

Product datasheet for **RG209232**

ELOVL2 (NM_017770) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ELOVL2 (NM_017770) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ELOVL2
Synonyms: SSC2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG209232 representing NM_017770
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGAACATCTAAAGGCCTTTGATGATGAAATCAATGCTTTTTGGACAATATGTTGGACCGCGAGATT
CTCGAGTCAGAGGGTGGTTCATGTTGGACTCTTACCTTCTACCTTTTTCTTACTGTATGTATCTGCT
CTCAATATGGCTGGGTAACAAGTATATGAAGAACAGACCTGCTTTCTCTCAGGGGTATCCTCACCTTG
TATAATCTTGAATCACACTTCTATCCGCGTACATGCTGGCAGAGCTCATTCTCCACTTGGGAAGGAG
GCTACAACCTACAGTGTCAAGATCTTACCAGCGCAGGGGAAGCTGACATCCGGGTAGCCAAGGTGCTTTG
GTGGTACTATTTCTCAAATCAGTAGAGTTCCTGGACACAATTTCTTCGTTTTGCGGAAAAAACGAGT
CAGATTACTTTTCTTATGTATATCATCATGCTTCTATGTTAACATCTGGTGGTGTGCTTGAACCTGGA
TACCTTGTGGACAAAGTTTCTTTGGACCAACACTGAACAGTTTTATCCACATTCTTATGTAATCCTACTA
TGGACTTTCTGTGTTCCATCTATGCACAAGTATCTTTGGTGGAAAGAAATATCTCACACAGGCTCAGCTG
GTGCAGTTCGTGCTCGCCATCACGCACACCATGAGCGCCGTCGTGAAACCGTGTGGCTTCCCCTTCGGTT
GTCTCATCTTCCAGTCATCTTATGCTAACGTTAGTCATCTCTTCTTAAATTTTTACGTTTCAGACATA
CCGAAAAAGCCAATGAAGAAAGATATGCAAGAGCCACCTGCAGGAAAGAAGTGAAGAATGTTTTTCC
AAAGCCTACTTCACTGCAGCAAATGGAGTGATGAACAAGAAAGCACAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG209232 representing NM_017770
Red=Cloning site Green=Tags(s)

MEHLKAFDDEINAFLDNMFGRDPSRVRGWFMLDSYLPFFLTVMYLLSIWLGNKYMKNRPALSLRGILTL
 YNLGITLLSAYMLAELILSTWEGGYNLQCQDLTSAGEADIRVAKVLWVYFYSKSVFLDITFFVLRKKT
 QITFLHVVYHSHMFNIWCVLNWIPCGQSFPGPTLNSFIHILMYSYYGLSVFSPMHKYLWKKYL
 TQAQLVQFVLAITHTMSAVVKPCGFPGCLIFQSSYMLTLVILFLNFYVQTYRKKPMKKDMQEP
 PAGKEVKNGFSKAYFTAANGVMNKKAAQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017770

ORF Size: 888 bp

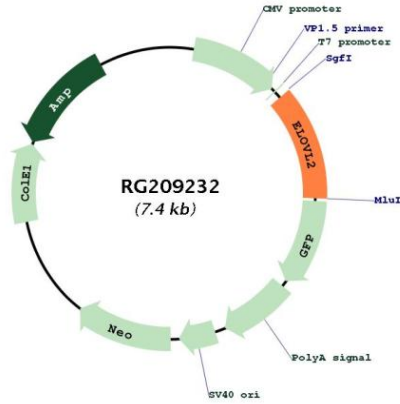
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_017770.2 , NP_060240.2
RefSeq Size:	4038 bp
RefSeq ORF:	891 bp
Locus ID:	54898
UniProt ID:	Q9NXB9
Cytogenetics:	6p24.2
Domains:	ELO
Protein Families:	Transmembrane
Protein Pathways:	Biosynthesis of unsaturated fatty acids
Gene Summary:	Catalyzes the first and rate-limiting reaction of the four reactions that constitute the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process allows the addition of 2 carbons to the chain of long- and very long-chain fatty acids (VLCFAs) per cycle. Condensing enzyme that catalyzes the synthesis of polyunsaturated very long chain fatty acid (C20- and C22-PUFA), acting specifically toward polyunsaturated acyl-CoA with the higher activity toward C20:4(n-6) acyl-CoA. May participate in the production of polyunsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG209232