

Product datasheet for **RC235729**

SDHC (NM_001278172) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SDHC (NM_001278172) 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 Sequence: >RC235729 representing NM_001278172
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCTGCGCTGTTGCTGAGACACGTTGGTCGTCATTGCCTCCGAGCCCACTTTAGCCCTCAGCTCTGTA
TCAGAAATTGGTCTCTTCCCATGGCGATGCCATCTGCCACCGTGGCACTGGTATTGCTTTGAGTGCAGA
TGTGGGACCTAGGAAAAGCCTGAAGATCCCCAGCTATACCAGTCTGGAGTGGTTGCTGTTCTTAC
TGTGTTGTCTCTATGGGCTGGCAGCCATGTGAAGAAAGGAGGCTCCAGCATCATCTTCTACACATT
ATTACATTCACCCATCTTCTGTTTGTCTTCTATCTCCAGCCTGGGAAAAGTCTCCTATTTGTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC235729 representing NM_001278172
Red=Cloning site Green=Tags(s)

MAALLLRHVGRHCLRAHFSPQLCIRNWSLPMAMSIHRGTGIALSADVGRPRKRPEDSPAIPVWSGCPGSY
CVVLYGAGSHVKKGGSQHHLPTHYYIHPSFCLSFSPAWEKFSLFV

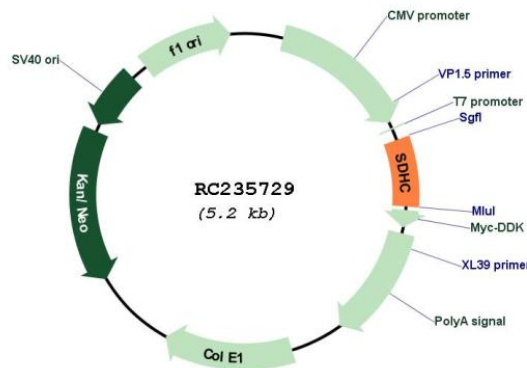
TRTRPLEQK**L**I**SEEDLA**AND**ILDYK**DDDDK**V**

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001278172

ORF Size: 348 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:	<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_001278172.2</u>
RefSeq Size:	2592 bp
RefSeq ORF:	351 bp
Locus ID:	6391
UniProt ID:	<u>Q99643</u>
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:	13.3 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]