OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC205010

SDHC (NM_003001) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SDHC (NM_003001) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SDHC
Synonyms:	CYB560; CYBL; PGL3; QPS1; SDH3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205010 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGCGCTGTTGCTGAGACACGTTGGTCGTCATTGCCTCCGAGCCCACTTTAGCCCTCAGCTCTGTA
TCAGAAATGCTGTTCCTTTGGGAACCACGGCCAAAGAAGAGATGGAGCGGTTCTGGAATAAGAATATAGG
TTCAAACCGTCCTCTGTCTCCCCACATTACTATCTACAGTTGGTCTCTTCCCATGGCGATGTCCATCTGC
CACCGTGGCACTGGTATTGCTTTGAGTGCAGGGGTCTCTCTTTTTGGCATGTCGGCCCTGTTACTCCCTG
GGAACTTTGAGTCTTATTTGGAACTTGTGAAGTCCCTGTGTCTGGGGCCAGCACTGATCCACACAGCTAA
GTTTGCACTTGTCTTCCCTCTCATGTATCATACCTGGAATGGGATCCGACACTTGATGTGGGACCTAGGA
AAAGGCCTGAAGATTCCCCAGCTATACCAGTCTGGAGTGGTTGTCCTGGTTCTTACTGTGTTGTCCTCTA
TGGGGCTGGCAGCCATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205010 protein sequence
Red=Cloning site Green=Tags(s)

MAALLLRHVGRHCLRAHFSPQLCIRNAVPLGTTAKEEMERFWNKNIGSNRPLSPHITIYSWSLPMAMSIC
HRGTGIALSAGVSLFGMSALLLPGNFESYLELVKSLCLGPALIHTAKFALVFPLMYHTWNGIRHLMWDLG
KGLKIPQLYQSGVVVLVLTVLSSMGLAAM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

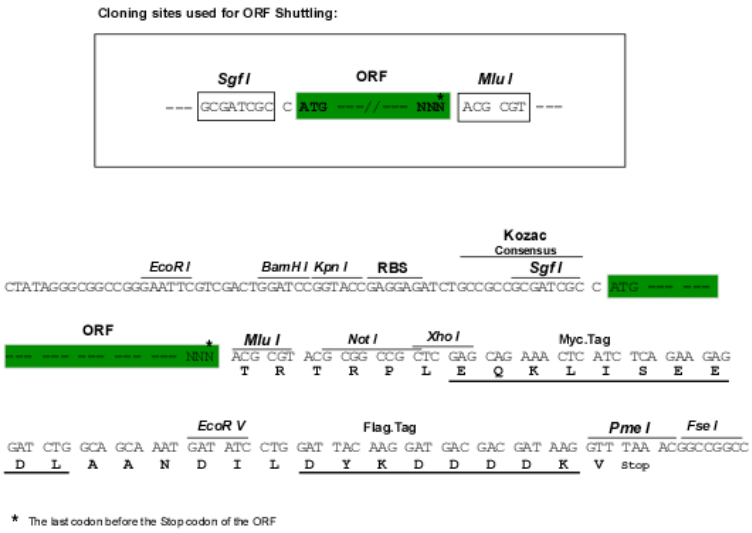
Chromatograms: https://cdn.origene.com/chromatograms/mk6439_b04.zip

View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Restriction Sites: SgfI-MluI

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: 2858 bp

RefSeq ORF: 510 bp

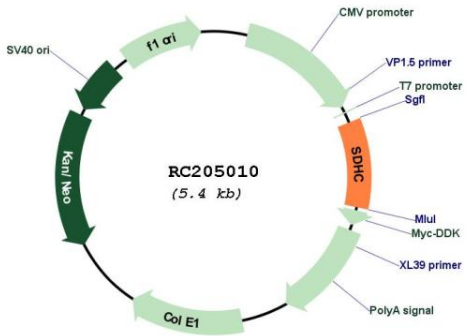
Locus ID: 6391

UniProt ID: Q99643

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

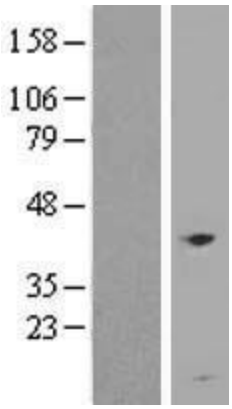
Cytogenetics:	1q23.3
Domains:	Sdh_cyt
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Alzheimer's disease, Citrate cycle (TCA cycle), Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	18.6 kDa
Gene Summary:	This gene encodes one of four nuclear-encoded 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]

Product images:



Circular map for RC205010

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US



Western blot validation of overexpression lysate (Cat# [LY418956]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205010 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US