

## Product datasheet for **TF301818**

### SCD5 Human shRNA Plasmid Kit (Locus ID 79966)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	SCD5 Human shRNA Plasmid Kit (Locus ID 79966)
Locus ID:	79966
Synonyms:	ACOD4; FADS4; HSCD5; SCD2; SCD4
Vector:	pRFP-C-RS (TR30014)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	SCD5 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 79966). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
RefSeq:	<a href="#">NM_001037582</a> , <a href="#">NM_024906</a> , <a href="#">NM_001037582.1</a> , <a href="#">NM_001037582.2</a> , <a href="#">NM_024906.1</a> , <a href="#">NM_024906.2</a> , <a href="#">BC004936</a> , <a href="#">BC048971</a> , <a href="#">BC137429</a> , <a href="#">BC137432</a> , <a href="#">NM_001037582.3</a>
UniProt ID:	<a href="#">Q86SK9</a>
Summary:	Stearoyl-CoA desaturase (SCD; EC 1.14.99.5) is an integral membrane protein of the endoplasmic reticulum that catalyzes the formation of monounsaturated fatty acids from saturated fatty acids. SCD may be a key regulator of energy metabolism with a role in obesity and dislipidemia. Four SCD isoforms, Scd1 through Scd4, have been identified in mouse. In contrast, only 2 SCD isoforms, SCD1 (MIM 604031) and SCD5, have been identified in human. SCD1 shares about 85% amino acid identity with all 4 mouse SCD isoforms, as well as with rat Scd1 and Scd2. In contrast, SCD5 shares limited homology with the rodent SCDs and appears to be unique to primates (Wang et al., 2005 [PubMed 15907797]).[supplied by OMIM, Mar 2008]
shRNA Design:	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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**Performance  
Guaranteed:**

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.

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](mailto: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).