

Product datasheet for **RG205010**

SDHC (NM_003001) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SDHC (NM_003001) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: SDHC
Synonyms: CYB560; CYBL; PGL3; QPS1; SDH3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG205010 representing NM_003001
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCGCTGTTGCTGAGACACGTTGGTCGTCATTGCCTCCGAGCCCACTTTAGCCCTCAGCTCTGTA
TCAGAAATGCTGTTCTTTGGGAACACGGCCAAAGAAGAGATGGAGCGTTCTGGAATAAGAATATAGG
TTCAAACCGTCTCTGTCTCCCCACATTACTATCTACAGTTGGTCTCTTCCCATGGCGATGCCATCTGC
CACCGTGGCACTGGTATTGCTTTGAGTGCAGGGGTCTCTTTTTGGCATGTCGGCCCTGTACTCCCTG
GGAACCTTTGAGTCTTATTTGGAACCTGTGAAGTCCCTGTGTCTGGGGCCAGCACTGATCCACACAGCTAA
GTTTGCACTTGTCTTCCCTCTCATGTATCATACTGGAATGGGATCCGACTTGTGTTGGGACCTAGGA
AAAGGCCTGAAGATTCAGCTATACAGTCTGGAGTGGTGTCTGCTGTTCTTACTGTGTTGCTCTCTA
TGGGGCTGGCAGCCATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG205010 representing NM_003001
Red=Cloning site Green=Tags(s)

MAALLLRHVGRHCLRAHFSPQLCIRNAVPLGTTAKEEMERFWNKNIGSNRPLSPHITIIYSWSPMAMSI
HRGTGIALSAGVSLFGMSALLLPGNFESYLELVKSLCLGPALIHAKFALVFPLMYHTWNGIRHLMWDLG
KGLKIPQLYQSGVVVLLVTLVSSMGLAAM

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_003001

ORF Size: 507 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](#)

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: [NM_003001.5](#)

RefSeq Size: 1315 bp

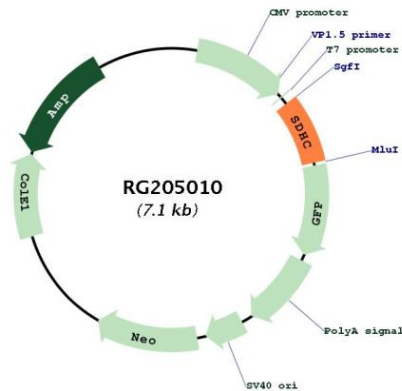
RefSeq ORF: 510 bp

Locus ID: 6391

UniProt ID: [Q99643](#)

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:	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]

Product images:



Circular map for RG205010