

## Product datasheet for **RC200099**

### COX16 (NM\_016468) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** COX16 (NM\_016468) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** COX16  
**Synonyms:** C14orf112; hCOX16; HSPC203  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC200099 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTTGACCCGCGGTGATGCGTGCTTTTCGCAAGAACAAGACTCTCGGCTATGGAGTCCCATGTTGT  
TGCTGATTGTTGGAGTCTTTTGGTCTTCGTGAGTTTCTCAAATCCGATATGATGCTGTGAAGAGTAA  
AATGGATCCTGAGCTTGAAAAAACTGAAAGAGAATAAAATATCTTTAGAGTCGGAATATGAGAAAATC  
AAAGACTCCAAGTTTGATGACTGGAAGAATATTCGAGGACCCAGGCCTTGGAAGATCCTGACCTCTCC  
AAGGAAGAAATCCAGAAAGCCTTAAGACTAAGACAACT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC200099 protein sequence  
Red=Cloning site Green=Tags(s)  
MFAPAVMRAFRKNKTLGYVPMLLLIVGGSFGLREFSQIRYDAVKSKMDPELEKLLKENKISLESEYEKI  
KDSKFDWKNIRGPRPWEDPDLQGRNPESLKTKT

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6385\\_d03.zip](https://cdn.origene.com/chromatograms/mk6385_d03.zip)

**Restriction Sites:** SgfI-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_016468

**ORF Size:** 318 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\\_016468.7](#)

**RefSeq Size:** 1724 bp

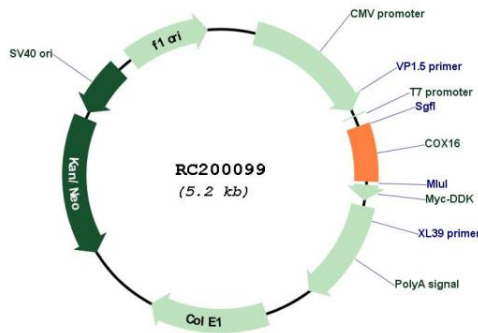
**RefSeq ORF:** 321 bp

**Locus ID:** 51241

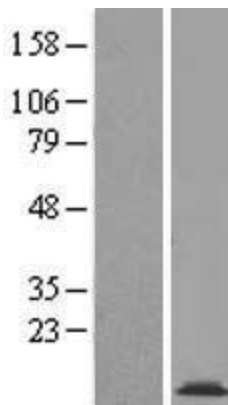
**UniProt ID:** [Q9P0S2](#)  
**Cytogenetics:** 14q24.2  
**Protein Families:** Secreted Protein, Transmembrane  
**MW:** 12.3 kDa

**Gene Summary:** Required for the assembly of the mitochondrial respiratory chain complex IV (CIV), also known as cytochrome c oxidase (PubMed:29355485, PubMed:29381136). Promotes the insertion of copper into the active site of cytochrome c oxidase subunit II (MT-CO2/COX2) (PubMed:29355485, PubMed:29381136). Interacts specifically with newly synthesized MT-CO2/COX and its copper center-forming metallochaperones SCO1, SCO2 and COA6 (PubMed:29381136). Probably facilitates MT-CO2/COX2 association with the MITRAC assembly intermediate containing MT-CO1/COX1, thereby participating in merging the MT-CO1/COX1 and MT-CO2/COX2 assembly lines (PubMed:29381136).[UniProtKB/Swiss-Prot Function]

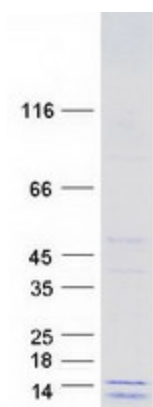
### Product images:



Circular map for RC200099



Western blot validation of overexpression lysate (Cat# [LY413968]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200099 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COX16 protein (Cat# [TP300099]). The protein was produced from HEK293T cells transfected with COX16 cDNA clone (Cat# RC200099) using MegaTran 2.0 (Cat# [TT210002]).