

Product datasheet for **MG208651**

Pccb (NM_025835) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pccb (NM_025835) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pccb
Synonyms:	1300012P06Rik; AI314687; R74805
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208651 representing NM_025835
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGGCGGATTAGGATTCGGGCGGTGGCGGCTGGAGCGAGGCTCAGCGTTCTGAATTGCGGCCTCG
 GCATCAGGACCCGCGCCTTTGCAGCCAGCCGGTTTCAGTTAAAGAGCGCATCGACAACAAGCGCCATGC
 AGCGTTGCTGGGAGGAGGCCAGCGCCGCATCGACGCGCAGCACAAAGCGAGGGAAGCTAACAGCCAGGGAG
 CGGATCAGTCTTCTGCTGGATCCTGGCAGCTTCATGGAGAGCGACATGTTTGTGGAACACAGATGTGCCG
 ACTTCGGAAATGGCTGCTGATAAGAATAAGTTTCCCGGAGATAGTGTGGTCACTGGACGGGGCCGAATCAA
 TGGACGATTGGTTATGTCTTCAGTCAGGATTTTACAGTTTTTGGAGGCAGTCTGTCAGGAGCACATGCT
 CAAAAGATCTGCAAAATCATGGACCAGGCCATAACAGTGGGGCTCCAGTGATCGGGCTCAATGACTCCG
 GGGGCCCAAGATCCAGGAGGGGTGGAGTCTTGGCTGGCTACGCGGACATCTTCTGAGGAATGTCAC
 AGCGTCTGGAGTCATCCCGCAGATTTCTCTGATCATGGGCCCGTGTGCTGGTGGGGCCGCTACTCCCT
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 AGTCTGTTACCAATGAGGATGCTCAAGAGCAGCTGGGTGGTCCAAAGACCCACACCCTGTGTCAAG
 TGTGGCCCATAGAGCTTTCGACAATGATGTTGATGCTCTGTGTAACCTGCGTGAATTCCTCAATTCCTG
 CCCCTCAGCAGCCAGGACCCGGCTCCCATCCGAGAGTGCCATGACCCAGTGACCGTCTGGTTCTGAGC
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 GGGAGGACCGTTGAATTGTCGGCAACCCAGCCCAATGTGGCCTCAGGGTGGTGGACATTAATTCATCCG
 TGAAGGGGGCTCGTTTTGTCAGATTCTGTGACGCATTCAACATCCCTCATCACTTTCTGTCAGTCCC
 TGGCTTCTGCTGCACGCGCCAGGAGTATGGGGCATCATCAGGCATGGTGCCAAAGCTGCTCTACGCG
 TTCGCCGAGGCAACTGTGCCAAAATCACAGTCATCACCAGGAAGGCCTATGGAGGTGCCTATGATGTCA
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 AAAGGGTGTGTGGAGATCATCTTCAAAGGACACCAAGATGTGGAAGCCGCCAGGCAGAGTATGTGGAG
 AAGTTCGCCAACCCCTTCCAGCAGCCGTGAGAGGTTTTGTGGATGACATCATCCAGCCATCCTCTACTC
 GTGCTCGGATATGCTGTGACCTGGAAGTCTGGCCAGCAAGAAGTCCATCGTCCCTGGAGGAAACATGC
 AAATATCCCACTG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG208651 representing NM_025835
 Red=Cloning site Green=Tags(s)

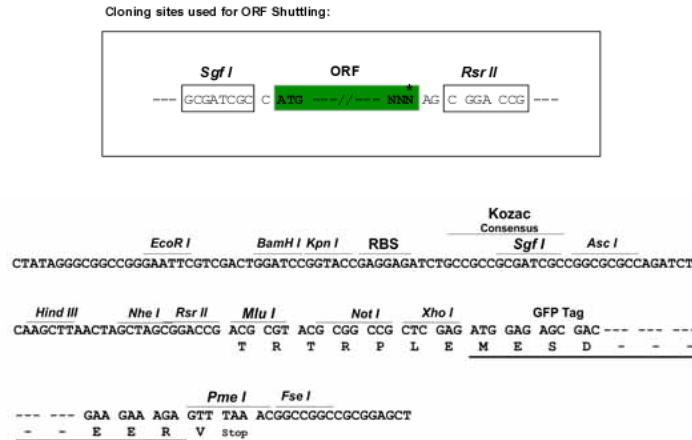
MAAAIRIRAVAAGARLSVLNCGLGITTRGLCSQPVSVKERIDNKRHAALLGGQRRIDAQHKRGKLTARE
 RISLLLDPGSFMESDMFVEHRCADFMAADKNKFPGDSVVTGRGRINGRLVYVFSQDFTVFGGSLSGAHA
 QKICKIMDQAITVGAPVIGLNDSSGARIQEGVESLAGYADIFLRNVTASGVIPQISLIMGPCAGGAVYSP
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 FAEATVPKITVITRKAYGGAYDVMSSKHL LGDTNYAWPTAEIAVMGAKGAVEIIFKQHDVEAAQAEYVE
 KFNANPFAAVRGFVDDIIQPSSTRARICDLEVLASKKVHRPWRKHANIPL

SGPTRRRLE – GFP Tag – V

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



ACCN: NM_025835

ORF Size: 1623 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

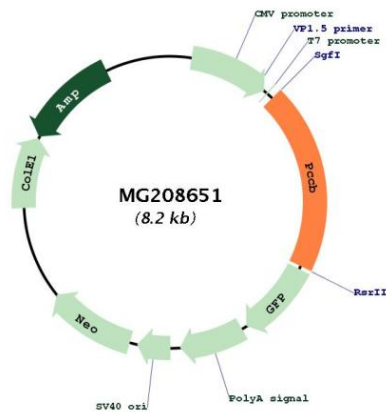
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:
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_025835.3](#)
 RefSeq Size: 2291 bp
 RefSeq ORF: 1626 bp
 Locus ID: 66904
 UniProt ID: [Q99MN9](#)
 Cytogenetics: 9 E4

Gene Summary: This is one of the 2 subunits of the biotin-dependent propionyl-CoA carboxylase (PCC), a mitochondrial enzyme involved in the catabolism of odd chain fatty acids, branched-chain amino acids isoleucine, threonine, methionine, and valine and other metabolites. Propionyl-CoA carboxylase catalyzes the carboxylation of propionyl-CoA/propanoyl-CoA to D-methylmalonyl-CoA/(S)-methylmalonyl-CoA (By similarity). Within the holoenzyme, the alpha subunit catalyzes the ATP-dependent carboxylation of the biotin carried by the biotin carboxyl carrier (BCC) domain, while the beta subunit then transfers the carboxyl group from carboxylated biotin to propionyl-CoA (By similarity). Propionyl-CoA carboxylase also significantly acts on butyryl-CoA/butanoyl-CoA, which is converted to ethylmalonyl-CoA/(2S)-ethylmalonyl-CoA (By similarity). Other alternative minor substrates include (2E)-butenoyl-CoA/crotonoyl-CoA (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG208651