

## Product datasheet for **MR200347**

### **Sdhaf4 (NM\_026503) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sdhaf4 (NM\_026503) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Sdhaf4  
**Synonyms:** 1110058L19Rik; 1700001E18Rik; C6orf57  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR200347 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGTCTCCACGACCCTTCCGTTTCACGGATGACTTTCGTCTGGAGAGCAGCAAGACCATCTCTTCTGA  
ATCATTCTTTGAGGAAAATGAGTTATCAGGAAGGAAAGCCTGAGCCTGCGAAGCAAGCCCTTAAGAAGTC  
AAAGCTGCCACTCGTTCGTTTGGACTCACTGGAGGATTCACCCGAAGAGAGAGCCACTGCAGAAGTTT  
CCGGATGATGTAATCCAGTTACCAAAGAAAAGGTGGACCCAAGGGCCCGGAGCCTACACGATATGGAG  
ACTGGGAACGGAAGGGACGCTGCATTGACTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR200347 protein sequence  
Red=Cloning site Green=Tags(s)  
MVSTTLSVSRMTFVWRAARPSLLNHSLRKMSYQEGKPEPAKQALKKSKLPLGRFDSLEDSPEEREPLQKF  
PDDVNPVTKEKGGPKGPEPTRYGDWERKGRCIDF

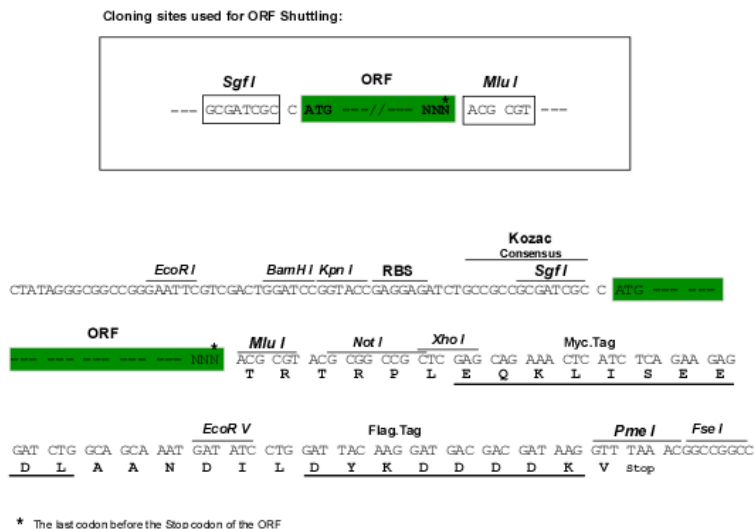
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI



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Cloning Scheme:



ACCN: NM\_026503

ORF Size: 315 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\\_026503.3](#)

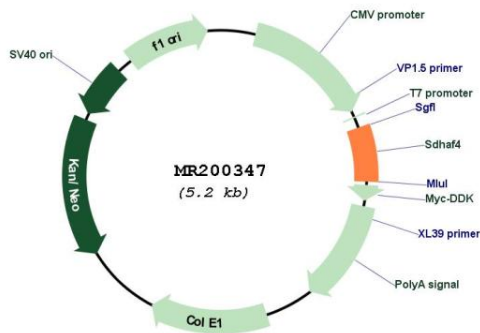
RefSeq Size: 675 bp

RefSeq ORF: 315 bp

**Locus ID:** 68002  
**UniProt ID:** [Q8BTE0](#)  
**Cytogenetics:** 1 A5  
**MW:** 11.9 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 (PubMed:24954416). Binds to the flavoprotein subunit Sdha in its FAD-bound form, blocking the generation of excess reactive oxygen species (ROS) and facilitating its assembly with the iron-sulfur protein subunit Sdhb into the SDH catalytic dimer (By similarity). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR200347