

Product datasheet for **RC238081**

FADS2 (NM_001281502) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: FADS2 (NM_001281502) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: FADS2
Synonyms: D6D; DES6; FADSD6; LLCDL2; SLL0262; TU13
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC238081 representing NM_001281502
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACCCGGGAGCCCCCTGGATGCCGGCGGGTGAACCTCGCTGATGTTGTACACCTTACGGTCGATCACTA
GCCACCGCTCCTCGACCCTGAGCGCTGGGCCACCTCGTCCAGGATGCCTTCCGCGCCTCCACCCTGA
CCTGGAATTCGTGGCAAGTTCTTGAAACCCCTGCTGATTGGTGAACCTGGCCCCGAGGAGCCAGCCAG
GACCACGGCAAGAACTCAAAGATCACTGAGGACTTCCGGGCCCTGAGGAAGACGGCTGAGGACATGAACC
TGTTCAAGACCAACCACGTGTTCTTCTCCTCCTCCTGGCCCACATCATCGCCCTGGAGAGCATTGCATG
GTTCACTGTCTTTTACTTTGGCAATGGCTGGATTCTACCTCATCACGGCCTTTGTCCTTGCTACCTCT
CAGGCCAAGCTGGATGGCTGCAACATGATTATGGCCACCTGTCTGTCTACAGAAAACCAAGTGAAC
ACCTTGTCACAAATTCGTCATTGGCCACTTAAGGGTGCCTCTGCCAAGTGGTGAATCATCGCCACTT
CCAGCACCACGCCAAGCCTAACATCTTCCACAAGGATCCCGATGTGAACATGCTGCACGTGTTTGTCTG
GGCGAATGGCAGCCCATCGAGTACGGCAAGAAGAAGCTGAAATACCTGCCCTACAATCACCAGCAGGAAT
ACTTCTTCTGATTGGGCCCGCTGCTCATCCCATGTATTTCCAGTACCAGATCATGACCATGAT
CGTCCATAAAGAAGTGGGTGGACCTGGCCCTGGGCCGTGAGTACTACATCCGGTTCCTCATCACCTACATC
CCTTTCTACGGCATCCTGGGAGCCCTCCTTTCTCAACTTCATCAGTTCTGGAGAGCCACTGGTTTG
TGTGGGTACACAGATGAATCACATCGTCATGGAGATTGACCAGGAGGCCTACCGTACTGGTTCAGTAG
CCAGCTGACAGCCACCTGCAACGTGGAGCAGTCTTCTTCAACGACTGGTTCAGTGGACACCTTAACTTC
CAGATTGAGCACCTTCTCCACCATGCCCGGCACAACCTTACACAAGATCGCCCCGCTGGTGAAGT
CTCTATGTCCAAGCATGGCATTGAATACCAGGAGAAGCCGCTACTGAGGGCCCTGCTGGACATCATCAG
GTCCTGAAGAAGTCTGGGAAGCTGTGGCTGGACGCTACCTTCACAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC238081 representing NM_001281502
 Red=Cloning site Green=Tags(s)

MTREPPGCRRVNSLMYTLRSITSHRSSHPERWATSSQDAFRAFHPDLEFVGKFLKPLLIGELAPEEPSQ
 DHGKNSKITEDFRALRKAEDMNLFKTNHVFFLLLLLAHIALESIAWFTVFYFGNGWIPTLITAFVLATS
 QAAQAGWLQHDYGHLSVYRKPKNHLVHKFVIGHLKGASANWNNHRHFQHHAKPNIFHKDPDVNMLHVFL
 GEWQPIEYGKKLKYLPYNHQHEYFFLIGPPLLIPMYFQYQIIMTMIVHKNWVDLAWAVSYIRFFITYI
 PFYGILGALLFLNFIREFLESHWFVWVTQMNHIVMEIDQEAYRDFWSSQLTATCNVEQSFFNDWFSGHLNF
 QIEHHLFPTMPRHNLHKIAPLVKSLCAKHGIEYQEKPLLRALLDIIRSLKKGKWLDAYLHK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

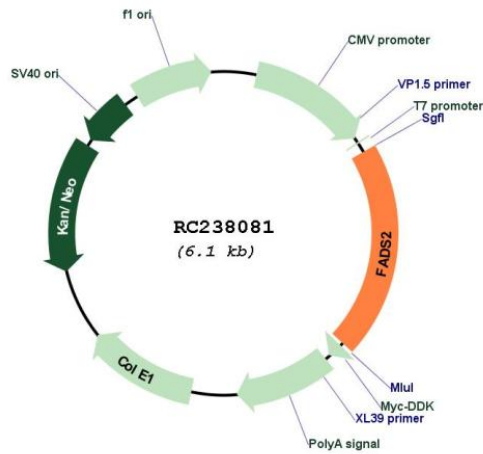
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001281502

ORF Size:	1239 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_001281502.1 , NP_001268431.1
RefSeq Size:	3094 bp
RefSeq ORF:	1242 bp
Locus ID:	9415
UniProt ID:	O95864
Cytogenetics:	11q12.2
Protein Families:	Transmembrane
Protein Pathways:	alpha-Linolenic acid metabolism, Biosynthesis of unsaturated fatty acids, PPAR signaling pathway
MW:	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]