

Product datasheet for MR225893

Scd1 (NM_009127) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Scd1 (NM_009127) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Scd1
Synonyms:	AA589638; ab; AI265570; Scd; Scd-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR225893 representing NM_009127 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGGCCACATGCTCCAAGAGATCTCCAGTCTTACACGACCACCACCACCTCACTGCACCTCCCT
CCGAAATGAACGAGAGAAGGTGAAGACGGTGCCCTCCACCTGGAAGAAGACATCCGTCCTGAAATGAA
AGAAGATATTCACGACCCACCTATCAGGATGAGGAGGGACCCCGCCAAGCTGGAGTACGTCTGGAGG
AACATCATTCTCATGGTCTGCTGCACTGGGAGGCTGTACGGGATCATACTGGTTCCTCCTGCAAGC
TCTACACCTGCCTCTTCGGGATTTCTACTACATGACCAGCGCTCTGGGCATCACAGCCGGGCTCATCG
CCTCTGGAGCCACAGAATTACAAGGCACGGCTGCCCTGCGGATCTTCCTTATCATTGCCAACCCATG
GCGTTCAGAATGACGTGTACGAATGGGCCGAGATCACCGCGCCACCACAAGTCTCAGAAAACACCG
CCGACCCTCACAATCCCGCCGTGGCTTCTTCTCTCACGTGGGTTGGCTGCTGTGCGCAAACCC
GGCTGTCAAAGAGAAGGGCGGAAAACCTGGACATGTCTGACCTGAAAGCCGAGAAGCTGGTGTATGTTCCAG
AGGAGGTACTACAAGCCCGCCTCTGCTGATGTGCTTCTGCCCACGCTGGTGCCTGGTACTGCT
GGGGCGAGACTTTGTAAACAGCCTGTTTCGTTAGCACCTTCTTGGGATACACTCTGGTGTCAACGCCAC
CTGGCTGGTGAACAGTCCCGCATCTCTATGGATATCGCCCCTACGACAAGAACATTCAATCCCGGGAG
AATATCCTGGTTCCCTGGGTGCCGTGGCGAGGGCTCCACAACCTACCACCACCTTCCCTTCGACT
ACTCTGCCAGTGAGTACCGCTGGCACATCAACTTACCACGTTCTTCATCGACTGCATGGCTGCCCTGGG
CCTGGCTTACGACCGAAGAAAGTTTCTAAGGCTACTGTCTTAGCCAGGATTAAGAGAAGTGGAGACGGG
AGTCACAAGAGTAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR225893 representing NM_009127
 Red=Cloning site Green=Tags(s)

MPAHLQEISSSYTTTTITAPPSGNEREKVKTVPLHLEEDIRPEMKEDIHDPTYQDEEGPPPKEYVWR
 NIILMVLHLGLGYIILVPSCKLYTCLFGIFYMYSALGITAGAHRLWSHRTYKARLPLRIFLIANTM
 AFQNDVYEWARDHRAHHKFSETHADPHNSRRGFFFSHVGWLLVRKHPAVKEKGGKLDMSDLKAEKLVMFQ
 RRYYPGLLLMCFILPTLVPWYCWGETFVNSLTVSTFLRYTLVLNATWLVNSAAHLYGYPYDKNIQSRE
 NILVSLGAVGEGFHNYHHTFPFDYSASEYRWHINF TTF IDCMAALGLAYDRKKVSKATVLARIKRTGDG
 SHKSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_009127

ORF Size: 1065 bp

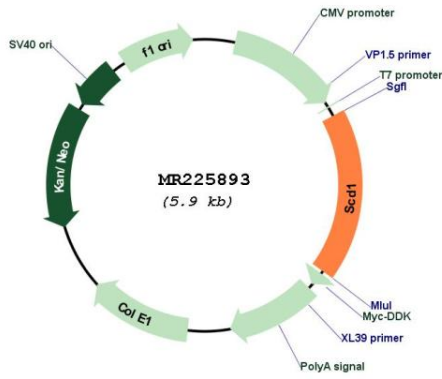
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<u>NM_009127.4</u> , <u>NP_033153.2</u>
RefSeq Size:	4844 bp
RefSeq ORF:	1068 bp
Locus ID:	20249
UniProt ID:	<u>P13516</u>
Cytogenetics:	19 37.98 cM
MW:	41.5 kDa
Gene Summary:	Stearyl-CoA desaturase that utilizes O ₂ and electrons from reduced cytochrome b5 to introduce the first double bond into saturated fatty acyl-CoA substrates. Catalyzes the insertion of a cis double bond at the Delta-9 position into fatty acyl-CoA substrates including palmitoyl-CoA and stearoyl-CoA (PubMed:11500518, PubMed:11533264, PubMed:16275639, PubMed:16443825, PubMed:26098370). Gives rise to a mixture of 16:1 and 18:1 unsaturated fatty acids (PubMed:11500518, PubMed:11533264, PubMed:16443825, PubMed:26098370). Plays an important role in lipid biosynthesis (PubMed:17127673, PubMed:10899171, PubMed:11500518, PubMed:11441127, PubMed:11533264, PubMed:12177411, PubMed:26098370). Plays an important role in regulating the expression of genes that are involved in lipogenesis and in regulating mitochondrial fatty acid oxidation (PubMed:12177411, PubMed:17127673, PubMed:24356954, PubMed:24295027). Plays an important role in body energy homeostasis (PubMed:17127673, PubMed:15210843, PubMed:24295027, PubMed:24356954). Contributes to the biosynthesis of membrane phospholipids, cholesterol esters and triglycerides (PubMed:10899171, PubMed:11500518, PubMed:11441127, PubMed:11533264, PubMed:12177411, PubMed:15210843, PubMed:26098370). Required for normal development of sebaceous glands (PubMed:17738154, PubMed:11533264). Required for the biosynthesis of normal levels of Delta-9 unsaturated fatty acids and 1-alkyl-2,3-diacylglycerol in the Harderian gland (PubMed:11500518). Required for normal production of meibum, an oily material that prevents drying of the cornea (PubMed:11533264).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225893