

## Product datasheet for MR218571

### Cox18 (NM\_001033310) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cox18 (NM_001033310) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cox18
Synonyms:	BC038311
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR218571 representing NM_001033310 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGTGCCGGTCGTGTGCCGGTGGCTCAGGTCGTCGCCACCCTGCGGCTCCCGGCACCGGGATCAC  
CGCCCGCTGGAGCAGCGCGGGCTCCAGCCCTCCGGTATGGGCAGCCGCTTCGGTGTCTGCGGCCTC  
TCCAGGTGGCTGGTATGAGGCCCTGGCAGCGTCGGCGCCGGTGGCACCAGGAGGAAGTGTCTGGGC  
GCGCAGGAGGCTACCGGCCTCCCTGGTGGAGCAACATCATACTCAGCACCGTTGCCCTGCGCGGTGCTG  
TCACTCTGCCCTGGCCGCTATCAGCACTACATCCTGGCTAAGGTGAAAACCTGCAACCAGAAATAAA  
AGACATCGCCAAGCGCCTTAACCAAGAAGTTGAGTCTGTGCCCGTCAGTTTGGATGGTCCAAGAGAGTG  
GCTAGACTCACCTATCTGAAGAATGCGGAGACTTATCTCAGAGCTGTATGTCCGTGACAACTGCCACC  
CTTTCAAAGCCACGGTGTCTGGTCTGGGTCCAGCTTCCAATGTGGGTTTTTCATCTCTGTGCGCCTCCGGAA  
CCTCAGCACTGGGGCCACACATTCAGACGGCATTCTGTTCAGGAACAGTTAGCTGCTGGCGGGACGCTG  
TGGTTTCTGACCTACCGCAGTGGATTCCACCTGGATTCTGCCTGTCTCTGTTGGTGTGTCAACCTAC  
TGATAGTGGAGATTTTGTCTACAAAAAATTGGGACGCTCGTTTTCAAATGTATGTTACAAATTTTGT  
CCGAGCTGTATCCGTGTGATGATTCCAGTTGCTGCAACAGTACCCTCGGCGCTTGTCTCTACTGGCTG  
TGCTCCAGCCTCATGGGCTCGCACAGAACCTGCTGCTGCGCTCCCTGGGTTCCGCCAGCTCTGCCGGA  
TACCACCAAGCAAGTCCGACTCAGAGACCCGTACCGAGACCTCTCTGCTGCCTTTTGCGCCAAGTTCCT  
TTCAAGAAAACGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR218571 representing NM\_001033310  
Red=Cloning site Green=Tags(s)

MLCRSCAGWLRSLPTLRLPAPGSPPAWSSARLPALPVWAAASVSAASPGGWYEAL AASAPVRTAEVLLG  
 AQEATGLPWWSNII LSTVALRGAVTLPLAAYQHYILAKVENLQPEIKDIAKRLNQEVAVCARQFGWSKRV  
 ARLTYLKNMRRLLISELYVRDNCHPFKATVLVWVQLPMWVFISVALRNLSTGATHSDGISVQEQLAAGTLL  
 WFPDLTAVDSTWILPVS VGVVNL L IVEIFALQKIGTSRFQMYVTNFVRAVSVLMIPVAATVPSALVLYWL  
 CSSLMGLAQNL L L RSPGFRQLCRIPPSKSDSETPYRDLSAAFCAKFLSRKR

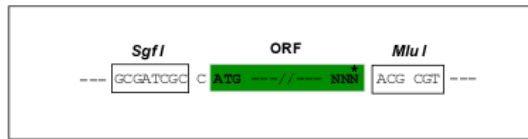
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9029\\_a03.zip](https://cdn.origene.com/chromatograms/mm9029_a03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001033310

**ORF Size:** 993 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\\_001033310.3](#), [NP\\_001028482.2](#)

**RefSeq Size:** 1338 bp

**RefSeq ORF:** 996 bp

**Locus ID:** 231430

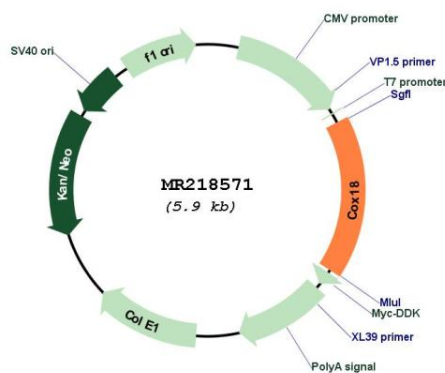
**UniProt ID:** [Q8VC74](#)

**Cytogenetics:** 5 E1

**MW:** 36.8 kDa

**Gene Summary:** Mitochondrial membrane insertase required for the translocation of the C-terminus of cytochrome c oxidase subunit II (MT-CO2/COX2) across the mitochondrial inner membrane. Plays a role in MT-CO2/COX2 maturation following the COX20-mediated stabilization of newly synthesized MT-CO2/COX2 protein and before the action of the metallochaperones SCO1/2. Essential for the assembly and stability of the mitochondrial respiratory chain complex IV (also known as cytochrome c oxidase).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR218571