

Product datasheet for **SC117225**

COX7A2L (NM_004718) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COX7A2L (NM_004718) Human Untagged Clone
Tag:	Tag Free
Symbol:	COX7A2L
Synonyms:	COX7AR; COX7RP; EB1; SCAF1; SCAFI; SIG81
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117225 sequence for NM_004718 edited (data generated by NextGen Sequencing) ATGTACTACAAGTTTAGTGGCTTCACGCAGAAGTTGGCAGGAGCATGGGCTTCGGAGGCC TATAGCCCGCAGGATTAAGCCTGTGGTTTCCACAGAAGCACCCATCATATTTGCC ACACCAACTAACTGACCTCCGATTCCACAGTGTATGATTATGCTGGGAAAAACAAAGT CCAGAGCTACAAAAGTTTTCCAGAAAGCTGATGGTGTGCCGTCTACCTGAAACGAGGC CTGCCTGACCAAATGCTTTACCGGACCACCATGGCGCTGACTGTGGGAGGGACCATCTAC TGCCTGATCGCCCTCTACATGGCTTCGCAGCCAAAAACAATGA

Clone variation with respect to NM_004718.2



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004718 unedited
 AAGTCAGAATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGGTCTTCT
 CTGGGGCGGTTCGGTTGGCAGCGGATGCGGGAAGCCGACTCTGGGCGTCATGACTACA
 AGTTTAGTGGCTTACGCAGAAGTTGGCAGGAGCATGGGCTTCGGAGGCCTATAGCCCGC
 AGGGATTAAGCCTGTGGTTTCCACAGAAGCACCACCTATCATATTTGCCACACCAACTA
 AACTGACCTCCGATTCCACAGTGTATGATTATGCTGGGAAAAACAAGTCCAGAGCTAC
 AAAAGTTTTTCCAGAAAGCTGATGGTGTGCCCGTCTACCTGAAACGAGGCCTGCCTGACC
 AAATGCTTTACCGGACCACCATGGCGCTGACTGTGGGAGGGACCATCTACTGCCTGATCG
 CCCTCTACATGGCTTCGACGCCAAAAACAATGAGTTAGGCTGCAGAGGACTGGTTTGT
 TTTTTGGCATAAACCCCTTTGAAGTTCCTTTTTTCATTGTTAAATAAAAATTTTTTTTTTA
 CTTGGATGGCTTAACATTTTTGCAAGAAAAATAGGAAGATATGAAGATGATGTTNTTGGT
 TTGTTTATGAAATGCATATGGCTTGTGACAGCTCATTGACAGTTAAAGCCATTGTTTAA
 AGAAATGGTGCTTTGCTCTGTGTTTGTGCTCCTGATTTCCCTGGAGGTTCTGGATGAAGG
 CTGAACACAGGCTTGTAAATGTCAGTCTGTGCTGAGGACCTCAGGACNTTGAGGTTGCAT
 TTTTGAGCATGGGGTGCANGAGCCTTTCTGGATTTTGGATGTGGCTATNGAAAGAACAC
 AGAGCAAGGTCATGTGCATGAATGGAGGAGTTTGAAGTTAGTCCCTCGGGGATTTTTTCC
 ATTTTGCAGTAAATGTTAAATTAATGTACCTGCCTCTATT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004718 unedited
 CGGCCGCAATCTAAAGTCGAGTTTTTTTTTTTTTTTTTTAATTTTTCATTCATGATTTTA
 TTCCACAGTCAAATAAATCAAAATTTAAAGCTATAACATTTTTAAAAGATAAAGGAGAA
 TTTGTGGCACAGCTGCATTAACAAAACAGACACCAGTCTAAAGTGAACACTAAACAGGT
 ATTCTCTGTTCCACGGTGAATAATTACACATAAGATTTCACTAAAGATAGGAGATGAG
 GCAAATAACCCCTTTGAAATTACCTGCCCAACAAATAGAGGCAGGCTACATTAATTTAACA
 TTTTACTGCAAAATGGAAAAATCCCCGAGGTGACTAACTCAAATCCTCATTTTCATGCA
 CATGACCTTGGCTTCTGTGTTCTTTCCATAGCCACATCCAAATCCAGAAAGGCTCCTGCA
 CCCCATGCTCAAAATGCAACCTCAAGTCCCTGAGGTCTCAGCACAGACTGACATTAAC
 AAGCCTGTGTTGACGCTTATCCAGAACCTCCAGGAAATCAGGAGCACAACACAGAGC
 AAAGCACCATTTCTTTAAACAATGGCTTTAACTGTCGAATGAGCTCTGACAAGCCATATG
 CATTTCATAAACAACAAAACATCATCTTCATATCTTCTATTTTTCTTGCAAAAATGT
 TAAGCCATCCAANGTAAAAAAAATTTAATTTAACAATGAAAAAGGAACCTTNC AAGGGT
 TTATGCCAAAAACAACAGTCTCTGACGCTAACTCATTGTTTTTGGGGCTGCGAA
 GCCATGTAGAGGGCGATCAGGCAGTAGATGGTCCCCTCCACAGTCAGCGCCATGGTGGTC
 CCGTTAAGCATTGGTCAAGCAGCCCTCGTTTTCAGTACACGGCCACCATCAAGCTTCT
 GGAACACTTTTGTAGCTCTGGAACCTGGTTTTCCACCCATATCTACCCTGGGGATCGG
 AGTCATTTTATTTGTGTGGCAAAATGATAGGCGTGTCTCT

Restriction Sites:

NotI-NotI

ACCN:

NM_004718

Insert Size:

1110 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:	<u>NM_004718.2</u> , <u>NP_004709.2</u>
RefSeq Size:	1145 bp
RefSeq ORF:	345 bp
Locus ID:	9167
UniProt ID:	<u>O14548</u>
Cytogenetics:	2p21
Domains:	COX7a
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Oxidative phosphorylation, Parkinson's disease
Gene Summary:	<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 similar to polypeptides 1 and 2 of subunit VIIa in the C-terminal region, and also highly similar to the mouse Sig81 protein sequence. This gene is expressed in all tissues, and upregulated in a breast cancer cell line after estrogen treatment. It is possible that this gene represents a regulatory subunit of COX and mediates the higher level of energy production in target cells by estrogen. Several transcript variants, some protein-coding and others non-protein coding, have been found for this gene. [provided by RefSeq, Jan 2016]</p> <p>Transcript Variant: This variant (1) represents the predominant transcript and encodes the longest isoform (a). Variants 1 and 2 both encode the same isoform (a).</p>