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Product datasheet for SC107931

Cytochrome C Oxidase subunit VIb (COX6B1) (NM_001863) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome C Oxidase subunit VIb (COX6B1) (NM_001863) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cytochrome C Oxidase subunit VIb
Synonyms:	COX6B; COXG; COXVIb1; MC4DN7
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF sequence for NM_001863 edited
ATGGCGGAAGACATGGAGACCAAAATCAAGAACTACAAGACCGCCCCTTTTGACAGCCGC
TTCCCCAACCAGAACCAGACTAGAAACTGCTGGCAGAACTACCTGGACTTCCACCGCTGT
CAGAAGGCAATGACCGCTAAAGGAGGCGATATCTCTGTGTGCGAATGGTACCAGCGTGTG
TACCAGTCCCTCTGCCCCACATCCTGGGTCACAGACTGGGATGAGCAACGGGCTGAAGGC
ACGTTTCCCGGGAAGATCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001863 unedited
CAGTATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCGACTGT
GGTGTCTTTGCTGAGGGTCACATTGAGCTGCAGGTTGAATCCGGGGTGCCTTTAGGATTC
AGCACCATGGCGGAAGACATGGAGACCAAAATCAAGAACTACAAGACCGCCCCTTTTGAC
AGCCGCTTCCCCAACCAGAACCAGACTAGAAACTGCTGGCAGAACTACCTGGACTTCCAC
CGCTGTCAGAAGGCAATGACCGCTAAAGGAGGCGATATCTCTGTGTGCGAATGGTACCAG
CGTGTGTACCAGTCCCTCTGCCCCACATCCTGGGTCACAGACTGGGATGAGCAACGGGCT
GAAGGCACGTTTCCCGGGAAGATCTGAACTGGCTGCATCTCCCTTTCCTCTGTCCTCCAT
CCTTCTCCCAGGATGGTGAAGGGGGACCTGGTACCCAGTGATCCCCACCCCAGGATCCTA
AATCATGACTTACCTGCTAATAAAAACTCATTGGAAAAAAAAAAAAAAAAAAACTCGACTC
TAGATTGCGGCCGCGGTCATAGCTGTTTCCTGAACAGATCCCGGGTGGCATCCCTGTGAC
CCCTCCCCAGTGCCTCTCCTGGCCCTGGAAGTTGCCACTCCAGTGCCCACCAGCCTTGTC
CTAATAAAATTAAGTTGCATCATTTTGTCTGACTAGGTGTCCTTCTTAATATTATGGGGT
GAGGGNGGGGGTTTGTGACACCAGGGGCAAAATTGGGAAAAAAACCTTGTGGGCCTGGCG
GGGGTCTATGGGGACCACACTGGAGGGGAGTGGACCAATCCTGCTCACTGGAATCTCCGC
CTCCTGGGGCCAAGCGATTCTCCTGCCTCAGCTCCCGGGTTGGTTGGGTATTCCAGGCAT
GCATGACCAGCCTAGCTAATTTTGGTTTTTTGGTAAA

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3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001863 unedited
CCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTCCAATGAGTTTTTATTAG
CAGGTAAGTCATGATTTAGGATCCTGGGGTGGGGATCACTGGGTACCAGGTCCCCCTTCA
CCATCCTGGGAGAAGGATGGAGGACAGAGGAAAGGGAGATGCAGCCAGTTCAGATCTTCC
CGGGAAACGTGCCTTCAGCCCGTTGCTCATCCCAGTCTGTGACCCAGGATGTGGGGCAGA
GGGACTGGTACACACGCTGGTACCATTCGCACACAGAGATATCGCCTCCTTTAGCGGTCA
TTGCCTTCTGACAGCGGTGGAAGTCCAGGTAGTTCTGCCAGCAGTTTCTAGTCTGGTTCT
GGTTGGGGAAGCGGCTGTCAAAAGGGGCGGTCTTGTAGTTCTTGATTTTGGTCTCCATGT
CTTCCGCCATGGTGCTGAATCCTAAAGGCACCCCGGATTCAACCTGCAGCTCAATGTGAC
CCTCAGNCAAGACACCACAGTCGGCCTCGTGCCGAATTCGCGGCCGCCCTATAGTGAGTC
GTATTACAAAATTCTGACGGTTCACTAAACGAGCTCTGCTTAATAGACCTCCCACCGTAC
ACGCCTACCGCCCATTTGCGTCAACGGCGCGGGGTTATTACCACATTTTGGAAAGCCCGT
TGATTTTGGTGCCACAACAAACTCCCATTGACGTCAAGGGGGTGGAGACCTTGAAATCCC
CGTGAGTCAAACCGCTCTCCCCGCCCATCGGTGTCCTGCCAAAACCCCATCACCTGGGAA
TACCCAGGACTAATCCCCAGTGAACCGCCAAGCCGAAACGCCCCGAGGGCCATGCCTGGG
CCTAAGACCGGCCGCCCTTTCCCGCATGTCCCAATGGGGGCGGCCTGGCTATGACCCTTG
ACGCCCGCAGCGGCCCCTACCGTAAACTCCCCCTGACGCAGGAAAGC

Restriction Sites: NotI-NotI

ACCN: NM_001863

Insert Size: 560 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:
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_001863.3, NP_001854.1

RefSeq Size: 578 bp

RefSeq ORF: 261 bp

Locus ID: 1340

UniProt ID: P14854

Cytogenetics: 19q13.12

Domains: COX6B

Protein Pathways: Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

Gene Summary: Cytochrome c oxidase (COX), the terminal enzyme of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. It 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 be involved in the regulation and assembly of the complex. This nuclear gene encodes subunit VIb. Mutations in this gene are associated with severe infantile encephalomyopathy. Three pseudogenes COX6BP-1, COX6BP-2 and COX6BP-3 have been found on chromosomes 7, 17 and 22q13.1-13.2, respectively. [provided by RefSeq, Jan 2010]