

Product datasheet for **RC230422**

PCCA (NM_001178004) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCCA (NM_001178004) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCCA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC230422 representing NM_001178004
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGGTTCTGGGTGCGGACAGCACCGCTGGTCGCTGCCGGACGGCGTGGGCGGTGGCCGCCGAGC
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 GTTAAGAGCACAACTTTTCAAGAAAATCAAGAATGCCTGTTATTAACCAGACATAGCCAACTGGGAG
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 CGTGGAGCTGGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230422 representing NM_001178004
 Red=Cloning site Green=Tags(s)

MAGFWVGTAPLVAAGRRGRWPPQQLMLSAALRTLKHLVYYSRQCLMVSRLNGSVGYDPNEKTFDKILVAN
 RGEIACRVIRTCKKMGIKTVAIHSDVDASSVHVKMAEAVCVGPAPTSKSYLNMDAIMEAIKKTRAQAVH
 PGYGFLSENKEFARCLAAEDVVFIGPDTHAIQAMGDKIESKLLAKKAEVENTIPGFDGVVKDAEEAVRIAR
 EIGYPVMIKASAGGGGKGMRIAWDDEETRDGFRLSSQEAAASSFGDDRLLIEKFIDNPRHIEIQVLGDKHG
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 NTRLQVEHPVTECITGLDLVQEMIRVAKGYPLRHKQADIRINGWAVECRVYAEDPYKSFGLPSIGRLSQY
 QEPLHLPGVRVDSGIQPGSDISIIYDPMISKLITYGSDRTEALKRMADALDNYVIRGVTHNIALREVII
 NSRFVKGDIKSTKFLSDVYPDGFKGHMLTKSEKNQLLAIASSLFVAFQLRAQHFQENSRMPVIKPDIANWE
 LSVKLDHDKVHTVASNNGSVFVVEVDGSKLNVTSTWNLASPLLSVSDGTQRTVQCLSREAGGNMSIQFL
 GTVVAEQEICVIEAMKMQNSMTAGKTGTVKSVCQAGDVTGEGDLLVELE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8072_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001178004

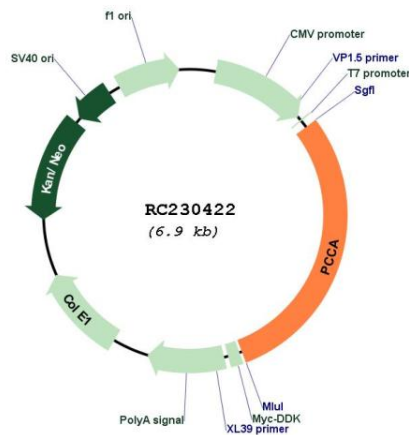
ORF Size: 2043 bp

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](#)

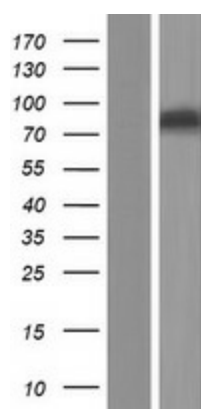
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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_001178004.1, NP_001171475.1</u>
RefSeq ORF:	2046 bp
Locus ID:	5095
UniProt ID:	<u>P05165</u>
Cytogenetics:	13q32.3
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Propanoate metabolism, Valine, leucine and isoleucine degradation
MW:	75.5 kDa
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 RC230422



Western blot validation of overexpression lysate (Cat# [LY433422]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230422 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).