

Product datasheet for RC216929

SCD5 (NM_024906) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCD5 (NM_024906) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SCD5
Synonyms:	ACOD4; FADS4; HSCD5; SCD2; SCD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216929 representing NM_024906 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGCCAGGCCCGCCACCGACGCGGGGAAGATCCCTTTCTGCGACGCCAAGGAAGAAATCCGTGCCGGGC
TCGAAAGCTCTGAGGGCGCGCGGCCCGGAGAGGCCAGGCGCGCGGGCAGCGGCAGAACATCGTCTG
GAGGAATGTCGTCCTGATGAGCTTGCTCCACTTGGGGCCGTGTACTCCCTGGTGTCTATCCCCAAAGCC
AAGCCACTCACTCTGCTCTGGGCTACTTCTGCCTCCTCTGGCCGCTCTGGGTGTACAGCTGGTGCC
ATCGCTTGTTGGAGCCACAGTCTACCGGGCCAAGCTGCCTCTGAGGATATTTCTGGCTGTCCCAACTC
CATGGCTTTCCAGAATGACATCTTCGAGCGGTCCAGGGACCACCGAGCCACCACAAGTACTCAGAGACG
GATGCTGACCCCCACAATGCCCGCCGGGCTTCTTCTTCTCCCATATTGGGTGGCTGTTTGTTCGAAGC
ATCGAGATGTTATTGAGAAGGGGAGAAAGCTTGACGTCACTGACCTGCTTGTGATCCTGTGGTCCGGAT
CCAGAGAAATACACAGCACATCCAGAAAGAAGGAAGAGCTCTCAATCAAGAGGCAGCGTGTGAGATGCTT
CGTGAGTGGCATCAAGGGCATATATTGAAAGTACCCTTCCCGGATTACACATTTTAGCTTTGTTACATA
CTCATTGTAACCACTCCGAAAAGTGTGCTTGTGCTGCTGCTTTCTGTGTCCTGGAGGATTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC216929 representing NM_024906
 Red=Cloning site Green=Tags(s)

MPGPATDAGKIPFCDAKEEIRAGLESSEGGGGPERPGARGQRQNIWVRNVVLMSSLHLGAVVSVLIPKA
 KPLTLLWAYFCLLLAALGVTAGAHRLWSHRYSYRAKLPLRIFLAVANSMAFQNDIFERSRDHRAHKYSET
 DADPHNARRGFFFSHIGWLFVRKHRDVIEKGRKLDVTDLLADPVVRIQRNTQHIQKEGRALNQEAACEML
 REWHQGHILKVTLPLGLHILALLHTHCNHSEKCCMLRALSVSLEVF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1467_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_024906

ORF Size: 768 bp

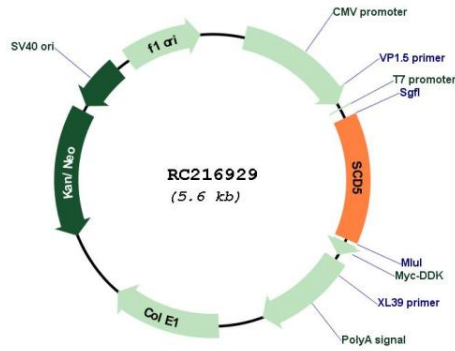
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

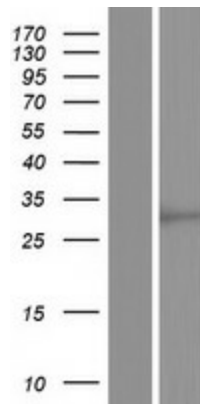
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	NM_024906.1 , NP_079182.1
RefSeq Size:	2021 bp
RefSeq ORF:	771 bp
Locus ID:	79966
UniProt ID:	Q86SK9
Cytogenetics:	4q21.22
Domains:	FA_desaturase
Protein Families:	Transmembrane
Protein Pathways:	Biosynthesis of unsaturated fatty acids, PPAR signaling pathway
MW:	28.8 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]

Product images:



Circular map for RC216929



Western blot validation of overexpression lysate (Cat# [LY411005]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216929 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).