

Product datasheet for SC122580

PCB (PC) (NM_000920) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: PCB (PC) (NM_000920) Human Untagged Clone
Tag: Tag Free
Symbol: PCB
Synonyms: PCB
Mammalian Cell Selection: None
Vector: pCMV6-XL5
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000920 edited
CAGCAGCGGTAGAGGCGGCGGCGAGGACTGGCGACGGCGAGGAGATAGTGTCTGCCTTCT
GGAGAGCTGACCAAACACTAAGGATGCTGAAGTTCGGAACAGTCCATGGGGCCTGAGGC
TCTGGGAATCCGCCGAACCTCCACCGCCCCGCTGCCTCCCAAATGTCGGGCGCTGG
AGTATAAGCCCATCAAGAAAGTCATGGTGGCCAACAGAGGTGAGATTGCCATCCGTGTGT
TCCGGGCTGCACGGAGCTGGGCATCCGCACCGTAGCCATCTACTCTGAGCAGGACACGG
GCCAGATGCACCGGCAGAAAGCAGATGAAGCCTATCTCATCGGCCGCGGCTGGCCCCG
TGCAGGCTACCTGCACATCCCAGACATCATCAAGGTGGCCAAGGAGAACAACGTAGATG
CAGTGCACCTGGCTACGGGTTCTCTCTGAGCGAGCGGACTTCGCCAGGCCTGCCAGG
ATGCAGGGTCCGGTTTATTGGCCAAGCCAGAAGTGGTCCGCAAGATGGGAGACAAGG
TGGAGGCCGGGCCATCGCCATTGCTGCGGGTGTCCCGTTGTCCCTGGCACAGATGCC
CCATCACGTCCCTGCATGAGGCCACGAGTTCTCCAACACCTACGGCTTCCCATCATCT
TCAAGGCGGCTATGGGGTGGAGGGCGTGGCATGAGGGTGGTGCACAGCTACGAGGAGC
TGGAGGAGAATTACCCCGGGCTACTCAGAGGCTCTGGCCGCTTTGGGAATGGGGCGC
TGTTTGTGGAGAAGTTATCGAGAAGCCACGGCACATCGAGGTGCAGATCTTGGGGGACC
AGTATGGGAACATCCTGCACCTGTACGAGCGAGACTGCTCCATCCAGCGGCGGCACCAGA
AGGTGGTGCAGATTGCCCGCGCCACCTGGACCCGACGCTTCGGACTCGGCTACCA
GCGACTCTGTGAAACTCGCTAAACAGGTGGGCTACGAGAACGCAGGCACCGTGGAGTTCC
TGGTGGACAGGCACGGCAAGCACTACTTCATCGAGGTCAACTCCGCTGCAGGTGGAGC
ACACGGTCACAGAGGAGATCACCGACGTAGACCTGGTCCATGCTCAGATCCACGTGGCTG
AGGGCAGGAGCCTACCCGACCTGGGCTGCGGCAGGAGAACATCCGCATCAACGGGTGTG
CCATCCAGTGCCGGGTCACCACCGAGGACCCCGCGCAGCTTCCAGCCGACACCGGCC
GCATTGAGGTGTTCCGGAGCGGAGAGGGCATGGGCATCCGCTGGATAATGCTTCCGCT
TCCAAGGAGCCGTCTCTCGCCCCACTACGACTCCCTGCTGGTCAAAGTCATTGCCACG
GCAAAGACCACCCACGGCCGCCACCAAGATGAGCAGGGCCCTTGGGAGTTCGGCTCC
GAGGTGTGAAGACCAACATCGCCTTCTGCAGAATGTGCTCAACAACCAGCAGTTCCTGG
CAGGCACTGTGGACCCAGTTCATCGACGAGAACCAGAGCTGTCCAGCTGCGGCTG



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CACAGAACCGGGCCAAAAGCTGTTGCACTACCTCGGCCATGTCATGGTAAACGGTCCAA
CCACCCGATTCCCGTCAAGGCCAGCCCCAGCCCACGGACCCCGTTGTCCCTGCAGTGC
CCATAGGCCCGCCCCGGCTGGTTTCAGAGACATCCTGCTGCGAGAGGGGCTGAGGGCT
TTGCTCGAGCTGTGCGGAACCACCGGGGCTGTGCTGATGGACACGACCTTCAGGGACG
CCCACCAGTCACTGTGGCCACTCGTGTGCGCACCCACGATCTCAAAAAGATCGCCCCCT
ATGTTGCCACAACCTTCAGCAAGCTCTTCAGCATGGAGAACTGGGAGGAGCCACGTTTG
ACGTCCCATGCGCTTCCGTATGATGAGTGCCTTGGCGGGGCAATGCTGTGGGCTACACCA
TCATCCCCAACATCCCTTCCAGATGCTGCTGCGGGGGCAATGCTGTGGGCTACACCA
ACTACCCAGACAACGTGGTCTTCAAGTTCTGTGAAGTGGCCAAAGAGAATGGCATGGATG
TCTTCCGTGTGTTTGACTCCCTCAACTACTTGCCCAACATGCTGCTGGGCATGGAGGCGG
CAGGAAGTGCCGGAGGCGTGGTGGAGGCTGCCATCTCATAACAGGGCGACGTGGCCGACC
CCAGCCGACCAAGTACTCACTGCAGTACTACATGGGCTTGCCGAAGAGCTGGTGCAG
CTGGCACCCACATCCTGTGCATCAAGGACATGGCCGGGCTGTGAAGCCCACGGCCTGCA
CCATGCTGGTCACTCCCTCCGGACCGCTTCCCGACCTCCACTGCACATCCACACC
ACGACACGTCAAGGGCAGGCGTGGCAGCCATGCTGGCCTGTGCCAGGCTGGAGCTGATG
TGGTGGATGTGGCAGCTGATTCCATGTCTGGGATGACTTCACAGCCCAGCATGGGGGCC
TGGTGGCCTGTACCAGAGGGACTCCCCTGGACACAGAGGTGCCCATGGAGCGCGTGTGTTG
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CCATGAAGTCTGGCAACTCGGACGTGTATGAAAATGAGATCCCAGGGGGCCAGTACACCA
ACCTGCACTTCCAGGCCACAGCATGGGGCTTGGCTCCAAGTTCAAGGAGGTCAAGAAGG
CCTATGTGGAGGCCAACCAGATGCTGGGCGATCTCATCAAGGTGACGCCCTCCTCCAAGA
TCGTGGGGGACCTGGCCAGTTTATGGTGCAGAATGGATTGAGCCGGGCAGAGCCGAAG
CTCAGGCGGAAGAGCTGTCTTTCCCGCTCCGTGGTGGAGTTCTGCAGGGCTACATCG
GTGTCCCCATGGGGGTTCCCCGAACCTTTCGCTCTAAGGTAAGTGAAGGACCTGCCAA
GGTGGAGGGGGCCTGGAGCCTCCCTCCCTCCCTGGATCTGCAGGCACTGGAGAAGG
AGCTGGTAGACCGCATGGGAGGAGGTGACGCCGAAGATGTGCTCTCAGCAGTATGT
ACCCCGATGTGTTTGCCCACTTCAAGGACTTCACTGCCACCTTTGGCCCCCTGGATAGCC
TGAATACTCGCTCTTCCCTGCAGGGACCAAGATCGCAGAGGAGTTTGAGGTGGAGCTGG
AGCGGGCAAGACGCTGCACATCAAGCCCTGGCCGTGAGCGACCTGAACCGGGCCGCCC
AGAGGCAGGTCTTCTTTGAGCTCAATGGGCAGCTGCGGTCCATCTTGGTCAAGGACACCC
AGGCCATGAAGGAGATGCACTTCCACCCCAAGGCCCTAAAGGACGTGAAGGGCCAGATCG
GGGCGCCATGCCTGGGAAGGTGATAGACATCAAAGTGGTGGCAGGGGCCAAGGTGGCCA
AGGGCCAGCCCCCTGTGTGTGCTCAGTGCCATGAAGATGGAGACTGTGGTACCTACCCCA
TGGAGGGTACTGTCCGAAGGTTTATGTGACCAAGGACATGACACTGGAAGGTGACGACC
TCATCCTGGAGATCGAGTGTCTTGCCTCAGACCGGCAGCCTGGCCATCCCCAAGCCTTC
AACAGAAGCTGTGCTGCCACGGCAGGCCAGGCCAGCCAGTGCCTGAGGGCCAGGAAGGCC
GGGCCGTGGAGGTCCTGTCCACAGCTGGACAGGAGAGACACCCCTGCGGTGGTTTATTTC
CTTTCAGCCATCGTCTTCTCCCGCGGACAGCTGCTTACATGTTTATCTCTTGGCCAAA
TAAGGGTCCCCTCCTCACTGGAGACTACAAGTGGTGGTTCAGGTGGTCTAGGACCCAGG
GGAGGTTTAGGGTCTATCTCCTGGGGGAAGGGGAGATCTAAGATGTCCAGGTCTGG
GAAGTTTACTCAATAAAGCTGGCTTCCCTGCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_000920 unedited GAAGCGTCAAATTTGTATACGACTCATATAGGCGGCCGCGNAATTCGCACGAGGCAGCAG CCGTAGAGGGCGGGCGGAGGACTGGCGACGGCGAGGAGATAGTGTCTGCCTTCTGGAGAG CTGACCAAACACTAAGGATGCTGAAGTTCCGAACAGTCCATGGGGCCTGAGGCTCCTGG GAATCCGCCGAACCTCCACCGCCCCGCTGCCTCCCCAAATGTCCGGCGCCTGGAGTATA AGCCCATCAAGAAAGTCATGGTGGCCAACAGAGGTGAGATTGCCATCCGTGTGTTCCGGG CCTGCACGGAGCTGGGCATCCGCACCGTAGCCATCTACTCTGAGCAGGACACGGGCCAGA TGCACCGGCAGAAAGCAGATGAAGCCTATCTCATCGGCCGCGCCTGGCCCCGTGCAGG CCTACCTGCACATCCCAGACATCATCAAGTGGCCAAGGAGAACAACGTAGATGCAGTGC ACCCTGGCTACGGGTTCTCTCTGAGCGAGCGGACTTCGCCCAGGCCTGCCAGGATGCAG GGGTCCGGTTTATTGGGCAAGCCAGAAAGTGGTCCGCAAGATGGGAGACAAGGTGGAGG CCCGGGCCATCGCCATTGCTGCGGGTGTCCCGTTGTCCCTGGCACAGATGCCCCATCA CGTCCCTGCATGAGGCCACGAGTTCTCCAACACCTACGGCTTCCCCATCATCTTCAAGG CGGCCTATGGGGTGGAGGGCGTGGCATGAGGGTGGTGCACAGCTACGAGGAGCTGGAGG AGAATTACACCGGGCCTACTCAGAGGCTCTGGCCGCTTTGGGAATGGGGCGCTGTTTG TGGAGAAGTTCATCGAGAAGCACGGCACATCGAGGTGCAGATCTTGGGGACCAGTATGG GAACATCCT
Restriction Sites:	Please inquire
ACCN:	NM_000920
Insert Size:	4058 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:	<u>NM_000920.2</u> , <u>NP_000911.1</u>
RefSeq Size:	4111 bp
RefSeq ORF:	3537 bp
Locus ID:	5091
UniProt ID:	<u>P11498</u>
Cytogenetics:	11q13.2
Protein Families:	Druggable Genome
Protein Pathways:	Citrate cycle (TCA cycle), Metabolic pathways, Pyruvate metabolism

Gene Summary:

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]

Transcript Variant: This variant (1) results from the use of a more distal promoter. Transcript variants 1-3 encode the same protein.