

Product datasheet for SC117461

COX5A (NM_004255) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: COX5A (NM_004255) Human Untagged Clone
Tag: Tag Free
Symbol: COX5A
Synonyms: COX; COX-VA; MC4DN20; VA
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)
Fully Sequenced ORF: >OriGene ORF sequence for NM_004255 edited
 ATGCTGGGCGCCGCTCTCCGCCGCTGCGCTGTGGCCGCAACCACCCGGGCGACCCTCGA
 GGCTCCTGCACTCCGCCCGGACCCCGCCCGCGTGGCTATCCAGTCAGTTCGCTGC
 TATTCCCATGGGTACAGGAGACAGATGAGGAGTTTGATGCTCGCTGGGTAACATACTTC
 AACAAAGCCAGATATAGATGCCTGGGAATTGCGTAAAGGGATAAACACACTTGTTACCTAT
 GATATGGTTCCAGAGCCAAAATCATTGATGCTGCTTTGCGGGCATGCAGACGGTAAAT
 GATTTTGTAGTACAGTTCGTATCCTAGAGGTTGTTAAGGACAAAGCAGGACCTCATAAG
 GAAATCTACCCCTATGTCATCCAGGAAGTACACCAACTTTAAATGAACTGGGAATCTCC
 ACTCCGGAGGAACTGGGCCTTGACAAAAGTGTA

5' Read Nucleotide Sequence: >OriGene 5' read for NM_004255 unedited
 CACAATTTGTATACGACTCCTATAGGCGGCCCGGAATTCGCACGAGGCCGCCATCGCCG
 TCATGCTGGGCGCGCTCTCCGCCGCTGCGCTGTGGCCGCAACCACCCGGGCGACCCTC
 GAGGCCTCCTGCACTCCGCCCGGACCCCGCCCGCGTGGCTATCCAGTCAGTTCGCT
 GCTATTCCCATGGGTACAGGAGACAGATGAGGAGTTTGATGCTCGCTGGGTAACATACT
 TCAACAAGCCAGATATAGATGCCTGGGAATTGCGTAAAGGGATAAACACACTTGTTACCT
 ATGATATGGTTCCAGAGCCAAAATCATTGATGCTGCTTTGCGGGCATGCAGACGGTAA
 ATGATTTTGTAGTACAGTTCGTATCCTAGAGGTTGTTAAGGACAAAGCAGGACCTCATA
 AGGAAATCTACCCCTATGTCATCCAGGAAGTACACCAACTTTAAATGAACTGGGAATCT
 CCACTCCGGAGGAACTGGGCCTTGACAAAAGTGTAAACCGCATGGATGGGCTTCCCCAAG
 GATTTATTGACATTGCTACTTGAGTGTGAACAGTTACCTGAAATACTGATGATAACATA
 TTACCTTATTTGAACAAGTTTTCTTTATTGAGTACCAAGCCATGTAATGGTAACCTGGA
 CTNTAATAAAAAGGAAATGAGTTTGAAGTGAATAAAAAAAAAAAAAAAAAACTCGACTTAGAT
 TGCGGCCGCGGTATAGCTGTTTCTGACCAGATCCCGGTTGGCATCCCTGTGACCCCTC
 CCCAGTGCCTNTCCTGGCCCTGGAGTGCCACTCCAGGGCCACCAGCCTTGCCCTATAAA
 ATAAGTGCATCATTTTGCCTGACTAGTGTCCCTCTAAATATATGGGTGAGCGGGGGGAA
 TTGGACCAGGGCCACCGCAACACACCTC



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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_004255 unedited CACTTCCAGGGCCGNAAGCACTGGGGNAGGGGTACAGGGATGCCACCCGGGATCTGT TCAGGAAACAGCTATGACCGCGGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTC AGTTCAAACCTCATTTCCCTTTTATTAAGTCCAAGTTACCATTACATGGCTTGGTACTCA ATAAAGGAAAACCTGTTCAAATAAGGTAATATGTTATCATCAGTATTTCCAGGTAAGTGT TCACACTCAAGTAGCAATGTCAATAAATCCTTGGGAAGCCCATCCATGCGGTTTACACT TTGTCAAGGCCAGTTCCTCCGGAGTGGAGATCCAGTTCATTTAAAGTTGGTCTAAGT TCCTGGATGACATAGGGGTAGATTTCTTATGAGGTCCTGCTTTGCTTAACTNNA ATTGATACGAACTGTACTAGCAAATCATTTAACCGTCTGCATGCCCGCAAAGCAGCATC AATGATTTGGGCTCTGGAACCATATCATAGGTAACAAGTGTGTTTATCCCTTTACGCAA TTCCCAGGCATCTATATCTGGCTTGTGAAGTATGTTACCCAGCGAGCATCAAACCTCTC ATCTGTCTCTGTGACCCATGGGAATAGCAGCGAACTGACTGGATAGCCACGGCGGGGCC GGNGTCCCGCCGAGTGCAGGAGGCTCNAGGGTCGGCCGGTGGTTGCGGCCACAGC GCAGCGCGGAATCCTCTNNNATAGAGGGAAAGCCGGCTCGGGCGAATCCCGGGC GCCCTTATAGGGAGTCGTATACAAATTCTGACGGTACTAAACGAGCTCTGCTTATAAG ACCTCNACCGTACCGCTAACGCCTATTGCGTACGGGGCGGGTATTACAATTTGAAAG ACCTGATTTGGTGCAACAACTCCATGCGTAG
Restriction Sites:	NotI-NotI
ACCN:	NM_004255
Insert Size:	4680 bp
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).
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:	<ol style="list-style-type: none"> 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_004255.2 , NP_004246.1
RefSeq Size:	645 bp
RefSeq ORF:	453 bp
Locus ID:	9377
UniProt ID:	P20674
Cytogenetics:	15q24.2
Domains:	COX5A

Protein Pathways:	Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
Gene Summary:	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 of 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 Va of the human mitochondrial respiratory chain enzyme. A pseudogene COX5AP1 has been found in chromosome 14q22. [provided by RefSeq, Jul 2008]