

## Product datasheet for MC209357

### Scd1 (NM\_009127) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Scd1 (NM_009127) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Scd1
Synonyms:	AA589638; ab; AI265570; Scd; Scd-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC209357 representing NM_009127 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**

ATGCCGGCCACATGCTCCAAGAGATCTCCAGTTCTTACACGACCACCACCACCATCACTGCACCTCCCT  
 CCGGAAATGAACGAGAGAAGGTGAAGACGGTCCCCCTCCACCTGGAAGAAGACATCCGTCTGAAATGAA  
 AGAAGATATTCACGACCCACCTATCAGGATGAGGAGGGACCCCGCCAAGCTGGAGTACGTCTGGAGG  
 AACATCATTCTCATGGTCTGCTGCACTGGGAGGCCTGTACGGGATCATACTGGTTCCCTCCTGCAAGC  
 TCTACACCTGCCTCTTCGGGATTTTCTACTACATGACCAGCGCTCTGGGCATCACAGCCGGGGCTCATCG  
 CCTCTGGAGCCACAGAACTTACAAGGCACGGCTGCCCCTGCGGATCTTCCTTATCATTGCCAACACCATG  
 GCGTTCAGAATGACGTGTACGAATGGGCCGAGATCACCGCGCCACCACAAGTTCTCAGAAAACACAG  
 CCGACCTCACAATTCGCCCGTGGCTTCTTCTCTCACGTGGGTGGCTGCTGTGCGCAAAACACCC  
 GGCTGTCAAAGAGAAGGGCGGAAACTGGACATGTCTGACCTGAAAGCCGAGAAGCTGGTGATGTCCAG  
 AGGAGGTACTACAAGCCCGCCTCCTGCTGATGTGCTTACCTGCCACGCTGGTGCCCTGGTACTGCT  
 GGGCGGAGACTTTTGTAACAGCCTGTTCTGTTAGCACCTTCTTGCGATACACTCTGGTGCTCAACGCCAC  
 CTGGCTGGTGAACAGTGCCGCGCATCTCTATGGATATCGCCCCTACGACAAGAATCAATCCCGGGAG  
 AATATCCTGGTTCCCTGGGTGCCGTGGCGAGGGCTTCACAACCTACCACACACCTTCCCTTTCGACT  
 ACTCTGCCAGTGAGTACCGCTGGCACATCACTTCAACAGTTCTTCATCGACTGCATGGCTGCCCTGGG  
 CCTGGCTTACGACCGGAAGAAAGTTTCTAAGGCTACTGTCTTAGCCAGGATTAAGAGAAGTGGAGACGGG  
 AGTCACAAGAGTAGCTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: [https://cdn.origene.com/chromatograms/ja2339\\_c10.zip](https://cdn.origene.com/chromatograms/ja2339_c10.zip)



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<b>Restriction Sites:</b>	Sgfl-MluI
<b>ACCN:</b>	NM_009127
<b>Insert Size:</b>	1068 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">BC007474</a> , <a href="#">AAH07474</a>
<b>RefSeq Size:</b>	4844 bp
<b>RefSeq ORF:</b>	1068 bp
<b>Locus ID:</b>	20249
<b>UniProt ID:</b>	<a href="#">P13516</a>
<b>Cytogenetics:</b>	19 37.98 cM

**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]