

Product datasheet for **TR513039**

Scd1 Mouse shRNA Plasmid (Locus ID 20249)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Scd1 Mouse shRNA Plasmid (Locus ID 20249)
Locus ID:	20249
Synonyms:	AA589638; ab; AI265570; Scd; Scd-1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Scd1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 20249). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC007474 , BC055453 , NM_009127 , NM_009127.1 , NM_009127.2 , NM_009127.3 , NM_009127.4 , BC114387 , BC114388 , BC114417
UniProt ID:	P13516



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Summary:	<p>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]</p>
shRNA Design:	<p>These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.</p>
Performance Guaranteed:	<p>OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.</p> <p>For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).</p>