

## Product datasheet for **SC326800**

### COX11 (NM\_001162862) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	COX11 (NM_001162862) Human Untagged Clone
Tag:	Tag Free
Symbol:	COX11
Synonyms:	COX11P
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001162862, the custom clone sequence may differ by one or more nucleotides ATGGGAGGGCTCTGGCGTCTGGATGGAGGTGCGTTTCTTCTGTGGCTGGCGCTGGATC CACCTGGGTCTCCAACCAAGGGCTGCAGAGAGGGTAGAGCCGTTTCTTAGGCCAGAGTGG AGTGGGACAGGAGGTGCCGAGAGAGGACTGAGGTGGCTTGGGACATGGAAGCGCTGCAGC CTTCGAGCCCGCATCCAGCATTGCAGCCGCCGCGGCCCTAAGAGCTCGAACCCCTTTC ACACGCGCGCAGGAGGAGGAGCGCGCGGCAGAACAAAGACGACCCTCACTTACGTGGCC GCTGTGCGCGTGGGCATGCTGGGGCGTCTACGCTGCCGTACCCCTTTATCGGCTCTAT TGCCAGACTACTGGACTTGGAGGATCAGCAGTTGCAGGTCATGCCTCAGACAAGATTGAA AACATGGTGCCTGTTAAAGATCGAATCATTAAAATTAGCTTTAATGCAGATGTGCATGCA AGTCTCCAGTGGAACTTTAGACCTCAGCAAACAGAAATATATGTGGTCCAGGAGAGACT GCACTGGCGTTTTACAGAGCTAAGAATCCTACTGACAAACAGTAATTGGAATTTCTACA TACAATATTGTTCCATTTGAAGCTGGACAGTATTTCAATAAAAATACAGGCTTCAAAGCTG CACAGAGTCTACGTTTTAGAGAGTTGGCACCTT
Restriction Sites:	Please inquire
ACCN:	NM_001162862
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.



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<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001162862.1, NP_001156334.1</u>
<b>RefSeq Size:</b>	824 bp
<b>RefSeq ORF:</b>	696 bp
<b>Locus ID:</b>	1353
<b>Cytogenetics:</b>	17q22
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Metabolic pathways, Oxidative phosphorylation
<b>Gene Summary:</b>	<p>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 <i>Rhodobacter sphaeroides</i> 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]</p> <p>Transcript Variant: This variant (3) uses an alternate splice site in the 3' coding region resulting in a frameshift, compared to variant 1. The resulting isoform (2) has a shorter and distinct C-terminus, compared to isoform 1.</p>