

## **Product datasheet for SC302837**

## SDHC (NM 001035511) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** SDHC (NM\_001035511) Human Untagged Clone

Tag: Tag Free Symbol: SDHC

**Synonyms:** CYB560; CYBL; PGL3; QPS1; SDH3

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM\_001035511 edited

ATGGCTGCGCTGTTGCTGAGACACGTTGGTCGTCATTGCCTCCGAGCCCACTTTAGCCCT
CAGCTCTGTATCAGAAATGCTGTTCCTTTGGGAACCACGGCCAAAGAAGAGTGGAGCGG
TTCTGGAATAAGAATATAGGTTCAAACCGTCCTCTGTCTCCCCACATTACTATCTACAGT
TGGTCTCTTCCCATGGCGATGTCCATCTGCCACCGTGGCACTGGTATTGCTTTGAGTGCA
GATGTGGGACCTAGGAAAAGGCCTGAAGATTCCCCAGCTATACCAGTCTGGAGTGGTTGT
CCTGGTTCTTACTGTGTTGTCCTCTATGGGGCTGGCAGCCATGTGAAGAAAGGAGGCTCC
CAGCATCATCTTCCTACACACTTATTACATTCACCCATCTTTCTGTTTGTCATTCTTATCT

CCAGCCTGGGAAAAGTTCTCCTTATTTGTTTAG

**Restriction Sites:** Please inquire ACCN: NM\_001035511

**Insert Size:** 700 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).



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**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: <u>NM 001035511.1</u>, <u>NP 001030588.1</u>

 RefSeq Size:
 2694 bp

 RefSeq ORF:
 453 bp

 Locus ID:
 6391

 UniProt ID:
 Q99643

 Cytogenetics:
 1q23.3

**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:** 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]

Transcript Variant: This variant (2, also known as delta5) lacks an alternate exon in the 3' coding region, which results in a frameshift, compared to variant 1. The encoded isoform (2) is shorter and has a distinct C-terminus, compared to 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.