

## Product datasheet for SC312669

## SCD5 (NM\_024906) Human Untagged Clone

## **Product data:**

## OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	SCD5 (NM_024906) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCD5
Synonyms:	ACOD4; FADS4; HSCD5; SCD2; SCD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC312669 representing NM_024906. Blue=Insert sequence <mark>Red=</mark> Cloning site Green=Tag(s)
	GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGCGCGCGCGCG
<b>Restriction Sites:</b>	Sgfl-Mlul
ACCN:	NM_024906
Insert Size:	771 bp



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SCD5 (NM_024906) Human Untagged Clone – SC312669	
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:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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>
RefSeq:	<u>NM 024906.2</u>
RefSeq Size:	2080 bp
RefSeq ORF:	771 bp
Locus ID:	79966
UniProt ID:	<u>Q865K9</u>
Cytogenetics:	4q21.22
Domains:	FA_desaturase
Protein Families:	Transmembrane
Protein Pathways:	Biosynthesis of unsaturated fatty acids, PPAR signaling pathway
MW:	29 kDa
Gene 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] Transcript Variant: This variant (2) has multiple differences in the 3' coding region, compared to variant 1, which result in a protein (isoform B) with a shorter and distinct C-terminus

Transcript Variant: This variant (2) has multiple differences in the 3' coding region, compared to variant 1, which result in a protein (isoform B) with a shorter and distinct C-terminus, compared to isoform A.

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