

Product datasheet for **MG200347**

Sdhaf4 (NM_026503) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sdhaf4 (NM_026503) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Sdhaf4
Synonyms: 1110058L19Rik; 1700001E18Rik; C6orf57
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200347 representing NM_026503
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTCTCCACGACCCCTTCCGTTTCACGGATGACTTTCGTCTGGAGAGCAGCAAGACCATCTCTTCTGA
ATCATTCTTTGAGGAAAATGAGTTATCAGGAAGGAAAGCCTGAGCCTGCGAAGCAAGCCCTTAAGAAGTC
AAAGCTGCCACTCGTTCGTTTGGACTCACTGGAGGATTCACCCGAAGAGAGAGCCACTGCAGAAGTTT
CCGGATGATGTAATCCAGTTACCAAAGAAAAGGTGGACCAAGGGCCCGGAGCCTACACGATATGGAG
ACTGGGAACGGAAGGGACGCTGCATTGACTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200347 representing NM_026503
Red=Cloning site Green=Tags(s)
MVSTTLSVSRMTFVWRAARPSLLNHSLRKMSYQEGKPEPAKQALKKSKLPLGRFDSLEDSPEEREPLQKF
PDDVNPVTKEKGGPKGPEPTRYGDWERKGRCIDF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



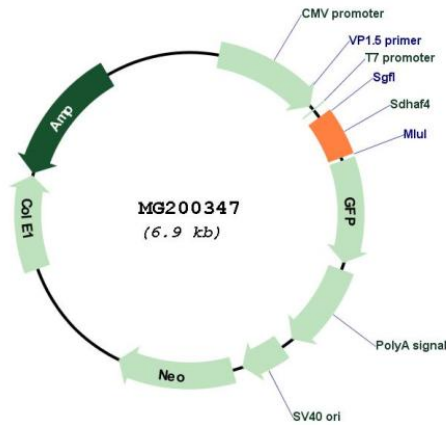
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Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_026503

ORF Size: 312 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_026503.3
RefSeq Size:	661 bp
RefSeq ORF:	315 bp
Locus ID:	68002
UniProt ID:	Q8BTE0
Cytogenetics:	1 A5
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]