

Product datasheet for **RC239108**

SDHA (NM_001294332) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SDHA (NM_001294332) 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:

>RC239108 representing NM_001294332
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGGGGTCCGGGGCTGTCCGGCTGCTGAGCGCTCGGCGCTGGCGCTGGCCAAGCGTGGCCAA
 CAGTGTTCGAAACAGGAACCCGAGGTTTTCACTCACTGTTGATGGGAACAAGAGGGCATCTGCTAAAGT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC239108 representing NM_001294332
 Red=Cloning site Green=Tags(s)

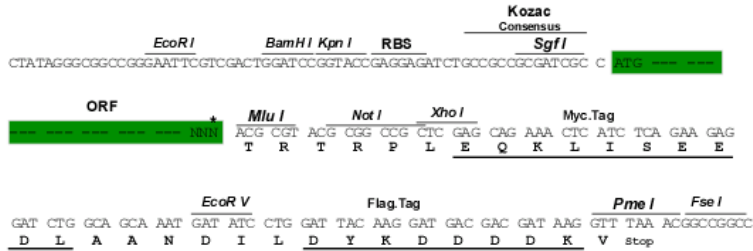
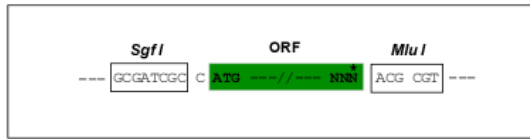
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 RYAPVAKDLASRDVVSRSMTLEIREGRGCGPEKDHVYLQLHHLPEQLATRLPGISETAMIFAGVDVTK
 PIPVLPVHYNMGGIPTNYKQVLRHVNGQDQIVPGLYACGEAACASVHGANRLGANSLLDLVVFGRACA
 LSIEESCRPGDKVPIKPNAGEESVMNLDKLRFADGSIRTSELRLSMQKSMQNHAAVFRVGSVLQEGCGK
 ISKLYGDLKHLKTFDRGMVWNTDLVETLELQNLMLCALQTIYGAEARKE SRGAHAREDYKVRIDEYDYSK
 PIQGGQKPFEEHWRKHTLSYVDVGTGKVTLEYRFPVIDKTLNEADCATVPPAIRSY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

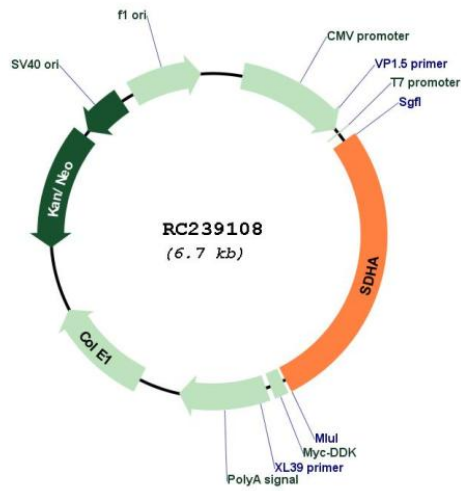
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001294332

ORF Size: 1848 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:	NM_001294332.1 , NP_001281261.1
RefSeq Size:	2659 bp
RefSeq ORF:	1851 bp
Locus ID:	6389
UniProt ID:	P31040
Cytogenetics:	5p15.33
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, Citrate cycle (TCA cycle), Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	67.7 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]