

Product datasheet for **RG226100**

PCCA (NM_001127692) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCCA (NM_001127692) 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:

>RG226100 representing NM_001127692
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGGTCTGGGTGCGGACAGCACCGCTGGTCGCTGCCGGACGGCGTGGCGGTGGCCGCCGAGC
 AGCTGATGCTGAGCGCGCGCTGCGGACCTGAAGACTTTTGATAAAAATTCTTGTGCTAATAGAGGAGA
 AATTGCATGTCGGGTTATTAGAAGTTCGAAGAAGATGGGCATTAAGACAGTTGCCATCCACAGTGATGTT
 GATGCTAGTTCTGTTTATGTGAAAATGGCGGATGAGGCTGTCTGTGTTGGCCAGCTCCCACCAGTAAAA
 GCTACCTCAACATGGATGCCATCATGGAAGCCATTAAGAAAACCAGGGCCCAAGCTGTACATCCAGGTTA
 TGGATTCTTTTCAGAAAACAAAGAATTTGCCAGATGTTTGGCAGCAGAAGATGTCGTTTTTCATTGGACCT
 GACACACATGCTATTCAAGCCATGGGCGACAAGATTGAAAGCAAATTTAGCTAAGAAAGCAGAGGTTA
 ATACAATCCCTGGCTTTGATGGAGTAGTCAAGGATGCAGAAGAAGCTGTCAGAATTGCAAGGGAAATGG
 CTACCCTGTCATGATCAAGGCCTCAGCAGTGGTGGTGGGAAAGGCATGCGCATTGCTTGGGATGATGAA
 GAGACCAGGGATGGTTTTAGATTGTCATCTCAAGAAGCTGCTTCTAGTTTTGGCGATGATAGACTACTAA
 TAGAAAAATTTATTGATAATCCTCGTCATATAGAAATCCAGGTTCTAGGTGATAAACATGGGAATGCTTT
 ATGGCTTAATGAAAGAGAGTGCTCAATTCAGAGAAGAAATCAGAAGTGGTGGAGGAAGCACAAGCATT
 TTTTTGGATGCGGAGACTCGAAGAGCGATGGGAGAACAAGCTGTAGCTCTTGCCAGAGCAGTAAAAATTT
 CCTCTGCTGGGACCGTGGAGTTCCTTGTGGACTCTAAGAAGAATTTTTATTTCTTGGAAATGAATACAAG
 ACTCCAGGTTGAGCATCTGTACAGAAATGCATTACTGGCCTGGACCTAGTCCAGGAAATGATCCGTGTT
 GCTAAGGGCTACCCTCTCAGGCACAAACAAGCTGATATTCGCATCAACGGCTGGGCGAGTTGAATGTCGGG
 TTTATGCTGAGGACCCCTACAAGTCTTTTGGTTTACCATCTATTGGGAGATTGCTCAGTACCAAGAACC
 GTTACATCTACCTGGTGTCCGAGTGGACAGTGGCATCCAACCAGGAAGTATATTAGCATTATTATGAT
 CCTATGATTTCAAACTAATCACATATGGCTCTGATAGAACTGAGGCACTGAAGAGAATGGCAGATGCAC
 TGGATAACTATGTTATTCGAGGTGTTACACATAATATTGCATTACTTCGAGAGGTGATAATCAACTCACG
 CTTTGTAAAAGGAGACATCAGCACTAAATTTCTCTCCGATGTGTATCCTGATGGCTTCAAAGGACACATG
 CTAACCAAGAGTGAGAAGAACCAGTTATTGGCAATAGCATCATCATTGTTTGTGGCATTCCAGTTAAGAG
 CACAACATTTTCAAGAAAATTAAGAATGCCTGTTATTAACCAGACATAGCCAAGTGGGAGCTCTCAGT
 AAAATTGCATGATAAAGTTCATACCGTAGTAGCATCAAACAATGGGTGAGTGTCTCGGTGGAAGTTGAT
 GGGTCGAAACTAAATGTGACCAGCACGTGGAACCTGGCTTCGCCCTTATTGTCTGTCAGCGTTGATGGCA
 CTCAGAGGACTGTCCAGTGTCTTCTCGAGAAGCAGGTGGAAACATGAGCATTGAGTTTCTTGGTACAGT
 GTACAAGGTGAATATCTTAACCAGACTGCCCAGAAATGAACAAATTTATGCTGAAAAAAGTACTGAG
 GACACAAGCAGTGTCTGCGTTCCTCCGATGCCCGGAGTGGTGGTGGCCGTCTCTGTCAAGCCTGGAGACG
 CGGTAGCAGAAGGTCAAGAAAATTTGTGTGATTGAAGCCATGAAAAATGCAGAATAGTATGACAGCTGGGAA
 AACTGGCACGGTGAATCTGTGCACTGTCAAGCTGGAGACACAGTTGGAGAAGGGGATCTGCTCGTGGAG
 CTGGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG226100 representing NM_001127692
 Red=Cloning site Green=Tags(s)

MAGFWVGTAPLVAAGRRGRWPPQQLMLSAALRTLKTFDKILVANRGEIACRVIRTCKKMGIKTVAIHSDV
 DASSVHVKMADEAVCVGPAPTSKSYLNMDAIMEAIKKTRAQAVHPGYGFLSENKEFARCLAAEDVVFIGP
 DTHAIQAMGDKIESKLLAKKAEVNTIPGFDGVVKDAEEAVRIAREIGYPVMIKASAGGGGKMRIAWDDE
 ETRDGFRLSSQEAASSFDDRRLLIEKFIDNPRHIEIQVLGDKHGNALWNERECIQRRNQKVVEEAPSI
 FLDAETRAMEQAVALARAVKYSSAGTVEFLVDSKKNFYFLEMNTRLQVEHPVTECITGLDLVQEMIRV
 AKGYPLRHKQADIRINGWAVECRVYAEDPYKSFGLPSIGRLSQYQEPLHLPGVRVDSGIQPGSDISIIYYD
 PMISKLITYGSDRTEALKRMADALDNYVIRGVTHNIALREVIINSRFVKGDISTKFLSDVYPDGFKGHM
 LTKSEKNQLLAIASSLFVAFQLRAQHFQENSRMPVIKPDIANWELSVKLDHKVHTVVASNNGSVFSVEVD
 GSKLNVTSTWNLASPLLVSVDGTQRTVQCLSREAGGNMSIQFLGTVYKVNILTRLAAELNKFMLEKVTE
 DTSSVLRSPMPGVVVAVSVKPGDAVAEGQEICVIEAMKMQNSMTAGKTGTVKSVCQAGDTVGEGLLVE
 LE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001127692

ORF Size: 2106 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_001127692.2](#), [NP_001121164.1](#)

RefSeq Size: 2499 bp

RefSeq ORF: 2109 bp

Locus ID: 5095

UniProt ID: [P05165](#)

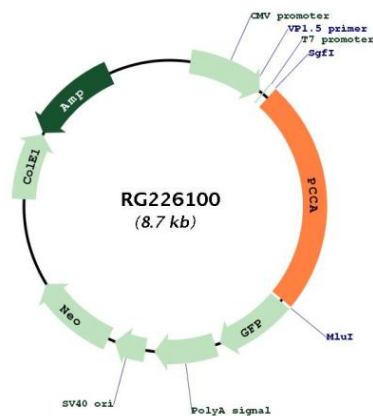
Cytogenetics: 13q32.3

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 RG226100