

Product datasheet for **SC302915**

SCD5 (NM_001037582) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCD5 (NM_001037582) 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:

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>OriGene sequence for NM_001037582 edited
GCTAAGACCTGGGAAGAGCGCAGGAGCCCGGAGAAGGGCTGGAAGGAGGGGACTGGA
CGTGCGGAGAATCCCCCTAAAAGGCAGAAGCCCCGCCCCACCTCGAGCTCCGCTC
GGGCAGAGCGCTGCCTGCCTGCCGCTGCTGCGGGCGCCACCTCGCCAGCCATGCCAG
GCCCGCCACCGACGCGGGGAAGATCCCTTTCTGCGACGCCAAGGAAGAAATCCGTGCCG
GGCTCGAAAGCTCTGAGGGCGGGCGGCCCGGAGAGGCCAGGCGCGCGGGCAGCGGGC
AGAACATCGTCTGGAGGAATGTCGTCTGATGAGCTTGCTCCACTTGGGGCCGTGACT
CCCTGGTCTCATCCCCAAGCCAAGCCACTCACTCTGCTCTGGCCTACTTCTGCTTCC
TCTGGCCGCTCTGGGTGTGACAGCTGGTGCCCATCGCTTGTGGAGCCACAGTCTACC
GGGCCAAGCTGCCTCTGAGGATATTTCTGGCTGTCGCCAACTCCATGGCTTTCCAGAATG
ACATCTTCGAGYGGTCCAGGGACCACCGAGCCACCACAAGTACTCAGAGACGGATGCTG
ACCCCCACAATGCCCGCCGGGGTCTTCTTCTCCCATATTGGGTGGCTGTTTGTTCGCA
AGCATCGAGATGTTATTGAGAAGGGGAGAAAGCTTGACGTCACCTGACTGCTGCTGATC
CTGTGGTCCGGATCCAGAGAAAGTACTATAAGATCTCCGTGGTGTCTATGTCTTTGTGG
TCCCCACGCTGGTGCCCTGGTACATCTGGGGAGAGAGTCTGTGGAATTCCTACTTCTTGG
CCTCTATTCTCCGCTATACCATCTCACTCAACATCAGCTGGCTGGTCAACAGCGCCGCC
ACATGTATGGAACCGGCCCTATGACAAGCACATCAGCCCTCGGCAGAACCCTCGTCCG
CTCTGGGTGCCATTGGTGAAGGCTTCCATAATTACCATCACACCTTTCCCTTTGACTACT
CTGCGAGTGAATTTGGCTTAAATTTTAACCAACCACCTGGTTCATTGATTTTCATGTGCT
GGCTGGGGCTGGCCACTGACCGCAAACGGGCAACCAAGCCGATGATCGAGGCCGGGAAGG
CCAGGACTGGAGACAGCAGTGTGAACTTGAACAGCCATCCCACATGTCTGCCGTTGC
AACCTCGGTTTCATGGCTTTGGTTACAATAGCTCTTGTACATTGGATCGTGGGAGGGGG
CAGAGGTGGGGGAAGGAACGAGTCAATGTGGTTTGGGAATGTTTTTGTATCTCAAAAT
AATGTTGAAATACAATTATCAATGAAAAAACTTTCGTTTTTTTTTTTTGTTTGTGTTTT
TTGAGACAGAGTCTCACTCTGTCAACCAGGCTGGAGTGCAGTGGCGCAGTCTCGGCTCAC
TGCAGCCTCCACCTACCTGGTTCAAGCAATTCTCTGCCTCAGCCTCCTGAGTAGCTGAG
ATTACAGGAGCCTGCCACCACACCCAGCTAATTTTTTTGTATKTTTAGTAGAGACAGGT
TTCATCATGTTGGCCAGACTGGCCTCGAATTCCTGACCTCAGGCAATCCACCCGCTCGG
CCTCCCAAAGAGCTGGGATTACAGGCGTGAGCCACCGCACCTGCCGAAAAAACTTTTT
TTTTTTGAGACGGAGGCTCGCTCTGTCCCCAGGCTGGAGTGCAGTGGCGAGATCTCAG
CTCACTGCAAGCTCCGCCTCCCGGTTACGCCATTCTCTGCCTCAGCCTCCCGAGTAG
CTGGGAGCCAGCGCCAGCCTAAAAAACTTTCAAGTCAATTTACTACGATTTAACA
TTAGAGTGTGGACATGTGATTTAATCGCTATAGCTAAAAACGTCAAATATACGTTGTCA
TGTGCTTGAACATGATGCTAACCCTGACAGGATGAAGGAAAGTAATTTCTTTCAGTGTA
GTTTCAGGAGAGCATTGTTTTCTTTTCTACCAATTAACCCATCATTGCTTTTAAACAACC
ATCTGAAGGAGCAGAGAGGCAGGTTAGAAGACAGAAGGGGATCTATGTGGTAACTAAAG
AATGTTTCTGTTTTGTTAATTATGTGTGTGTGTGTTTTATTGTTTGTGTTAAGAGAATC
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CAGCTTGTAAATGCTCTACTGCTTTTGTTCAGAGAGATTTGTTCACTGCCAGCTCGT
TTTTGTGCTGAGCCCTATGGCCAGCCACCTTATAAATCATGCCTGTTTATGATGTTTGA
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TCCCAGCCACTGATGCATGTAAGTACTTCTGCTAAATAAGCATATTAATTTTCCA
CATCAGGCCATCAGATCTTGAGAACCAACAGTTATCTAGAATCCCGTGTCTACTAATGTT
TCACCTGCATGCAGCCTTCAATTTTTGTAGCAAAATATAAAGTGCATCATTATGTAGTT
TCTGGATTAATAAATTTGTGTGTGAAGTTGCTTTGTAAAGTGCATGTGGAATTAATGGG
ACAGTGTGCCCTTTGTGTTAGATGTTAGAGCAAAAGAAAGGGCTTATAGTGTAGTATTG
GAGCAGCTTTGAAGATAGATATTTTTCAGAAAAGATGTAGGATTTAAAGTTAAATTTTAAA
TTTTAGAAAAAGATATGATGGCAATTGGAAATAGTCACAATGAAGTTCTTCATCCAGTAG
GTGTTTAAACAGTGTTATTTTGGCACTGGTAATGTGTAACCTGTGAGTGATTTACAATAAA
TGATTATGAATTCAAAAAATAAAAAAAAAA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001037582 unedited</p> <pre> AGGAATTGTATACGACTACTATAGGGCGGCCGGAATTCGCACGAGGGCTAAGACCCTGG GGAAGAGCGCAGGAGCCCGGGAGAAGGGCTGGAAGGAGGGGACTGGACGTGCGGAGAATT CCCCCTAAAAGGCAGAAAGCCCCGCCCCACCCTCGAGCTCCGCTCGGGCAGAGCGCT GCCTGCCTGCCGTGTGCGGGCGCCACCTCGCCAGCCATGCCAGGCCCGGCCACCGA CGCGGGGAAGATCCCTTTCTGCGACGCCAAGGAAGAAATCCGTGCCGGGCTCGAAAGCTC TGAGGGCGGGCGGGCCCGGAGAGGCCAGGCGCGGGCAGCGGCAGAACATCGTCTG GAGGAATGTCGTCTGATGAGCTTGCTCCAATTGGGGCCGTGTACTCCCTGGTGCAT CCCCAAAGCCAAGCCACTCACTCTGCTCTGGGCTACTTCTGCTTCTCCTGGCCGCTCT GGGTGTGACAGCTGGTGCCCATCGCTTGTGGAGCCACAGGTCCTACCGGGCCAAGCTGCC TCTGAGGATATTTCTGGCTGTCGCCAACTCCATGGCTTTCAGAATGACATCTTCGAGTG GTCCAGGGACCACCGAGCCACCACAAGTACTCAGAGACGGATGCTGACCCCAATGC CCGCCGGGCTTCTTCTTCTCCCATATTGGGTGGCTGTTGTTTCGAAGCATCGAGATGT TATTGAGAAGGGAGAAAGCTTGACGTCACTGACCTGCTTGTGATCCTGTGGTCCGGAT CCAGAGAAAGTACTATAAGATCTCCGTGGTGTCTATGTGCTTTGTGGTCCCACGCTGGT GCCTGGACATCTGGGGAGAGATCTGTGAATNCTACTTCTGGNCTCTATTTNCGCTTAC CATCCACTCACATAGCTGCTGGGCACAGCGGCCACAGATGAAAACGCN </pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001037582 unedited</p> <pre> CTATGGAACGCGGCACGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTGAATTCATAA TCATTTATTGAAATCACTCACAGTTTACACATTACCAGTGGCAAATAACACTGTTAAA CACCTACTGGATGAAGAACTTCATTGTGACTATTTCCAATTGCCATCATATCTTTTTCTA AAATTTAAATTTAACTTTAAATCCTACATCTTTCTGAAAATATCTATCTTCAAAGTG CTCCAATACTAACAATAAGCCCTTTCTTTTGCTCCTACATCTAACACAAGGGCACAC TGTCCTTAATTCACATGCACCTTACAAAGCACTTCACACAAAATTTTTTAAATCC AGAAACTACATAATGATCACTTTATATTTGCTACAAAATTAATGAAGGCTGCATGCAGG TGAAACATTAGTAGACACGGAATCTAGATAACTGTTGGTTCTCAAGATCTGATGGCCTG ATGTGGAAAATTAATATGCTTATTTAGCAGAAGTAGCTAAAGTACATGCATCAGTGGCTG GGATCAATTAGAATATAAATTAGGTGTTTAAACATTTAAACGAGAGCTTAATTTGAGCTT AATTTGATGCTGGCATGTCAGAGTTATACACCTTTAAGATAACAATAGCAAACCGAAC AAATTCAAACATCTAAACAGGCATGATTTATAAGGCGGGCCTGGCATAAAGGCTCAAGACA CAAACAGCCTGGGCAGTGAACAAATCTCTTGGAAACAAGACCGTAGAGCATTACCAA GCTGTCAACCCACCAAAAAATAACCACGAGCCTTCCCCGATTCCCATTTTTCTCAGTTT TGATCCCCTTACCACACTTAAACCCCCCCCCCATTATTACAAACGAAACTTCTTAATA CCCATAAATCCCCTTCGGTTTTACCCGCCTCTTGGTCTCAAAGGGGTTAAACACGAGGGT AATGCGAAN </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_001037582
Insert Size:	3000 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).
OTI Annotation:	There is 1 nucleotide difference between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. This results in the substitution of 1 amino acid.

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:	<u>NM_001037582.1</u> , <u>NP_001032671.1</u>
RefSeq Size:	3030 bp
RefSeq ORF:	993 bp
Locus ID:	79966
UniProt ID:	<u>Q86SK9</u>
Cytogenetics:	4q21.22
Protein Families:	Transmembrane
Protein Pathways:	Biosynthesis of unsaturated fatty acids, PPAR signaling pathway
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encoded the longer isoform (A).</p>