

## Product datasheet for **RC204085**

### PPCDC (NM\_021823) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PPCDC (NM\_021823) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PPCDC  
**Synonyms:** coaC; MDS018; PPC-DC  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC204085 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAACCAAAGGCCCTCTGTCCAGCTGCTGCACCCTTGATGGAGAGAAAATCCATGTTCTTGTGGGTG  
 TCACGGGGAGTGTGCGAGCCCTGAAGTTGCCTTCTCTGGTGTCAAAGCTTTGGACATTCCTGGGCTGGA  
 AGTAGCAGTGGTCACAACCTGAGAGAGCCAAACATTTCTACAGCCCCAGGACATTCCTGTCACCCTCTAC  
 AGCGACGCTGATGAATGGGAGATGTGGAAGAGCCGCTCTGACCCAGTTCTGCACATTGACCTGCGGAGGT  
 GGGCAGACCTCCTGCTGGTGGCTCCTCTTGATGCCAACACTCTGGGAAGGTGGCCAGTGGCATCTGTGA  
 CAACTTGCTTACCTGCGTCATGCGGGCCTGGGACCGCAGCAAGCCCTGCTCTTCTGCCCGCCATGAAC  
 ACCGCCATGTGGGAGCACCCGATCACAGCGCAGCAGGTAGACCAGCTCAAGGCCTTTGGCTATGTCGAGA  
 TCCCTGTGTGGCCAAGAAGCTGGTGTGCGGAGATGAAGGTCTCGGGGCCATGGCTGAAGTGGGACCAT  
 CGTGGACAAAGTAAAAGAAGTCTCTTCCAGCACAGTGGCTTCCAGCAGAT

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC204085 protein sequence  
 Red=Cloning site Green=Tags(s)

MEPKASCAPAAAPLMERKFHVLVGVTSVAALKPLLVSKLLDIPGLEAVVTTTERAKHFYSPQDIPVTLY  
 SDADEWEMWKSRSRDPVLHIDLRWADLLLVAPLDANTLGKVASGICDNLCTCVMRAWDRSKPLLFPCAMN  
 TAMWEHPITAQQVDQLKAFGYVEIPCVAKKLVCGDEGLGAMAIEVGTIVDKVKEVLFQHSGFQQS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6430\\_h09.zip](https://cdn.origene.com/chromatograms/mk6430_h09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_021823

**ORF Size:** 612 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\\_021823.5](#)

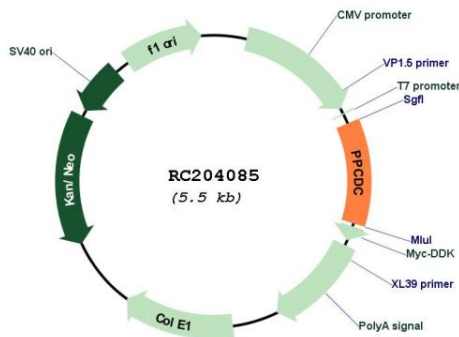
**RefSeq Size:** 2268 bp

**RefSeq ORF:** 615 bp

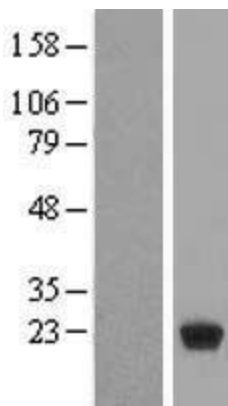
**Locus ID:** 60490

**UniProt ID:** [Q96CD2](#)  
**Cytogenetics:** 15q24.2  
**Domains:** Flavoprotein  
**Protein Pathways:** Metabolic pathways, Pantothenate and CoA biosynthesis  
**MW:** 22.4 kDa  
**Gene Summary:** Biosynthesis of coenzyme A (CoA) from pantothenic acid (vitamin B5) is an essential universal pathway in prokaryotes and eukaryotes. PPCDC (EC 4.1.1.36), one of the last enzymes in this pathway, converts phosphopantothenoylcysteine to 4-prime-phosphopantetheine (Daugherty et al., 2002 [PubMed 11923312]).[supplied by OMIM, Mar 2008]

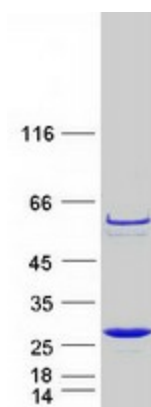
**Product images:**



Circular map for RC204085



Western blot validation of overexpression lysate (Cat# [LY411905]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204085 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPCDC protein (Cat# [TP304085]). The protein was produced from HEK293T cells transfected with PPCDC cDNA clone (Cat# RC204085) using MegaTran 2.0 (Cat# [TT210002]).