

Product datasheet for **RG229252**

FADS1 (NM_013402) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FADS1 (NM_013402) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FADS1
Synonyms:	D5D; FADS6; FADSD5; LLCDL1; TU12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG229252 representing NM_013402
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGAACGCGCGCTGCGAGGCCCGCGGTCTGCCTGCGGTGCTGAAAACCCGCGCGCAGGCGGCTGG
 CTCTGGGCGCGGCCAGCAAATCCACTCCTGGAGCCCGCGGACCCGAGCACGCGCTGACAGCCCTGC
 TGGCCCGCGCGCGCGCTCGCCAGGCCAGCTATGGCCCCGACCCGGTGGCCGCCGAGACCGCGGCTCAG
 GGACCTACCCCGCGCTACTTCACCTGGGACGAGGTGGCCAGCGCTCAGGGTGGAGGAGCGGTGGCTAG
 TGATCGACCGTAAGGTGTACAACATCAGCGAGTTCACCCGCCGCATCCAGGGGGCTCCCGGGTCATCAG
 CCACTACGCCGGCAGGATGCCACGGATCCCTTTGTGGCCTTCCACATCAACAAGGGCCTTGTGAAGAAG
 TATATGAAGTCTCTCTGATTGGAGAAGTCTCCAGAGCAGCCAGCTTTGAGCCACCAAGAATAAAG
 AGCTGACAGATGAGTCCGGGAGCTGCGGGCCACAGTGGAGCGGATGGGGCTCATGAAGGCCAACCATGT
 CTTCTTCTGCTGTACCTGCTGCACATCTTGTCTGGATGGTGCAGCCTGGCTCACCTTTGGGCTTT
 GGGACGTCTTTTTGCCCTTCTCTCTGTGCGGTGCTGCTCAGTGCAGTTCAGGCCAGGCTGGCTGGC
 TGCAGCATGACTTTGGGACCTGTCGGTCTCAGCACCTCAAAGTGAACCATCTGCTACATCATTTTGT
 GATTGGCCACCTGAAGGGGGCCCCGCCAGTTGGTGAACCACATGCACTTCCAGCACCATGCCAAGCCC
 AACTGCTTCCGCAAGACCCAGACATCAACATGCATCCCTTCTTCTTGGCCTTGGGAAGATCCTCTCTG
 TGGAGCTTGGGAAACAGAAGAAAAAATATGCCGTACAACCACCAGCACAAATACTTCTCCTAATTGG
 GCCCCAGCCTTGCTGCCTCTCTACTCCAGTGGTATATTTCTATTTTGTATCCAGCGAAAGAAGTGG
 GTGGACTTGGCCTGGATGATTACCTTCTACGTCCGCTTCTCCTCACTTATGTGCCACTATTGGGCTGA
 AAGCCTTCTGGCCTTTCTTTCATAGTCAGTTCCTGGAAAGCAACTGGTTTGTGTGGTGACACAGAT
 GAACCATATTCCCATGCACATTGATCATGACCGAACATGGACTGGGTTTCCACCCAGCTCCAGGCCACA
 TGAATGTCCACAAGTCTGCCTTCAATGACTGGTTCAGTGGACACCTCAACTTCCAGATTGAGCACCATC
 TTTTCCACGATGCCTCGACACAATTACCACAAAGTGGCTCCCCTGGTGCAGTCTTGTGTCCAAAGCA
 TGGCATAGAGTACCAGTCCAAGCCCTGCTGTCAGCCTTCGCCGACATCATCCACTACTAAAGGAGTCA
 GGGCAGCTCTGGCTAGATGCCTATCTTACCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

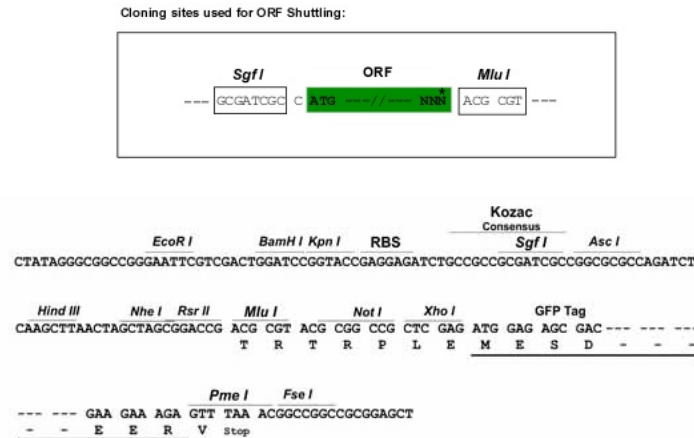
>RG229252 representing NM_013402
 Red=Cloning site Green=Tags(s)

MGTRAARPAGLPCGAENPARRRLLALGARQQIHSWSRTPSTRLTAPAGPARGVARPAMADPVAETAQAQ
 GPTRPRYFTWDEVAQRSGCEERWLVIDRKVYNISEFTRRHPPGSRVISHYAGQDATDPFVAFHINKGLVKK
 YMNSLLIGELSPEQPSFEPTKNKELTDEFRELRATVERMGLMKNHVFLLYLLHILLDGAAWLTLWVF
 GTSFLPFLLCAVLLSAVQAQAGWLQHDFGHLVSVFSTSKWNHLLHHFVIGHLKGAPASWWNHMHFQHHAKP
 NCFRKDPDINMHPFFALGKILSVELGKQKKYMPYNHQHKYFFLIGPPALLPL YFQWYIFYFVIQRKKW
 VDLAWMITFYVRFLLTYVPLLGLKAFGLFFIVRFLESNWFVWVTQMNHIPMHIDHNRNMDWVSTQLQAT
 CNVHKSADFNDWFSGHLNFQIEHHLFPTMPRHNYHKVAPLVQSLCAKHGIEYQSKPLL SAFADIIHSLKES
 GQLWLDAYLHQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_013402

ORF Size: 1503 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:

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_013402.7](#)

RefSeq Size: 4432 bp

RefSeq ORF: 1506 bp

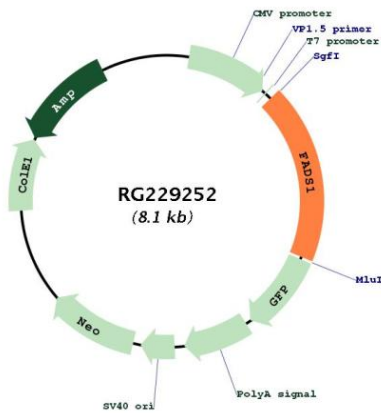
Locus ID: 3992

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]

Product images:



Circular map for RG229252