

Product datasheet for RC212803

DEGS1 (NM_003676) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DEGS1 (NM_003676) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DEGS1
Synonyms:	DEGS; DEGS-1; Des-1; DES1; FADS7; HLD18; MIG15; MLD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212803 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAGCCGCTCTCGCGGAAGACTTCGAGTGGGTCTACACCGACCAGCCGACGCCGACCGCGCC
GGGAGATCCTGGCAAAGTATCCAGAGATAAAGTCCTTGATGAAACCTGATCCCAATTTGATATGGATTAT
AATTATGATGGTTCTCACCCAGTTGGGTGCATTTACATAGTAAAAGACTTGGACTGGAAATGGGTCATA
TTTGGGCCTATGCGTTTGGCAGTTGCATTAACCACTCAATGACTCTGGCTATTCATGAGATTGCCACA
ATGCTGCCTTTGGCAACTGCAAAGCAATGTGGAATCGCTGGTTTGAATGTTGCTAATCTCCTATTGG
GATTCCATATTCAATTTCTTTAAGAGGTATCACATGGATCATCATCGGTACCTTGGAGCTGATGGCGTC
GATGTAGATATTCTACCGATTTTGGGGCTGGTCTTCTGTACCGCTTTCAGAAAGTTTATATGGTTA
TTCTTCAGCCTCTCTTTATGCCTTTGACCTCTGTTTCATCAACCCAAACCAATTACGTATCTGGAAGT
TATCAATACCGTGGCACAGGTCACCTTTTACATTTTAAATTTACTTTTGGGAATTAATCCTTAGTC
TACATGTTGGCAGCATCTTACTTGGCCTGGTGGTGCACCAATTTCTGGACATTTTATAGCTGAGCATT
ACATGTTCTTAAAGGTCATGAACTTACTCATATTATGGGCCTCTGAATTTACTTACCTCAATGTGG
TTATCATAATGAACATCATGATTTCCCCAACATTCCTGGAAAAAGTCTTCCACTGGTGGGAAAAAGCA
GCTGAATACTATGACAACCTCCCTCACTACAATTCCTGGATAAAAAGTACTGTATGATTTTGTGATGGATG
ATACAATAAGTCCCTACTCAAGAATGAAGAGGCCACCAAAAAGGAGAGATGGTGTGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC212803 protein sequence
Red=Cloning site Green=Tags(s)

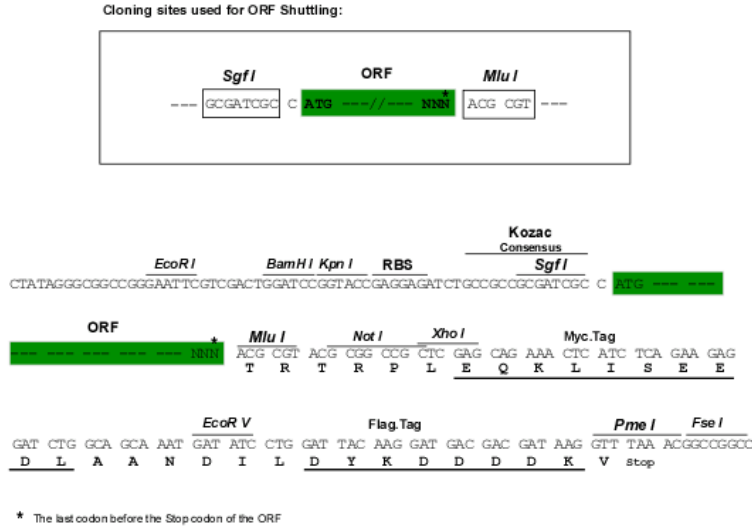
MGSRVSREDFEWVYTDQPHADRRREILAKYPEIKSLMKPDPNLIWIIIMVLTLQGFYIVKDLWKWVI
 FGAYAFGSCINHSMTLAIHEIAHNAAFGNCKAMWNRWFGMFANLPIGIPYSISFKRYHMDHRYLGADGV
 DVDIPTDFEGWFFCTAFRKFIVVILQPLFYAFRPLFINPKPITYLEVINTVAQVTFDILIIYYFLGIKSLV
 YMLAASLLGLGLHPI SGHFIAEHYMF LKGHETYSYYGPLNLLTFNVGYHNEHDFPNIPGKSLPLVRKIA
 AEYYDNLPHYNSWIKVLYDFVMDDTISPYSRMKRHQK GEMVLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6300_f11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003676

ORF Size: 969 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003676.4](#)

RefSeq Size: 2101 bp

RefSeq ORF: 972 bp

Locus ID: 8560

UniProt ID: [O15121](#)

Cytogenetics: 1q42.11

Domains: FA_desaturase

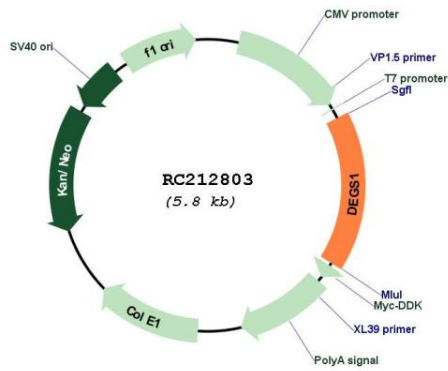
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Metabolic pathways, Sphingolipid metabolism

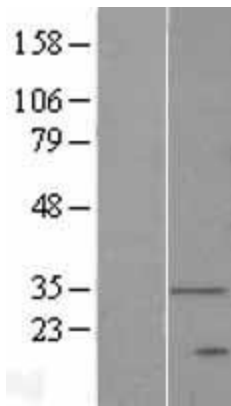
MW: 37.9 kDa

Gene Summary: This gene encodes a member of the membrane fatty acid desaturase family which is responsible for inserting double bonds into specific positions in fatty acids. This protein contains three His-containing consensus motifs that are characteristic of a group of membrane fatty acid desaturases. It is predicted to be a multiple membrane-spanning protein localized to the endoplasmic reticulum. Overexpression of this gene inhibited biosynthesis of the EGF receptor, suggesting a possible role of a fatty acid desaturase in regulating biosynthetic processing of the EGF receptor. [provided by RefSeq, Mar 2010]

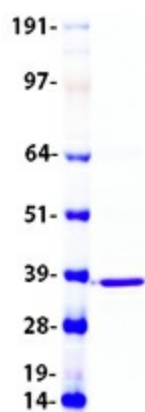
Product images:



Circular map for RC212803



Western blot validation of overexpression lysate (Cat# [LY418506]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212803 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DEGS1 protein (Cat# [TP312803]). The protein was produced from HEK293T cells transfected with DEGS1 cDNA clone (Cat# RC212803) using MegaTran 2.0 (Cat# [TT210002]).