

Product datasheet for **RC229211**

COQ2 (NM_015697) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COQ2 (NM_015697) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	COQ2
Synonyms:	CL640; COQ10D1; MSA1; PHB:PPT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC229211 representing NM_015697
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGACCCCAATTTACAAGTAAGGATGAGGAAAGTTCTGCCACACCGCCGCCAGCCTGGCAGACTAG
GATTGCATCCTGCGGGTGCCACTGCGCATGCTGCGGGGAATGACGTCATCCGAGCTCGTCCCGCCT
CACCAGCGCCATGCTGGGCTCGCGAGCCCGGGGTTTCGCGCGGGGCTGCGGGCTGTGGCACTGGCGTGG
CTGCCGGGCTGGCGGGCCGCTCCTTCGCCCTGGCGCGTGGCGCAGGCGCGCCACGGTGGTACTGTC
AGCCCCCGCCTGTCCGAGCCGCGGGGCGCCAGCTCAGTTTGTCCGCGCGGGGCTGGTGGACTCTGC
GCCCGGCCCTGCAGCCGACTTGCCTCATGCGGTTGGACAAGCCATTGGAACCTGGCTTCTGTAT
TTACCATGTACCTGGAGCATTGGTTTGGCAGTGAACCAGTTGTTTTCCAGATTGGTACATGCTCTCCC
TCTTTGGCACTGGAGCTATTCTGATGCGTGGAGCAGGCTGACTATTAATGACATGTGGACCAGGACTA
TGATAAAAAGGTTACAAGAACAGCCAATCGTCCAATAGCCGCTGGAGACATTTCAACTTTTCAGTCTTT
GTTTTTCTGGGGGACAGCTAACCTGGCACTGGGTGTTCTTCTGTGTCTAAATTAACACTACAGTATAGCTC
TGGGAGCAGGATCCTTACTTCTTGTTCATCACCTACCCACTAATGAAAAGAAATTCATACTGGCCTCAACT
AGCCTTGGGCTTGACATTTAATTGGGGAGCGTTACTTGGATGGTCTGCTATCAAGGGTTCCTGTGATCCA
TCTGTTTGCTGCCTCTTTATTTTTCTGGAGTTATGTGGACACTAATATATGATACTATTTATGCCCATC
AGGACAAAAGAGATGATGTTTTGATTGGTCTTAAGTCAACGGCTCTGCGGTTCCGGAGAAAATACCAAGCC
GTGGCTCAGCGGCTTCAAGTGTGCAATGCTGGGGCAGTGGCTAGTGGGTGTGAACAGTGGACAGACT
GCTCCCTACTACGCTGCCCTGGGTGCTGAGGAGCCATCTGACTCACCAGATTTACACTCTAGACATCC
ACAGACTGAGGATTGTTGGAATAAATTTATCTCAACCGAACACTGGGACTAATAGTTTTTTTAGGGAT
TGTCTTGGGAATTTGTGAAAGAAAAGAAGACAGACAAAAACAAGGATATAGAGAATAAAATAGAA
AAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC229211 representing NM_015697
Red=Cloning site Green=Tags(s)

MTPISQVRMRKGSAAHTAAQPGRLGLHPAGATAHACRGMTSIRARPGLTSAMLGSRAAGFARGLRAVALAW
LPGWRGRSFALARAAGAPHGGDLQPPACPEPRGRQLSLAAA VVDSAPRPLQPYLRMLRDKPIGTWLLY
LPCTWSIGLAAEPGCFPDWYMLSLFGTGAILMRGAGCTINDMWDQDYDKK VTRTANRPIAAGDISTFQSF
VFLGGQLTLALGVLLCLNYYSIALGAGSLLL VITYPLMKRISYWPQLALGLTFNWGALLGWSAIGSCDP
SVCLPLYFSGVMWTLIYDTIYAHQDKRDDVLI GLKSTALRFGENTKPWLSGFSVAMLGALSLVGVNSGQT
APYYAALGAVGAHLTHQIYTLDIHRPEDCWNKFI SNRTLGLIVFLGIVLGNLWKEKKTDKTKKGIENKIE
N

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8009_d04.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_015697

ORF Size: 1263 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_015697.8](#)

RefSeq ORF: 1266 bp

Locus ID: 27235

Cytogenetics: 4q21.22-q21.23

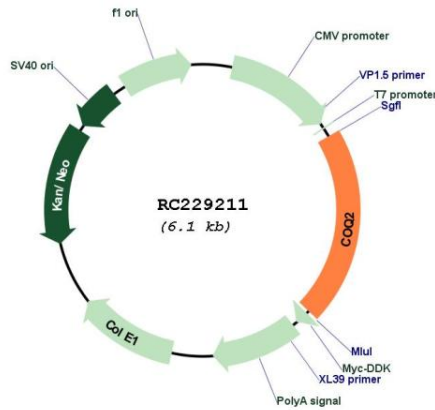
Protein Families: Transmembrane

Protein Pathways: Ubiquinone and other terpenoid-quinone biosynthesis

MW: 45.4 kDa

Gene Summary: This gene encodes an enzyme that functions in the final steps in the biosynthesis of CoQ (ubiquinone), a redox carrier in the mitochondrial respiratory chain and a lipid-soluble antioxidant. This enzyme, which is part of the coenzyme Q10 pathway, catalyzes the prenylation of parahydroxybenzoate with an all-trans polyprenyl group. Mutations in this gene cause coenzyme Q10 deficiency, a mitochondrial encephalomyopathy, and also COQ2 nephropathy, an inherited form of mitochondriopathy with primary renal involvement. [provided by RefSeq, Oct 2009]

Product images:



Circular map for RC229211