

## Product datasheet for **SC126991**

### COX5B (NM\_001862) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	COX5B (NM_001862) Human Untagged Clone
Tag:	Tag Free
Symbol:	COX5B
Synonyms:	COXVB
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC126991 sequence for NM_001862 edited (data generated by NextGen Sequencing) ATGGCTTCAAGGTTACTTCGCGGAGCTGGAACGCTGGCCGCGCAGGCCCTGAGGGCTCGC GGCCCCAGTGGCGCGCCGCGATGCGCTCCATGGCATCTGGAGGTGGTGTCCCCTGAT GAAGAGCAGGCGACTGGGTTGGAGAGGGAGATCATGCTGGCTGCAAGAAGGGACTGGAC CCATACAATGTAAGTGGCCCCAAAGGGAGCTTCAGGCACCAGGGAAGACCCTAATTTAGTC CCCTCCATCTCCAACAAGAGAATAGTAGGCTGCATCTGTGAAGAGGACAATACCAGCGTC GTCTGGTTTTGGCTGCACAAAGGCGAGGCCAGCGATGCCCCGCTGTGGAGCCATTAC AAGCTGGTGCCCCAGCAGCTGGCACACTGA

Clone variation with respect to NM\_001862.2



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**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_001862 unedited  
 NGGCGTCAGATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCAG  
 CTTGTTCCCGGAAGTTTTGCTGCTAGTCGCGGACGCAATGGCTTCAAGGTTACTTCGCGG  
 AGCTGGAACGCTGGCCGCGCAGGCCCTGAGGGCTCGCGGCCCCAGTGGCGCGGCCGCGAT  
 GCGCTCCATGGCATCTGGAGGTGGTGTCCCACTGTTGAAGAGCAGGCGACTGGGTTGGA  
 GAGGGAGATCATGCTGGCTGCAAAGAAGGGACTGACCCATAACAATGTAAGTGGCCCCAAA  
 GGGAGCTTCAGGCACCAGGGAAGACCCTAATTTAGTCCCCTCCATCTCCAACAAGAGAAT  
 AGTANGCTGCATCTGTGAAGAGGACAATACCAGGTCGTCTGGTTTTGGCTGCACANAGG  
 CGAGGCCAGCGATGCCCCCGCTGTGGAGCCATTACAAAGCTGTGCCCCAGCAGCTGGC  
 ACACTGAGCACCTGCACTAAATTAATAAAAAATGTGCTGTAAAGTTCCTTCTTTTCAGTA  
 AAGACTAGCCATTGCATGGCCTCCTTCTCCCACTAAAAAAAAAAAAAAAAAACTCGACTCTA  
 ATTTGCGGCCGCGGTATAGCTGTTTCTGAACAGATCCCGGGGGGCATCCTGGGACCC  
 TTTCCAGGGCGTTTTCTGGCCTTGAATTGCCCTTCCAGGGCCCCACAACCTTGGC  
 CCAATAAAAAATTAATTGCCATAATTTGGCCTGACAAGGGGGCCCTTTTAAAATTATGGG  
 GGGAGGGGGTGGTATTGAAACAAGGCCAATTTGAAAAACAATTTGGGGCGTGGGGGT  
 TTTTGGGAAACAACGTGGGTGGAGGGGCACAATTTGGGCCAGTGAATCCCCCCCCGGGG  
 GAAT

**Restriction Sites:** NotI-NotI

**ACCN:** NM\_001862

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_001862.2](#), [NP\\_001853.2](#)

**RefSeq Size:** 523 bp

**RefSeq ORF:** 390 bp

<b>Locus ID:</b>	1329
<b>UniProt ID:</b>	<a href="#">P10606</a>
<b>Cytogenetics:</b>	2q11.2
<b>Domains:</b>	COX5B
<b>Protein Pathways:</b>	Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
<b>Gene Summary:</b>	<p>Cytochrome C oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit Vb of the human mitochondrial respiratory chain enzyme. [provided by RefSeq, Jul 2008]</p>