

Product datasheet for **RR207048**

Sdhaf2 (NM_001008371) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sdhaf2 (NM_001008371) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Sdhaf2
Synonyms: RGD1309216
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RR207048 representing NM_001008371
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGGTCACCTTGATCCCGACGCTGGCGGGTATTGTCAAAGCACAGTCTGCTGTCTCCTTTGC
TTAGTGTGACATCGTTCAGACGCTTCTACAGAGGTGACAGCCCAACAGATTCTCAAAAAGACATGATTGA
AATCCCTTTGCCTCCGTGGCAGGAGAGAACTGATGAATCCATAGAAACAAAAGAGCCCGCTTACTGTAT
GAGAGCAGAAAGAGGGGGATGCTGGAGAACTGCATTCTCCTGAGCCTCTTTGCTAAAGAATATCTGCACA
ACATGACAGAGAAGCAGCTGAACCTCTACGATCGTCTGATTAATGAGCCTAGCAATGACTGGGATATTTA
CTACTGGCCACAGAAGCAAAACAGCTCCAGAAATATTTGAAAATGAAGTCATGGAAGTACTGAGAGAA
TTCACCAAAAACAAAACAAAGAGCAGAGACTGCGTGCCCGATCTGGAATATCTTTGAAAAGCCTC
GT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR207048 representing NM_001008371
Red=Cloning site Green=Tags(s)

MAVVTLIPTLARVLSKHSLLSPLL SVTSFRRFYRGDSPTDSQKDMIEIPLPPWQERTDESIETKRARLLY
ESRKRGMLENCILLSLFAKEYLHNMTEKQLNLYDRLINEPSNDWDIYYWATEAKPAPEIFENEVMELLRE
FTKNKNKEQRLRAPDLEYLFEKPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_001008371

ORF Size: 492 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.

RefSeq: [NM_001008371.1](#), [NP_001008372.1](#)

RefSeq Size: 1890 bp

RefSeq ORF: 495 bp

Locus ID: 361726

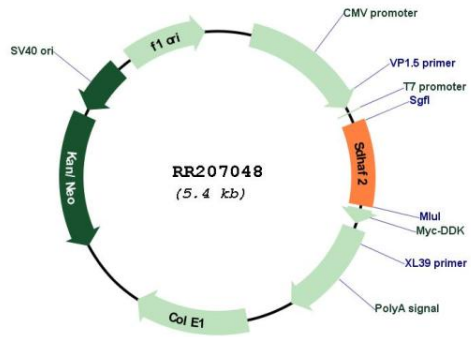
UniProt ID: [Q5R1Q7](#)

Cytogenetics: 1q43

MW: 19.5 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. Required for flavinylation (covalent attachment of FAD) of the flavoprotein subunit SDHA of the SDH catalytic dimer.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR207048