

Product datasheet for **RC200349**

SDHA (NM_004168) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SDHA (NM_004168) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SDHA
Synonyms:	CMD1GG; FP; MC2DN1; NDAXOA; PGL5; SDH1; SDH2; SDHF
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC200349 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGGATCGCC**

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Protein Sequence: >RC200349 protein sequence
 Red=Cloning site Green=Tags(s)

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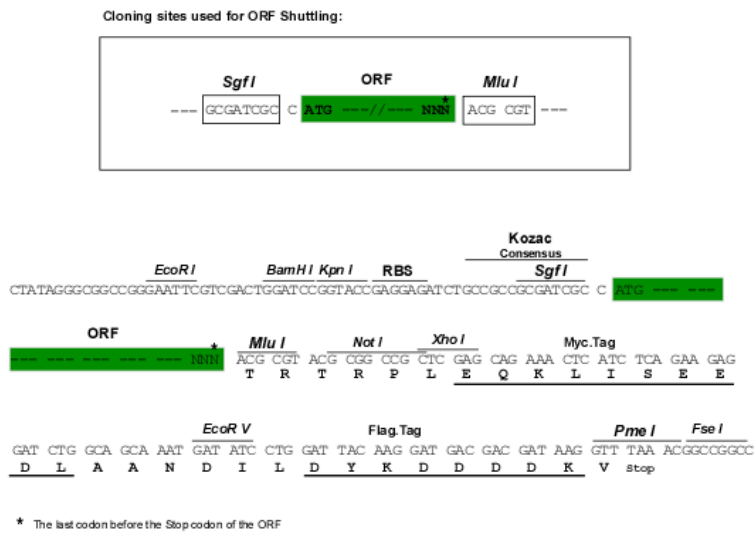
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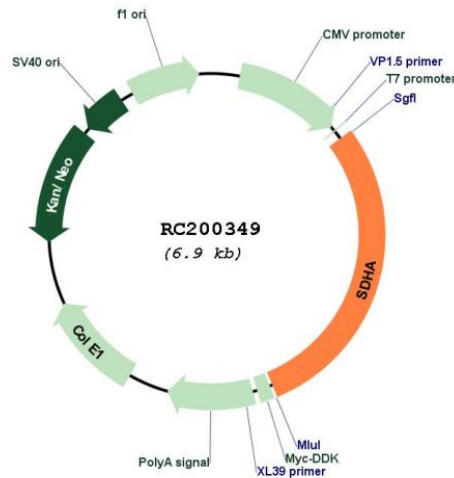
Chromatograms: https://cdn.origene.com/chromatograms/mk6199_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_004168

ORF Size: 1992 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_004168.4](#)

RefSeq Size: 2803 bp

RefSeq ORF: 1995 bp

Locus ID: 6389

UniProt ID: [P31040](#)

Cytogenetics: 5p15.33

Domains: FAD_binding_2, succ_DH_flav_C

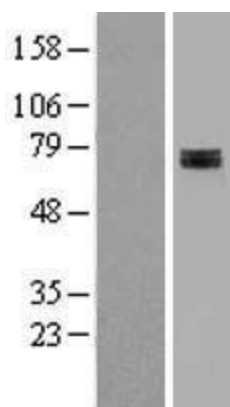
Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, Citrate cycle (TCA cycle), Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

MW: 72.7 kDa

Gene Summary: This gene encodes a major catalytic subunit of succinate-ubiquinone oxidoreductase, a complex of the mitochondrial respiratory chain. The complex is composed of four nuclear-encoded subunits and is localized in the mitochondrial inner membrane. Mutations in this gene have been associated with a form of mitochondrial respiratory chain deficiency known as Leigh Syndrome. A pseudogene has been identified on chromosome 3q29. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2014]

Product images:



Western blot validation of overexpression lysate (Cat# [LY401340]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200349 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).