

Product datasheet for **MR218965**

Sdhaf3 (NM_001077713) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Sdhaf3
Synonyms:	0610005M07Rik; 4933430A16Rik; Acn9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >MR218965 representing NM_001077713
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGGGGAAGCATGTCTCGAGAGTCCGGGCTTTATATAGGCGAATCTTGCTGCTACATCGGGCTCTGC
CCCCGACCTCAAAGCCCTGGGTGACCAGTACGTGAAGGACGAATTTAGGAGACATAAGACTGTTGGTCC
TGGCGAGGCCCAGCGATTCTTGAAGGAATGGGAGACGTACGCAGCAGTGTGTGGCAACAAGCTGAGGAC
AGCAGACAAAGCTCAACTGGAAGCGTGTCTTGGCACCTCTCTCCAGAAGAAAACTCAATGACTTTC
GTGATGAGCAAAATTGGACAGTTGCAAGAGCTGATGCAAGAGGCTACTAAACCAATAGGCAGTTTAGTAT
CACTGAGTCTACAAAACCACAGTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218965 representing NM_001077713
Red=Cloning site Green=Tags(s)

MPGKHYSRVRALYRRILLHRLPPDLKALGDQYVKDEFRRHKTVGPGEAQRFLKEWETYAAVLWQQAED
SRQSSSTGKACFGTSLPEEKLNDFRDEQIGQLQELMQEATKPNRQFSITESTKPQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9042_a03.zip

Restriction Sites: SgfI-MluI



Cloning Scheme:



ACCN: NM_001077713

ORF Size: 375 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.

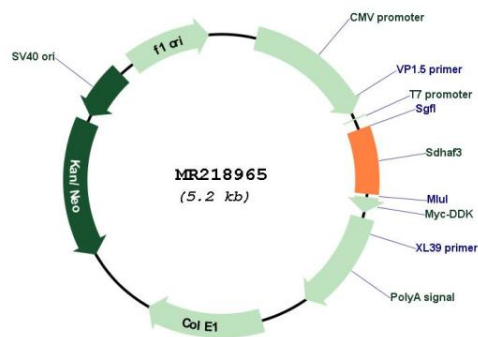
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001077713.1](#), [NP_001071181.1](#)

RefSeq Size:	550 bp
RefSeq ORF:	378 bp
Locus ID:	71238
UniProt ID:	Q8BQU3
Cytogenetics:	6 A1
MW:	14.9 kDa

Gene Summary: Plays an essential role in the assembly of succinate dehydrogenase (SDH), an enzyme complex (also referred to as respiratory complex II) that is a component of both the tricarboxylic acid (TCA) cycle and the mitochondrial electron transport chain, and which couples the oxidation of succinate to fumarate with the reduction of ubiquinone (coenzyme Q) to ubiquinol. Promotes maturation of the iron-sulfur protein subunit Sdhb of the SDH catalytic dimer, protecting it from the deleterious effects of oxidants. May act together with SDHAF1. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218965