

Product datasheet for **RC210756**

COX17 (NM_005694) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: COX17 (NM_005694) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: COX17
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210756 representing NM_005694
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGGGTCTGGTTGACTCAAACCCTGCCCGCCTGAGTCTCAGGAGAAGAAGCCGCTGAAGCCCTGCT
GCGCTTGCCGGAGACCAAGAAGCGCGCATGCGTGTATCATCGAGAAAGGAGAAGAACACTGTGGACA
TCTAATTGAGGCCACAAGGAATGCATGAGAGCCCTAGGATTTAAATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210756 representing NM_005694
Red=Cloning site Green=Tags(s)
MPGLVDSNPAPPESQEKKPLKPCACPETKKARDACIIEKGEEHCGHLIEAHKECMRALGFKI
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8114_f02.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_005694

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).

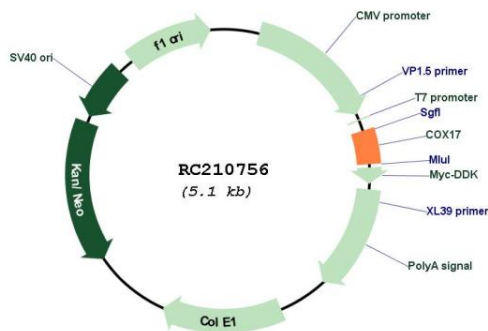
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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: [NM_005694.2](#)

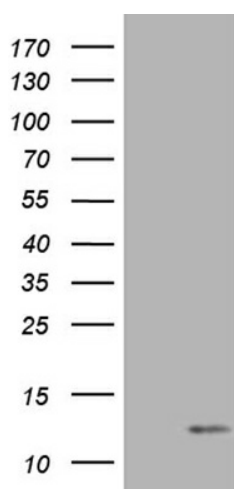
RefSeq Size: 423 bp

RefSeq ORF:	192 bp
Locus ID:	10063
UniProt ID:	<u>Q14061</u>
Cytogenetics:	3q13.33
Protein Pathways:	Metabolic pathways, Oxidative phosphorylation
MW:	6.7 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 a protein which is not a structural subunit, but may be involved in the recruitment of copper to mitochondria for incorporation into the COX apoenzyme. This protein shares 92% amino acid sequence identity with mouse and rat Cox17 proteins. This gene is no longer considered to be a candidate gene for COX deficiency. A pseudogene COX17P has been found on chromosome 13. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210756



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY COX17 (Cat# RC210756, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-COX17 (Cat# [TA812124])(1:2000).