

Product datasheet for **RN215846**

Sdhaf1 (NM_001177687) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sdhaf1 (NM_001177687) Rat Untagged Clone
Tag: Tag Free
Symbol: Sdhaf1
Synonyms: Lyrn8; RGD1562079
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN215846 representing NM_001177687
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAGCCGGCTTAGCCGGCTGCAGAGGCAAGTTCTGAGCCTGTACCGGAACTGCTGCGCGCCGGGCGCG
GGAAGCCGGGCGCCGAGGCACGGGTGCGGGCCGAGTTCGGCAGCACGCCAGCCTCCGCGCTCCGACGT
GCTGCGTATCGAGTATCTGTATCGCCGGGACGGCCAGCTACAGCTGCTGCGTTCGGCCACGCCACG
GCCATGGGTACTTTCGTGCGCCCGGGGCCCTACTGAAGAACCCTCGACGCGACGCCCGGGGAACA
GGCTGGACGATAGTGATGCCCTAAAGAATCCTTGTGAAGGCACGGGAGCACGGGAAACGGATCCGATGG
ACGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI

ACCN: NM_001177687

Insert Size: 357 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.



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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:	<u>NM_001177687.1, NP_001171158.1</u>
RefSeq Size:	986 bp
RefSeq ORF:	357 bp
Locus ID:	499125
UniProt ID:	<u>B0K036</u>
Cytogenetics:	1q21
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 SDHAF3. Contributes to iron-sulfur cluster incorporation into SDHB by binding to SDHB and recruiting the iron-sulfur transfer complex formed by HSC20, HSPA9 and ISCU through direct binding to HSC20.[UniProtKB/Swiss-Prot Function]