

Product datasheet for SC118274

SDHC (NM_003001) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SDHC (NM_003001) Human Untagged Clone
Tag:	Tag Free
Symbol:	SDHC
Synonyms:	CYB560; CYBL; PGL3; QPS1; SDH3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_003001 edited
 ATGGCTGCGCTGTTGCTGAGACACGTTGGTCGTCATTGCCTCCGAGCCCACTTTAGCCCT
 CAGCTCTGTATCAGAAATGCTGTTCCCTTTGGGAACCACGGCCAAAGAAGAGATGGAGCGG
 TTCTGGAATAAGAATATAGGTTCAAACCGTCTCTGTCTCCCCACATTACTATCTACAGT
 TGGTCTCTTCCCATGGCGATGTCCATCTGCCACCGTGGCACTGGTATTGCTTTGAGTGCA
 GGGGTCTCTTTTTGGCATGTCGGCCCTGTTACTCCCTGGAACTTTGAGTCTTATTTG
 GAACCTGTGAAGTCCCTGTGTCTGGGGCCAGCACTGATCCACACAGCTAAGTTTGCACTT
 GTCTTCCCTCTCATGTATCATACTGGAATGGGATCCGACACTTGATGTGGGACCTAGGA
 AAAGGCCTGAAGATTCACAGCTATACCAGTCTGGAGTGGTTGTCCTGGTTCTTACTGTG
 TTGTCCTCTATGGGGCTGGCAGCCATGTGA

5' Read Nucleotide Sequence: >OriGene 5' read for NM_003001 unedited
 CCGCGAATTCGGCAGCAGCCGGAACCAAGATGGCTGCGCTGTTGCTGAGACACGTTGGT
 CGTCATTGCCTCCGAGCCCACTTTAGCCCTCAGCTCTGTATCAGAAATGCTGTTCCCTTTG
 GGAACCACGGCCAAAGAAGAGATGGAGCGGTTCTGGAATAAGAATATAGGTTCAAACCGT
 CCTCTGTCTCCCCACATTACTATCTACAGTTGGTCTCTTCCCATGGCGATGTCCATCTGC
 CACCGTGGCACTGGTATTGCTTTGAGTGCAGGGGTCTCTTTTTGGCATGTCGGCCCTG
 TTACTCCCTGGAACTTTGAGTCTTATTTGGAACCTGTGAAGTCCCTGTGTCTGGGGCCA
 GCACTGATCCACACAGCTAAGTTTGCACTTGCTTCCCTCTCATGTATCATACTGGAAT
 GGGATCCGACACTTGATGTGGGACCTAGGAAAAGGCCTGAAGATTCACAGCTATACCAG
 TCTGGAGTGGTTGCTGTTTCTTACTGTGTTGTCCTCTATGGGGCTGGCAGCCATGTGA
 AGAAAGGAGGCTCCCAGCATCATCTTCCACATTATTACATTCACCCATCTTTCTGTT
 TGTCACTTATCTCCAGCCTGGGAAAAGTTCTCCTTATTTGGTTAGATCCTTTTGTATT
 TTCAGATCTCCTTGGAGCAGTAGAGTACCTGGTAGACCATAATAGTGGAAGGGGTCTAG
 TTTTCCCTTTGGTTCTAAGATGAGGT



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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_003001 unedited CCCCATTCTTGCCCGCGCCGATTCTACGAGCGAGTTTTTTTTTTTTTTTTTTTTT AAATGAGTATTTAATTCAGTTTCAGAAAAAGGGTACATTACTTCGATGAGAAGCATAAA ATTAAGAGGCTTTTCTGGAAATCCAAGAAAAAGAAATAACCATTAATATGTTCAATGATA ATTTTCTAGATCTTCTCGTGTCCAAAGCTATATTTTTCTCCTCAAAGCAGCTGCTCC AAGAATAACTAGCCCTTTTATCTCCCTAGCTGGGACAGACTAATCCCCTCCACCC CCACCTCTTTTCAATAAACAAGTGTAGGTGTTAATGGCCTGGGCTCACCACATGA AGAGAATTGTCTTTAAGCCAGCAACCCACAGGAGTGGCACCCAAAGCCTCACCAACCC ACCCCCAACCCGGCCTATCCCCAGGGCAGAAGCCACAGAGCTGGCATTGTTTCCACTGT CTCAGGAAGAAGGAGCCAAAAGCTGACCTTTAGTACAAATTAAGCCCAATATGGAGAGA GAATAACTGATTTTAGGCTTAGAGTAGGCAAGCTGCGGGCCAAAAGGGGAGTTTTGCT GCCTCTTCATTTTTTAGACAGGGGAAAAGTACACCTTTTCCCTTATTACGGTCTACC AGGCCCTTTCCTGGTTTCAGGAGAACTGACAATCCACACGGATTAACCAAAAAAGGCGA ACTTTTCCACGCTGGAAAAATAATGACCACCCACCACCGTTAATGCTATACCGCGCC CCAAAATTATCCTTGGCAGCTTTACTTTTTTCCCTGGTAGCCACCCCTCCGTGGTCT ACCATTCACCTACACGCAAACTCCTCACACCGGCTCGTTTGACAACATCCTGGCCTCCTC CCCCACCCCG
Restriction Sites:	NotI-NotI
ACCN:	NM_003001
Insert Size:	1200 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).
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.
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_003001.2</u> , <u>NP_002992.1</u>
RefSeq Size:	1315 bp
RefSeq ORF:	510 bp
Locus ID:	6391
UniProt ID:	<u>Q99643</u>

Cytogenetics:	1q23.3
Domains:	Sdh_cyt
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Alzheimer's disease, Citrate cycle (TCA cycle), Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
Gene Summary:	<p>This gene encodes one of four nuclear-encoded subunits that comprise succinate dehydrogenase, also known as mitochondrial complex II, a key enzyme complex of the tricarboxylic acid cycle and aerobic respiratory chains of mitochondria. The encoded protein is one of two integral membrane proteins that anchor other subunits of the complex, which form the catalytic core, to the inner mitochondrial membrane. There are several related pseudogenes for this gene on different chromosomes. Mutations in this gene have been associated with paragangliomas. Alternatively spliced transcript variants have been described. [provided by RefSeq, May 2013]</p> <p>Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>