

Product datasheet for **SC320968**

COQ2 (NM_015697) Human Untagged Clone

Product data:

| | |
|---------------------------|---------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | COQ2 (NM_015697) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | COQ2 |
| Synonyms: | CL640; COQ10D1; MSA1; PHB:PPT |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC (PS100020) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >OriGene sequence for NM_015697.6
 GCCGGGAATGACGTCAATCCGAGCTCGTCCCGGCCTCACCAGCGCCATGCTGGGCTCGC
 GAGCCGCGGGGTTGCGCGGGGGCTGCGGGCTTTGGCACTGGCGTGGCTGCCGGGCTGGC
 GGGGCCGCTCCTTCGCCCTGGCGGTGCGGCAGGCGGCCACGGTGGTGAATTGCAGC
 CCCCCGCTGTCCGAGCCGCGGGGCGCCAGCTCAGTTGTCCGCGCGGGCGGTGGTGG
 AACCTGGCTTCTGTATTTACCATGTACCTGGAGCATTGGTTTGGCAGCTGAACCCAGTT
 GTTTCCAGATTGGTACATGCTCTCCCTCTTTGGCACTGGAGCTATTCTGATGCGTGGAG
 CAGGCTGTACTATTAATGACATGTGGGACCAGGACTATGATAAAAAGGTTACAAGAACAG
 CCAATCGTCCAATAGCCGCTGGAGACATTTCAACTTTTTCAGTCTTTGTTTTTCTGGGG
 GACAGCTAACCCCTGGCACTGGGTGTTCTTCTGTGTCTAAATTAACAGTATAGCTCTGG
 GAGCAGGATCCTTACTTCTTGTGCATCACCTACCCACTAATGAAAAGAATTCATACTGGC
 CTAACCTAGCCTTGGGCTTGACATTTAATTGGGGAGCGTACTTGGATGGTCTGCTATCA
 AGGTTTCTGTGATCCATCTGTTTGCCTGCCTTTATTTTTCTGGAGTTATGTGGACAC
 TAATATATGACACTATTTATGCCCATCAGGACAAAAGAGATGATGTTTTGATTGGTCTTA
 AGTCAACGGCTCTGCGGTTCCGAGAAAATACCAAGCCGTGGCTCAGCGGCTTCAGTGTTG
 CAATGCTGGGGGCACTGAGCCTAGTGGGTGTGAACAGTGGACAGACTGCTCCCTACTACG
 CTGCCCTGGGTGCTGTAGGAGCCCATCTGACTCACCAGATTTACTCTAGACATCCACA
 GACCTGAGGATTGTTGGAATAAATTTATCTCCAACCGAACACTGGGACTAATAGTTTTTT
 TAGGGATTGCTCTTGGGAATTTGTGAAAGAAAAGAAGACAGACAAAACAAGAAGGGTA
 TAGAGAATAAAATAGAAAATTAATGAATGAAATTTATCTAGGAATTTTTAAACATTTTT
 TACAAAATATAATTAGATTTGAATACAAAATCTGATACAATATGTTAAAGAATTAAGAAC
 CTGAAGATGAAGATTTAGAGCATATTTACCTGGATTTTACTTATTTGCTAGCAAAATTC
 CCCTTGTACAGAAACCGGGACTCTTCAGGATTTGAGATGGCCTTGAGTATTTTGTG
 ATACATCTTCTGCCATTATAATTCTCACCTGAAGTTATGGGGATTGCACGGGTTTTGG
 CACTTTAGAAAAAGCCTGATGTGGGTCTTACATAAATGAATGTCTGTATAAGAAAATGGA
 CTCTTTTTTTTAGGGAAAAATAAAGCAACTATGGCAAAAAAAAAAAAAAAAAAAAAA
 AAAAAA

Restriction Sites: Please inquire

ACCN: NM_015697

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_015697.6](#), [NP_056512.4](#)

RefSeq Size: 1657 bp

RefSeq ORF: 1155 bp

Locus ID: 27235

Cytogenetics: 4q21.22-q21.23

Protein Families: Transmembrane

Protein Pathways: Ubiquinone and other terpenoid-quinone biosynthesis

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.