

Product datasheet for **SC105787**

SCD5 (AL831891) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCD5 (AL831891) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCD5
Synonyms:	ACOD4; FADS4; HSCD5; SCD2; SCD4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for AL831891, the custom clone sequence may differ by one or more nucleotides

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GGGGAGAAAGCTTGACGTCACTGACCTGCTTGCTGATCCTGTGGTCCGGATCCAGAGAAAGTACTATAAG
ATCTCCGTGGTGCTCATGTGCTTTGTGGTCCCCACGCTGGTGCCCTGGTACATCTGGGAGAGAGTCTGT
GGAATTCCTACTTCTTGGCCTCTATTCTCCGCTATACCATCTCACTCAACATCAGCTGGCTGGTCAACAG
CGCCGCCACATGTATGAAACCGGCCCTATGACAAGCACATCAGCCCTCGGCAGAACCCACTCGTCGCT
CTGGGTGCCATTGGTGAAGGCTTCCATAATTACCATCACACCTTTCCCTTTGACTACTCTGCGAGTGAAT
TTGGCTTAAATTTAACCAACCACCTGGTTCATTGATTCATGTGCTGGCTGGGCTGGCCACTGACCG
CAAACGGCAACCAAGCCGATGATCGAGGCCCGGAAGGCCAGGACTGGAGACAGCAGTGTGAACTTGG
AACAGCCATCCCACATGTCTGCCGTTGCAACCTCGGTTTCATGGCTTTGGTTACAATAGCTCTTTGTACA
TTGGATCGTGGGAGGGGCGAGGGTGGGAAGGAACGAATCAATGTGGTTTGGGAATGTTTTGTTTTAT
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TGAGACAGAGTCTCACTCTGTCAACCAGGCTGGAGTGCAGTGGCGCAGTCTCGGCTCACTGCAGCCTCCA
CCTACCTGGTTCAAGCAATTCTCCTGCCTCAGCCTCCTGAGTAGCTGAGATTACAGGAGCCTGCCACCAC
ACCCAGCTAATTTTTTTGTATTTTTAGTAGAGACAGGTTTCATCATGTTGGCCAGACTGGCCTCGAATT
CCTGACCTCAGGCAATCCACCCGCTCGGCCTCCCAAAGAGCTGGGATTACAGGCGTGAGCCACCGCACC
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TAAGCACCTAATTTATATTCTAATTGATCCAGCCACTGATGCATGTACTTTAGCTACTTCTGCTAATA
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TAATGTTTACCTGCATGCAGCCTTCATTAATTTGTAGCAAAATATAAAGTGATCATTATGTAGCTTCT
GGATTAAAAAAATTTGTGTGTGAAGTTGCTTTGTAAAGTGCATGTGGAATTAATGGGACAGTGTGCCCTT
TGTGTTAGATGTTAGAGCAAAAGAAAGGCTTATAGTGTAGTATTGGAGCACTTTGAAGATAGATTTT
TCAGAAAAGATGTAGGATTTAAAGTAAATTTTAAATTTTAGAAAAAGATATGATGGCAATGGAAATA
GTCACAAATGAAGTTCTTCATCCAGTAGGTGTTAACAGTGTTATTTTGCCACTGGTAATGTGTAACCTGT
GAGTGATTTACAATAAATGATTATGAATCAAAAAAAAAAAAAAAAAA
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5' Read Nucleotide Sequence:

>OriGene 5' read for AL831891 unedited
 GTCAGAATTTGTATACGACTCATATAGGCGGCNCGCGATTTCGGCAGGAGGCCACTCACT
 CTGCTCTGGGCTACTTCTGCTTCTCCTGGCCGCTCTGGGTGTGACAGCTGGTGCCCAT
 CGCTTGTGGAGCCACAGGTCCTACCGGGCCAAGCTGCCTCTGAGGATATTTCTGGCTGTC
 GCCAACTCCATGGCTTTCCAGAATGACATCTTCGAGTGGTCCAGGGACCACCGAGCCAC
 CACAAGTACTCAGAGACGGATGCTGACCCCAATGCCCGCCGGGGCTTCTTCTTCTCC
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 GACGCTACTGACCTGCTTGTGCTGATCCTGTGGTCCGGATCCAGAGAAAGTACTATAAGATC
 TCCGTGGTGCTCATGTGCTTTGTGGTCCCCACGCTGGTGCCCTGGTACATCTGGGAGAG
 AGTCTGTGGAATTCCTACTTCTTGGCCTTATTCTCCGCTATACCATCTCACTCAACATC
 AGCTGGCTGGTCAACAGCGCCGCCACATGTATGGAAACCGGCCATGACAAGCACATC
 AGCCCTCGGCAGAACCCACTCGTCGCTCTGGGTGCCATTGGTGAAGGCTTCCATAATTAC
 CATCACACCTTTCCCTTTGACTACTCTGCGAGTGAATTTGGCTTANATTTTAACCCAACC
 ACCTGGTTCATTGATTTTCATGTGCTGGCTGGNGCTGGCCACTGACCGCAAACGGGCAACC
 AAGCCGATGATCGAGGCCCGAANGCCAGGACTGGAGACAGCAGTCTTGAACCTGAACA
 GCCATCCACATGTCTGCCGTGAACCTCGGTGATGGGCTTGGTACATAGCTCTCTGACAT
 TGNATCGNTGGAGGGGCACAGGTGGGGAAGGACAGTCAATGTGNTTGGGAATGTTT

3' Read Nucleotide Sequence:

>OriGene 3' read for AL831891 unedited
 TTCTGTGAACCCGCGCCGAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTGAATTCTA
 ATCATTTATTGTAATCACTCACAGTTTACACATTACCAGTGGCAAATAAAGCTGTTAA
 ACACCTACTGGATGAAGAACTTCATTGTGACTATTTCCAATTGCCATCATATCTTTTTCT
 AAAATTTAAAATTTAACTTTTAAATCCTACATCTTTTCTGAAAATATCTATCTTCAAAGT
 GCTCCAATACTAACACTATAAGCCCTTTCTTTTGTCTAACATCTAACACAAAGGGCACA
 CTGTCCCATAATTCCACATGCACTTTACAAAGCAACTTCACACACAAATTTTTTAAATC
 CAGAACTACATAATGATCACTTTATATTTTGTACAAAATTAATGAAGGCTGCATGCAG
 GTGAAACATTAGTAGACACGGAATTCTAGATAACTGTTGGTCTCAAGATCTGATGGCCT
 GATGTGGAAAATTAATATGCTTATTTAGCAGAAGTAGCTAAAGTACATGCATCAGTGGCT
 GGGATCAATTAGAATATAAATAGGTGTTTAAACATTTAAACGAGAGCTTAATTTGAGCT
 TAATTTGATGCTGGCATGTCAGAGTTATACACCTTTAAGATAACAATAGCAAACAGAAC
 ANAATCAAACATCTAAACAGGCATGATTTATAAGGTGGGCTGGGCATANGGCTCANGACA
 CANAACGAGCTGGGCAGTGAACAAATCTCTTTTGAACAAAGACAGTAGAGCATTAAACA
 GCTGTAAACCCANGCAAAAATTAACCAGACCCATTTCTGGAATCTCATTTTTTCAGTTTT
 TGATTCTCTTAGCAACAATAAACCCACACCCATAATTACAAACAGAACCTTCTTAGTA
 CACATAGTCCCCCTGTCTCTACCTGCCTCCTGCTCCTCAAAGGGTGGTTAAAGCATGA
 TGGG

Restriction Sites:

NotI-NotI

ACCN:

AL831891

Insert Size:

2750 bp

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).

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:

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: [AL831891.1](#), [CAD38567.1](#)

RefSeq Size: 2287 bp

RefSeq ORF: 2287 bp

Locus ID: 79966

Cytogenetics: 4q21.22

Protein Families: Transmembrane

Protein Pathways: Biosynthesis of unsaturated fatty acids, PPAR signaling pathway

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]