

Product datasheet for **RC216831**

SDHAF1 (NM_001042631) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SDHAF1 (NM_001042631) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: SDHAF1
Synonyms: LYRM8; MC2DN2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216831 representing NM_001042631
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCCGGCACAGCCGGCTGCAGAGGCAGGTTCTGAGCCTGTACCGCATCTGCTGCGCGCCGGGCGTG
GGAAGCCGGGCGCCGAGGCGGAGTGCGGGCAGAGTCCGGCAGCATGCGGGCTGCCGGTCCGACGT
GCTGCGCATCGAGTACCTGTACCGCCGGGCGGCCAGCTGCAGCTGCTACGCTCGGGCCACGCCACC
GCCATGGGCGCCTTCGTACGCCCGGGCCCCGACCGGGAGCCTGGCGGCGTGGGTTCCAGCCTGACG
ACGGCGACAGTCCAAGGAACCCACGACAGCACGGGGCACCGGAGACCCGCCCGACGGACGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216831 representing NM_001042631
Red=Cloning site Green=Tags(s)

MSRHSRLQRQVLSLYRDLLRAGRGKPGAEARVRAEFRQHAGLPRSDVLRIEYLYRRGRRQLQLLRSGHAT
AMGAFVPRAPTGEPPGVSQPDDGDSRNPNDSTGAPETRPDGR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8018_f09.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_001042631

ORF Size: 345 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_001042631.2](#)

RefSeq Size: 1131 bp

RefSeq ORF: 348 bp

Locus ID: 644096

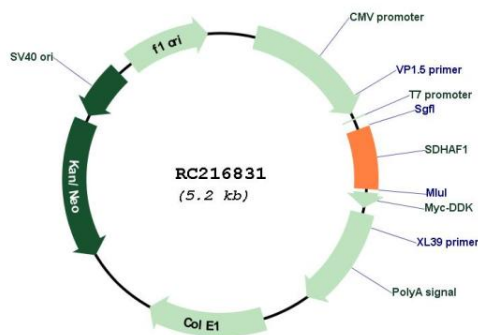
UniProt ID: [A6NFY7](#)

Cytogenetics: 19q13.12

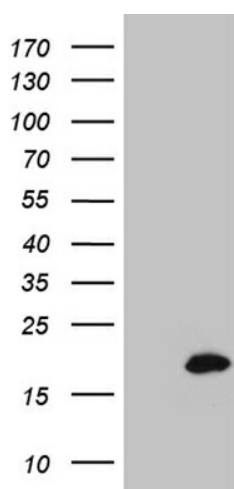
MW: 12.6 kDa

Gene Summary: The succinate dehydrogenase (SDH) complex (or complex II) of the mitochondrial respiratory chain is composed of 4 individual subunits. The protein encoded by this gene resides in the mitochondria, and is essential for SDH assembly, but does not physically associate with the complex in vivo. Mutations in this gene are associated with SDH-defective infantile leukoencephalopathy (mitochondrial complex II deficiency).[provided by RefSeq, Mar 2010]

Product images:



Circular map for RC216831



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SDHAF1 (Cat# RC216831, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SDHAF1 (Cat# [TA809735])(1:2000).