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# Product datasheet for RC228165

## COX11 (NM_001162862) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | COX11 (NM_001162862) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | COX11 |
| **Synonyms:** | COX11P |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC228165 representing NM_001162862
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGAGGGCTCTGGCGTCCTGGATGGAGGTGCGTTCCTTTCTGTGGCTGGCGCTGGATCCACCCTGGGT
CTCCAACCAGGGCTGCAGAGAGGGTAGAGCCGTTTCTTAGGCCAGAGTGGAGTGGGACAGGAGGTGCCGA
GAGAGGACTGAGGTGGCTTGGGACATGGAAGCGCTGCAGCCTTCGAGCCCGGCATCCAGCATTGCAGCCG
CCGCGGCGGCCTAAGAGCTCGAACCCTTTCACACGCGCGCAGGAGGAGGAGCGGCGGCGGCAGAACAAGA
CGACCCTCACTTACGTGGCCGCTGTCGCCGTGGGCATGCTGGGGGCGTCCTACGCTGCCGTACCCCTTTA
TCGGCTCTATTGCCAGACTACTGGACTTGGAGGATCAGCAGTTGCAGGTCATGCCTCAGACAAGATTGAA
AACATGGTGCCTGTTAAAGATCGAATCATTAAAATTAGCTTTAATGCAGATGTGCATGCAAGTCTCCAGT
GGAACTTTAGACCTCAGCAAACAGAAATATATGTGGTGCCAGGAGAGACTGCACTGGCGTTTTACAGAGC
TAAGAATCCTACTGACAAACCAGTAATTGGAATTTCTACATACAATATTGTTCCATTTGAAGCTGGACAG
TATTTCAATAAAATACAGGCTTCAAAGCTGCACAGAGTCTACGTTTTAGAGAGTTGGCACCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:**

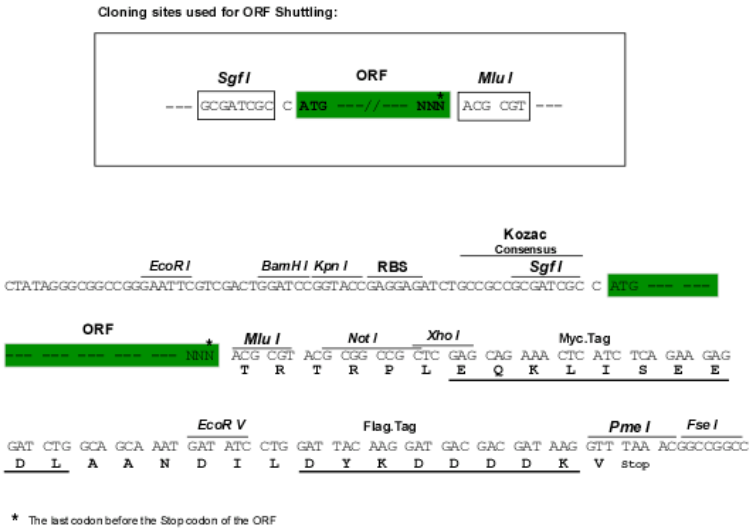
>RC228165 representing NM_001162862
Red=Cloning site Green=Tags(s)

MGGLWRPGWRCVPFCGWRWIHPGSPTRAAERVEPFLRPEWSGTGGAERGLRWLGTWKRCSLRARHPALQP
PRRPKSSNPFTRAQEEERRRQNKTTLTYVAAVAVGMLGASYAAVPLYRLYCQTTGLGGSAVAGHASDKIE
NMVPVKDRIIKISFNADVHASLQWNFRPQQTEIYVVPGETALAFYRAKNPTDKPVIGISTYNIVPFEAGQ
YFNKIQASKLHRVYVLESWHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_001162862

**ORF Size:** 693 bp

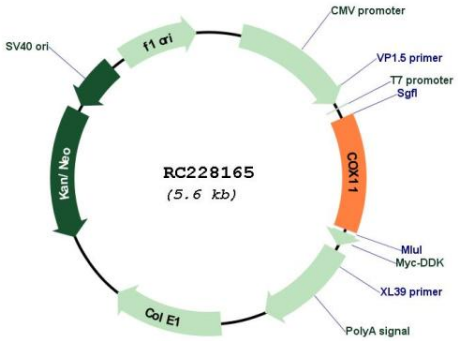
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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. |
| **Note:** | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| **RefSeq:** | NM_001162862.2 |
| **RefSeq ORF:** | 696 bp |
| **Locus ID:** | 1353 |
| **Cytogenetics:** | 17q22 |
| **Protein Families:** | Transmembrane |
| **Protein Pathways:** | Metabolic pathways, Oxidative phosphorylation |
| **MW:** | 26 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 a heme A biosynthetic enzyme involved in COX formation, according to the yeast mutant studies. However, the studies in Rhodobacter sphaeroides suggest that this gene is not required for heme A biosynthesis, but required for stable formation of the Cu(B) and magnesium centers of COX. This human protein is predicted to contain a transmembrane domain localized in the mitochondrial inner membrane. Multiple transcript variants encoding different isoforms have been found for this gene. A related pseudogene has been found on chromosome 6. [provided by RefSeq, Jun 2009] |

## Product images:




Circular map for RC228165