

## Product datasheet for **RG230422**

### **PCCA (NM\_001178004) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PCCA (NM_001178004) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCCA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG230422 representing NM\_001178004  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCGGGTTCTGGGTGCGGACAGCACCGCTGGTCGCTGCCGGACGGCTGGGCGGTGGCCCGCGCAGC  
 AGCTGATGCTGAGCGCGCGCTGCGGACCCTGAAGCATGTTCTGTACTATTCAAGACAGTGCTTAATGGT  
 GTCCCGTAATCTTGTTCACTGGGATATGATCCTAATGAAAAAATTTTGATAAAAATTTCTGTTGCTAAT  
 AGAGGAGAAAATTCATGTCGGGTATTAGAACTTGAAGAAGATGGGCATTAAGACAGTTGCCATCCACA  
 GTGATGTTGATGCTAGTTCTGTTTCATGTGAAAATGGCGGATGAGGCTGTCTGTGTTGGCCAGCTCCAC  
 CAGTAAAAGCTACCTCAACATGGATGCCATCATGGAAGCCATTAAAGAAAACAGGGCCCAAGCTGTACAT  
 CCAGGTTATGGATTCTTTCAGAAAACAAAGAATTTGCCAGATGTTTGGCAGCAGAAGATGTCGTTTTCA  
 TTGGACCTGACACACATGCTATTCAGCCATGGGCGACAAGATTGAAAGCAAATTTATTAGCTAAGAAAGC  
 AGAGGTTAATAACAATCCCTGGCTTTGATGGAGTAGTCAAGGATGCAGAAGAAGCTGTCAGAAATGCAAGG  
 GAAATTGGCTACCTGTATGATCAAGGCTCAGCAGGTGGTGGTGGGAAAGGCATGCGCATTGCTTGGG  
 ATGATGAAGAGACCAGGGATGGTTTTAGATTGTCATCTCAAGAAGCTGCTTCTAGTTTTGGCGATGATAG  
 ACTACTAATAGAAAAATTTATTGATAATCCTCGTCATATAGAAATCCAGGTTCTAGGTGATAAACATGGG  
 AATGCTTTATGGCTTAATGAAAGAGAGTGCTCAATTCAGAGAAGAAATCAGAAGGTGGTGGAGGAAGCAC  
 CAAGCATTTTTTTGGATGCGGAGACTCGAAGAGCGATGGGAGAACAAGCTGTAGCTCTTGGCAGAGCAGT  
 AAAATATTCCTCTGCTGGGACCGTGGAGTTCCTTGTGGACTCTAAGAAGAATTTTTATTTCTTGGAAATG  
 AATACAAGACTCCAGGTTGAGCATCCTGTCACAGAATGCATTACTGGCCTGGACCTAGTCCAGGAAATGA  
 TCCGTGTTGCTAAGGGCTACCCTCTCAGGCACAACAAGCTGATATTCGCATCAACGGCTGGGCAGTTGA  
 ATGTCGGGTTTATGCTGAGGACCCCTACAAGTCTTTTGGTTTACCATCTATTGGGAGATTGCTCAGTAC  
 CAAGAACCCTTACATCTACCTGGTGTCCGAGTGGACAGTGGCATCCAACCAGGAAGTATATTAGCATT  
 ATTATGATCCTATGATTTCAAACTAATCACATATGGCTCTGATAGAAGTGGGACTGAAGAGAATGGC  
 AGATGCACTGGATAACTATGTTATTCGAGGTGTTACACATAATATTGCATTACTTCGAGAGGTGATAATC  
 AACTCACGCTTTGTAAGGAGACATCAGCACTAAATTTCTCCTCGATGTGTATCCTGATGGCTTCAAAG  
 GACACATGCTAACCAAGAGTGAGAAGAACCAGTTATTGGCAATAGCATCATCATTGTTTGTGGCATTCCA  
 GTTAAGAGCACAACTTTTCAAGAAAATCAAGAATGCCTGTTATTAACCAGACATAGCCAACTGGGAG  
 CTCTCAGTAAAAATGCATGATAAAGTTCATACCGTAGTAGCATCAAACAATGGGTCAGTGTCTCGGTGG  
 AAGTTGATGGGTGAAAATAAATGTGACCAGCAGTGGAACCTGGCTTCGCCCTTATTGTCTGTACGCGT  
 TGATGGCACTCAGAGGACTGTCCAGTGTCTTCTCGAGAAGCAGGTGGAAACATGAGCATTAGTTTCTT  
 GGTACAGTGGTAGCAGAAGTCAAGAAATTTGTGTGATTGAAGCCATGAAAATGCAGAATAGTATGACAG  
 CTGGGAAAATGGCACGGTGAATCTGTGCACTGTCAAGCTGGAGACACAGTTGGAGAAGGGGATCTGCT  
 CGTGGAGCTGGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG230422 representing NM\_001178004  
 Red=Cloning site Green=Tags(s)

MAGFWVGTAPLVAAGRRGRWPPQQLMLSAALRTLKHLVYYSRQCLMVSRLGSGVGYDPNEKTFDKILVAN  
 RGEIACRVIRTCKKMGIKTVAIHSDVDASSVHVKMADEAVCVGPAPTSKSYLNMDAIMEAIKKTRAQAVH  
 PGYGFLENKEFARCLAAEDVVF IGPDTHAIQAMGDKIESKLLAKKAVENTIPGFDGVVKDAEEAVRIAR  
 EIGYPVMIKASAGGGGKMRIAWDDEETRDGFRLSSQEAAASSFGDDRLLIEKFIDNPRHIEIQVLGDKHG  
 NALWLNERECSIQRNQNKVVEEAPSIFLDAETRRAMGEQAVALARAVKYSSAGTVEFLVDSKKNFYFLEM  
 NTRLQVEHPVTECITGLDLVQEMIRVAKGYPLRHKQADIRINGWAVECRVYAEDPYKSFGLPSIGRLSQY  
 QEPLHLPGV RVDSGIQPGSDISIIYDPMISKLITYGSDRTEALKRMADALDNYVIRGVTHNIALLREVII  
 NSRFVKGDI STKFLSDVYPDGFKGHMLTKSEKNQLLAIASSLFVAFQLRAQHFQENSRMPVIKPDIANWE  
 LSVKLDHKVHTVVASNNGSVFSVEVDGSKLNVTSTWNLASPLL SVSDGTQRTVQCLSREAGGNMSIQFL  
 GTVVAEQEICVIEAMKMQNSMTAGKTGTVKS VHCQAGDTV GEGDLLVELE

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001178004

**ORF Size:** 2043 bp

**OTI Disclaimer:** 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\\_001178004.1](#), [NP\\_001171475.1](#)

**RefSeq Size:** 2436 bp

**RefSeq ORF:** 2046 bp

**Locus ID:** 5095

**UniProt ID:** [P05165](#)

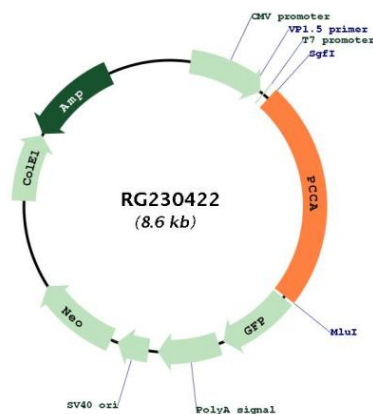
**Cytogenetics:** 13q32.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Propanoate metabolism, Valine, leucine and isoleucine degradation

**Gene Summary:** The protein encoded by this gene is the alpha subunit of the heterodimeric mitochondrial enzyme Propionyl-CoA carboxylase. PCCA encodes the biotin-binding region of this enzyme. Mutations in either PCCA or PCCB (encoding the beta subunit) lead to an enzyme deficiency resulting in propionic acidemia. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, May 2010]

## Product images:



Circular map for RG230422