCGACGGCGAGGAGATAGTGTCTGCCTTCT
GGAGAGCTGACCAAACACTAAGGATGCTGAAGTTCGGAACAGTCCATGGGGCCTGAGGC
TCTGGGAATCCGCCGAACCTCCACCGCCCCGCTGCCTCCCAAATGTCGCGCGCTGG
AGTATAAGCCCATCAAGAAAGTCATGGTGGCCAACAGAGGTGAGATTGCCATCCGTGTGT
TCCGGGCTGCACGGAGCTGGGCATCCGCACCGTAGCCATCTACTCTGAGCAGGACACGG
GCCAGATGCACCGGCAGAAAGCAGATGAAGCCTATCTCATCGGCCGCGGCTGGCCCCG
TGCAGGCTACCTGCACATCCCAGACATCATCAAGGTGGCCAAGGAGAACAACGTAGATG
CAGTGCACCTGGCTACGGTTCTCTCTGAGCGAGCGGACTTCGCCAGGCCTGCCAGG
ATGCAGGGTCCGGTTTATTGGCCAAGCCAGAAGTGGTCCGCAAGATGGGAGACAAGG
TGGAGGCCGGGCATCGCCATTGCTGCGGGTGTCCCGTTGTCCCTGGCACAGATGCC
CCATCACGTCCCTGCATGAGGCCACGAGTTCTCCAACACCTACGGCTTCCCATCATCT
TCAAGGCGGCTATGGGGTGGAGGGCTGGCATGAGGGTGGTGCACAGCTACGAGGAGC
TGGAGGAGAATTACCCCGGGCTACTCAGAGGCTCTGGCCGCTTTGGGAATGGGGCGC
TGTTTGTGGAGAAGTTATCGAGAAGCCACGGCACATCGAGGTGCAGATCTTGGGGGACC
AGTATGGGAACATCCTGCACCTGTACGAGCGAGACTGCTCCATCCAGCGGCGGCACCAGA
AGGTGGTGCAGATTGCCCGCGCCACCTGGACCCGACGCTTCGGACTCGGCTACCA
GCGACTCTGTGAAACTCGCTAAACAGGTGGGCTACGAGAACGCAGGCACCGTGGAGTTCC
TGGTGGACAGGCACGGCAAGCACTACTTCATCGAGGTCAACTCCGCTGCAGGTGGAGC
ACACGGTCACAGAGGAGATCACCGACGTAGACCTGGTCCATGCTCAGATCCACGTGGCTG
AGGGCAGGAGCCTACCCGACCTGGGCTGCGGCAGGAGAACATCCGCATCAACGGGTGTG
CCATCCAGTGCCGGTCAACCACCGAGGACCCCGCGCAGCTTCCAGCCGACACCGGCC
GCATTGAGGTGTTCCGGAGCGGAGAGGGCATGGGCATCCGCTGGATAATGCTTCCGCT
TCCAAGGAGCCGTCTCGCCCCACTACGACTCCCTGCTGGTCAAAGTCATTGCCACG
GCAAAGACCACCCACGGCCGCCACCAAGATGAGCAGGGCCCTTGGGAGTTCGCGTCC
GAGGTGTGAAGACCAACATCGCCTTCTGCAGAATGTGCTCAACAACCAGCAGTTCCTGG
CAGGCACTGTGGACCCAGTTCATCGACGAGAACCAGAGCTGTCCAGCTGCGGCTG



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CACAGAACCGGGCCAAAAGCTGTTGCACTACCTCGGCCATGTCATGGTAAACGGTCCAA
 CCACCCGATTCCCGTCAAGGCCAGCCCCAGCCCCACGGACCCCGTTGTCCCTGCAGTGC
 CCATAGGCCCGCCCCGGCTGGTTTCAGAGACATCCTGCTGCGAGAGGGGCTGAGGGCT
 TTGCTCGAGCTGTGCGGAACACCCGGGCTGCTGCTGATGGACACGACCTTCAGGGACG
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 ATGTTGCCACAACCTTCAGCAAGCTCTTCAGCATGGAGAACTGGGAGGAGCCACGTTTG
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 TCATCCCCAACATCCCTTCCAGATGCTGCTGCGGGGGCAATGCTGTGGGCTACACCA
 ACTACCCAGACAACGTGGTCTTCAAGTTCTGTGAAGTGGCCAAAGAGAATGGCATGGATG
 TCTTCCGTGTGTTGACTCCCTCAACTACTTGCCCAACATGCTGCTGGGCATGGAGGCGG
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 CCATGAAGTCTGGCAACTCGGACGTGTATGAAAATGAGATCCCAGGGGGCCAGTACACCA
 ACCTGCACTTCCAGGCCACAGCATGGGGCTTGGCTCCAAGTTCAAGGAGGTCAAGAAGG
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 TCGTGGGGGACCTGGCCAGTTTATGGTGCAGAATGGATTGAGCCGGGCAGAGCCGAAG
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 AGCTGGTAGACCGGCATGGGAGGAGGTGACGCCGAAGATGTGCTCTCAGCAGTATGT
 ACCCCGATGTGTTTGCCCACTTCAAGGACTTCACTGCCACCTTTGGCCCCCTGGATAGCC
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 AGCGGGGAAGACGCTGCACATCAAGCCCTGGCCGTGAGCGACCTGAACCGGGCCGGCC
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 AGGGCCAGCCCCTGTGTGTGCTCAGTGCCATGAAGATGGAGACTGTGGTACCTCACCCA
 TGGAGGGTACTGTCCGAAGGTTTATGTGACCAAGGACATGCACTGGAAGGTGACGACC
 TCATCCTGGAGATCGAGTATCTTGCCCCAGACCGGCAGCCTGGCCATCCCCAAGCCTTC
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 GGGCCGTGGAGGTCTGTCCACAGCTGGACAGGAGAGACACCGCCTGCGGTGGTTTATTTC
 CTTTCAGCCATCGTCTTCTCCCGCGGACAGCTGCTTACATGTTTATCTTTGCCAAA
 TAAGGGTCCCCTCCTCACTGGAGACTACAAGTGGTGGGTCAGGTGGTCTAGGACCCAGG
 GGAGGTTTAGGGTCTATCTCCTGGGGGAAGGGGAGATCTAAGATGTCCAGGTCTGG
 GAAGTTTACTCAATAAAGCTGGCTTCCCTGCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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).
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_022172.2 , NP_071504.2
RefSeq Size:	3959 bp
RefSeq ORF:	3537 bp
Locus ID:	5091
UniProt ID:	P11498
Cytogenetics:	11q13.2
Protein Families:	Druggable Genome
Protein Pathways:	Citrate cycle (TCA cycle), Metabolic pathways, Pyruvate metabolism
Gene Summary:	<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>