

## **Product datasheet for RC201768**

## COX7C (NM 001867) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** COX7C (NM\_001867) Human Tagged ORF Clone

Tag:Myc-DDKSymbol:COX7C

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC201768 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTTGGGCCAGAGCATCCGGAGGTTCACAACCTCTGTGGTCCGTAGGAGCCACTATGAGGAGGGCCCTGGGAAGAATTTGCCATTTTCAGTGGAAAACAAGTGGTCGTTACTAGCTAAGATGTGTTTTGTACTTTGGATC

TGCATTTGCTACACCCTTCCTTGTAGTAAGACACCAACTGCTTAAAACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC201768 protein sequence

Red=Cloning site Green=Tags(s)

MLGQSIRRFTTSVVRRSHYEEGPGKNLPFSVENKWSLLAKMCLYFGSAFATPFLVVRHQLLKT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6376">https://cdn.origene.com/chromatograms/mk6376</a> f12.zip

Restriction Sites: Sgfl-Mlul



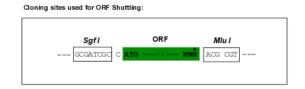
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

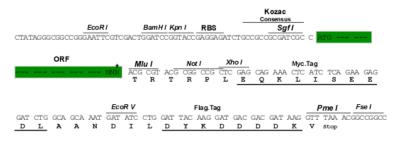
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001867

ORF Size: 189 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:** <u>NM 001867.3</u>

RefSeq Size: 448 bp



 RefSeq ORF:
 192 bp

 Locus ID:
 1350

 UniProt ID:
 P15954

 Cytogenetics:
 5q14.3

**Protein Pathways:** Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways,

Oxidative phosphorylation, Parkinson's disease

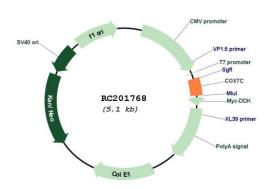
**MW:** 7.2 kDa

**Gene Summary:** Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain,

catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes subunit VIIc, which shares 87% and 85% amino acid sequence identity with mouse and bovine COX VIIc, respectively, and is found in all tissues. A pseudogene COX7CP1 has been found on

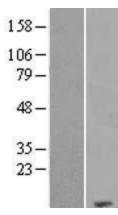
chromosome 13. [provided by RefSeq, Jul 2008]

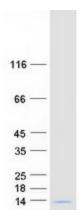
## **Product images:**



Circular map for RC201768







Western blot validation of overexpression lysate (Cat# [LY419695]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201768 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified COX7C protein (Cat# [TP301768]). The protein was produced from HEK293T cells transfected with COX7C cDNA clone (Cat# RC201768) using MegaTran 2.0 (Cat# [TT210002]).