

## Product datasheet for **SC336031**

### FADS2 (NM\_001281501) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FADS2 (NM_001281501) Human Untagged Clone
Tag:	Tag Free
Symbol:	FADS2
Synonyms:	D6D; DES6; FADSD6; LLCDL2; SLL0262; TU13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC336031 representing NM_001281501. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCACGGCAGGGAGGCGGGACCCTTTGTGTGTGCGGTGTTGTTGGCCTCCATCCCCACTCCCCAG
ACTCCACTTCTCCAGGCCTCTCTCCCGCTTTTCATCCCGCATCCGCAGGACACCCAATCACCGGGCAA
CAGGATGCCTTCCGCGCCTTCCACCCTGACCTGGAATTCGTGGGCAAGTCTTGAACCCCTGCTGATT
GGTGAAGTGGCCCGGAGGAGCCAGCCAGGACCAGGCAAGAAGTCAAAGATCACTGAGGACTCCGG
GCCCTGAGGAAGACGGCTGAGGACATGAACCTGTTCAAGACCAACCACGTGTTCTTCTCCTCCTCTG
GCCACATCATCGCCCTGGAGAGCATTGCATGGTTCAGTGTCTTTACTTTGGCAATGGCTGGATTCTT
ACCTCATCACGGCCTTTGTCCTTGCTACCTCTCAGGCCAAGCTGGATGGCTGCAACATGATTATGGC
CACCTGTCTGTCTACAGAAAACCAAGTGGAAACCCTTGTCCACAAATTCGTATTGGCCACTTAAAG
GGTGCCTCTGCCAAGTGGTGAATCATCGCCACTTCCAGCACCACGCCAAGCCTAACATCTTCCACAAG
GATCCCGATGTGAACATGCTGCACGTGTTTGTCTGGGCGAATGGCAGCCATCGAGTACGGCAAGAAG
AAGCTGAAATACCTGCCCTACAATCACCAGCAGCAATACTTCTTCTGATTGGGCCCGCGCTGCTCATC
CCCATGATTTCCAGTACCAGATCATCATGACCATGATCGTCCATAAGAAGTGGTGGACCTGGCCCTGG
GCCGTGAGTACTACATCCGTTCTTTCATCACCTACATCCCTTTCTACGGCATCCTGGGAGCCCTCCTT
TTCCTCAACTTTCATCAGTTTCTGGAGAGCCACTGGTTTGTGTGGGTACACAGATGAATCACATCGTC
ATGGAGATTGACCAGGAGCCTACCGTACTGGTTCAGTACAGCAGCTGACAGCCACCTGCAACCTGGAG
CAGTCTTCTTCAACGACTGGTTCAGTGGACACCTTAACTTCCAGATTGAGCACCACCTTCTCCACC
ATGCCCGGCACAACCTTACACAAGATCGCCCGCTGGTGAAGTCTCTATGTGCCAAGCATGGCATTGAA
TACCAGGAGAAGCCGCTACTGAGGGCCCTGCTGGACATCATCAGGTCCCTGAAGAAGTCTGGGAAGCTG
TGGCTGGACGCCTACCTTCAAAATGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```



[View online »](#)

<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_001281501
<b>Insert Size:</b>	1269 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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001281501.1</u>
<b>RefSeq Size:</b>	3025 bp
<b>RefSeq ORF:</b>	1269 bp
<b>Locus ID:</b>	9415
<b>UniProt ID:</b>	<u>O95864</u>
<b>Cytogenetics:</b>	11q12.2
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	alpha-Linolenic acid metabolism, Biosynthesis of unsaturated fatty acids, PPAR signaling pathway
<b>MW:</b>	49.3 kDa

**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 at 11q12-q13.1; this cluster is thought to have arisen evolutionarily from gene duplication based on its similar exon/intron organization. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2013]

Transcript Variant: This variant (2) differs in the 5' UTR and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) has a distinct N-terminus and is shorter than isoform 1.