

# **Product datasheet for RC222196**

## SDHC (NM 001035512) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** SDHC (NM\_001035512) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: SDHC

Synonyms: CYB560; CYBL; PGL3; QPS1; SDH3

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC222196 representing NM\_001035512
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTGCGCTGTTGCTGAGACACGTTGGTCGTCATTGCCTCCGAGCCCACTTTAGCCCTCAGCTCTGTA
TCAGAAATTGGTCTCTTCCCATGGCGATGTCCATCTGCCACCGTGGCACTGGTATTGCTTTGAGTGCAGG
GGTCTCTCTTTTTTGGCATGTCGGCCCTGTTACTCCCTGGGAACTTTGAGTCTTATTTGGAACTTGTGAAG
TCCCTGTGTCTGGGGCCAGCACTGATCCACACAGCTAAGTTTGCACTTGTCTTCCCTCTCATGTATCATA
CCTGGAATGGGATCCGACACTTGATGTGGGACCTAGGAAAAGGCCTGAAGATTCCCCAGCTATACCAGTC

TGGAGTGGTTGTCCTGGTTCTTACTGTGTTGTCCTCTATGGGGCTGGCAGCCATG

 ${\color{red} \textbf{ACGCGT}} \textbf{ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT}$ 

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222196 representing NM\_001035512

Red=Cloning site Green=Tags(s)

MAALLLRHVGRHCLRAHFSPQLCIRNWSLPMAMSICHRGTGIALSAGVSLFGMSALLLPGNFESYLELVK SLCLGPALIHTAKFALVFPLMYHTWNGIRHLMWDLGKGLKIPQLYQSGVVVLVLTVLSSMGLAAM

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

**Restriction Sites:** Sgfl-Mlul



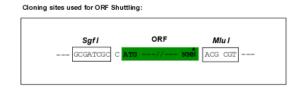
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

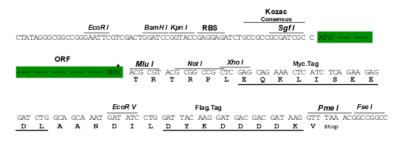
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



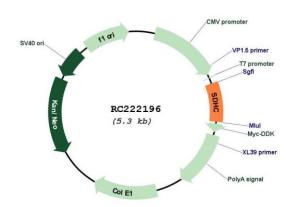
#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

#### Plasmid Map:



**ACCN:** NM\_001035512

ORF Size: 405 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info



## SDHC (NM\_001035512) Human Tagged ORF Clone - RC222196

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**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: <u>NM 001035512.2</u>

 RefSeq Size:
 2756 bp

 RefSeq ORF:
 408 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

**MW:** 14.77 kDa

**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]