

## Product datasheet for **SC127259**

### FADS1 (NM\_013402) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FADS1 (NM_013402) Human Untagged Clone
Tag:	Tag Free
Symbol:	FADS1
Synonyms:	D5D; FADS6; FADSD5; LLCDL1; TU12
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_013402, the custom clone sequence may differ by one or more nucleotides

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ATGGGAACGCGCCTGCGAGGCCCGCGGTCTGCCCTGCGGTGCTGAAAACCCGCGCGCAGGCGGCTGG
CTCTGGGCGCGCCAGCAAATCCACTCCTGGAGCCCGCGGACCCGAGCACGCGCTGACAGCCCTGC
TGGCCCGCGCGCGGCGTCCAGGCCAGCTATGGCCCCGACCCGGTGGCCGCCGAGACCCGCGCTCAG
GGACCTACCCCGCCTACTTCACCTGGGACGAGGTGGCCAGCGCTCAGGGTGGCAGGAGCGGTGGCTAG
TGATCGACCGTAAGGTGTACAACATCAGCGAGTTCACCCGCCGATCCAGGGGGCTCCCGGTCATCAG
CCACTACGCCGGCAGGATGCCACGGATCCCTTTGTGGCCTTCCACATCAACAAGGGCCTTGTGAAGAAG
TATATGAACTCTCTCCTGATTGGAGAAGTCTCCAGAGCAGCCAGCTTTGAGCCACCAAGAATAAAG
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CTTCTTCTGCTGTACCTGCTGCACATCTTGTGCTGGATGGTGCAGCCTGGCTCACCTTTGGGCTTT
GGGACGTCCTTTTTGCCCTTCTCTGTGCGGTGCTGCTCAGTGCAGTTCAGGCCAGGCTGGCTGGC
TGCAGCATGACTTTGGGCACCTGTCCGCTTTCAGCACCTCAAAGTGAACCATCTGCTACATCATTTTGT
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AACTGCTCCGCAAGACCCAGACATCAACATGCATCCCTTCTTCTTGGCCTTGGGAAGATCCTCTCTG
TGGAGCTTGGGAAACAGAAGAAAAAATATGCCGTACAACCACCAGCACAAATACTTCTCCTAATTGG
GCCCCAGCCTTGTGCCTCTACTTCCAGTGGTATATTTTCTATTTTGTATCCAGCGAAAGAAGTGG
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AAGCCTTCTGGGCTTTTCTTCAAGTCAAGTTCCTGAAAGCAACTGTTTGTGTGGGTGACACAGAT
GAACCATATCCCATGCACATTGATCATGACCGGAACATGGACTGGGTTCCACCCAGCTCCAGGCCACA
TGCAATGTCCACAAGTCTGCCTTCAATGACTGGTTCAGTGGACACCTCACTTCCAGATTGAGCACCATC
TTTTTCCACGATGCCTCGACACAATTACCACAAAGTGGCTCCCCTGGTGCAGTCCTTGTGTCCAAGCA
TGGCATAGAGTACCAGTCCAAGCCCTGCTGTCAGCCTTCGCCGACATCATCCACTACTAAAGGAGTCA
GGGCGACTCTGGCTAGATGCCTATCTTACCAATAA
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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_013402 unedited</p> <pre>TGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGCTGAAAACCCGGCG CGCAGGGCGGCTGGCTCTGGGCGCGGCCAGCAAATCCACTCTGGAGCCCGCGGACCCCG AGCACGCGCCTGACAGCCCTGCTGGCCCGGCGCGCGGCTCGCCAGGCCAGCTATGGCC CCCAGCCCGGTGGCCCGCGAGACCGGGCTCAGGGACCTACCCCGCGCTACTTCACTGG GACGAGGTGGCCAGCGCTCAGGGTGCAGGAGCGGTGGCTAGTGATCGACCGTAAGGTG TACAACATCAGCGAGTTACCCCGCGGCATCCAGGGGGCTCCCGGTCATCAGCCACTAC GCCGGGAGGATGCCACGGATCCCTTTGTGGCCTTCCACATCAACAAGGGCCTTGTGAAG AAGTATATGAACTCTCTCTGATTGGAGAACTGTCTCCAGAGCAGCCAGCTTTGAGCCC ACCAAGAATAAAGAGCTGACAGATGAGTTCGGGAGCTGCGGGCCACAGTGGAGCGGATG GGGCTCATGAAGGCCAACCATGTCTTCTTCTGCTGTACCTGCTGCACATCTTGCTGCTG GATGGTGCAGCCTGGCTCACCTTTGGTCTTTGGGACGCTCTTTTTGCCCTTCTCCTC TGTGCGGTGCTGCTCAGTGCAGTCAAGCCAGGCTGGTGGCTGCAGCATGACTTTGGG CACCTGTCGGTCTCAGCACCTCAAAGTGAACCATCTGCTACATCATTTTGTGATTGGC CCCTGNAAGGGGCCCCGCGAGTTGGTGAACCCATGCACTTCCAGACCATGCCAGCCAC TGCTTCGCAAGACCAGAAATAAATGCATCCTCTCTTGTCTGGGAAGATCTCTTGNNGAGCT GGAAAGAGATAATTTGCGTCACCA</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_013402 unedited</p> <pre>CCGCGGCCCGCAATTCTANATCGAGTTTTTTTTTTTTTTTTTTTAAAGGAGTCTTGCTCT GTCGCCAGGCTGGAGTACAATGGCGTGATCTCAGCTCACTGCAACCTCCACCTCCCGG TTCAAGCGATTCTCTGCCTCAGCCTCCTGGGTAGCTGGGATTACAGGCGCGTGCCACCA CGCCCGCATGAGTGGAATTTTAGTGTTAAATCTTACTGACTCTGGGTTCAAGTGGAC CCTCCTTCTGTACCCTCCTGTTCTCTGTTCACCAACTACCTGCATGTGCCAAAC TAGAAAAAGGAAATAATTTACACCCCTGCCCAACAGCTCCTTCCCTCCTAGGGACTTCT GTGTCCACCCCCACTTTGGGTCTTAAACTGTGGCTACAAGATAAAAGGGAGGAGTTTG AGTCAGAGGCTTTATGTCCCAACCCCAACCCCTCTGAGTATTAACCTATAGTGGCATT GACCCTCAAGCTCCCCTGCGCTGGCTCCAGAGTCTTCTACTCTTTTTACACTGGG CAGGGCGGCTGCCGATTTGGTGAAGATAGGCATTCTACTCCGAGCTGCCCTGACTCCTTT ACCGAGTGGATGATCGCCCCCACCCTTACAGCAAGGGCTCCGACTGGTACTCCTATG CCCTCCTTGGTCCACAAGAACTGCACCAAGGGAGCCACTTTTTGGGTAATTGTGCCTTAG CCATCCCGCGGAAACAAATCGCCCTCCATCCGGAAGCCGAGTGTCCACTGAACCCAGT ACTTAAAAGGCCAACTCGTCGACCATTTGCAATGTGGTCTGCAACCTGGCTGAAAACACC CATCCCTGGTCCGGTCTGAATCAATTGCGCTCGCAATACTGTTTACATTTGTGGCCA ACCCACACANACCATTGTCTTTCCGGAACCTCTCGTCTCGATGAAAATGTCCCGGA TTGCTCTTAN</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_013402
<b>Insert Size:</b>	2050 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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:** [NM\\_013402.3](#), [NP\\_037534.2](#)

**RefSeq Size:** 4432 bp

**RefSeq ORF:** 1335 bp

**Locus ID:** 3992

**UniProt ID:** [O60427](#)

**Cytogenetics:** 11q12.2

**Domains:** heme\_1, FA\_desaturase

**Protein Families:** Transcription Factors, Transmembrane

**Protein Pathways:** Biosynthesis of unsaturated fatty acids

**Gene Summary:** The protein encoded by this gene is a member of the fatty acid desaturase (FADS) gene family. Desaturase enzymes regulate unsaturation of fatty acids through the introduction of double bonds between defined carbons of the fatty acyl chain. FADS family members are considered fusion products composed of an N-terminal cytochrome b5-like domain and a C-terminal multiple membrane-spanning desaturase portion, both of which are characterized by conserved histidine motifs. This gene is clustered with family members FADS1 and FADS2 at 11q12-q13.1; this cluster is thought to have arisen evolutionarily from gene duplication based on its similar exon/intron organization. [provided by RefSeq, Jul 2008]