

Product datasheet for MC209964

Elovl1 (NM_001039175) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Elovl1 (NM_001039175) Mouse Untagged Clone

Tag: Tag Free Symbol: Elovl1

Synonyms: AA407424; BB151133; Ssc1

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC209964 representing NM_001039175

Red=Cloning site Blue=ORF Orange=Stop codon

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCC}$

GCCGCGATCGCC

ATGCGGTTTCTGATGTCTGGTTGGCTGAGTACCTACACCTGGCGCTGTGACCCCATAGACTTTTCCAATA
GCCCTGAAGCACTTCGGATGGTTCGAGTGGCCTGGCTCTTCATGCTTTCCAAGGTCATTGAGCTGATGGA
CACAGTGATATTTATCCTCCGGAAGAAGGACGGCCAAGTGACCTTCCTCCATGTCTTCCACCACTCGGTG
CTTCCCTGGAGTTGGTGGTGGGGGGATAAAAATTGCTCCAGGAGGAATGGGCTCCTTCCATGCCATGATAA
ACTCCTCTGTACATGTCGTCATGTACCTCTACTATGGATTGTCTGCCCTTGGCCCTGTGGCCCAGCCCTA
CCTTTGGTGGAAGAAACATATGACTGCCATTCAGCTGATCCAGTTTTGTCCTGGTCTCACTGCACATCAGC
CAATACTACTTCATGCCCAGCTGCAACTACCAGTACCCCATCATCACCACCTCATCTGGATGTATGGCA
CCATCTTCTTCATACTGTTCTCCAATTTCTGGTATCACTCTTACACCAAGGGGAAGCGGCTGCCCCGTGC
AGTTCAGCAAAATGGAGCTCCAGCTACCACCAAGGTCAAGGCCAACTGA

 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001039175

Insert Size: 609 bp



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OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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: <u>NM 001039175.2</u>, <u>NP 001034264.1</u>

 RefSeq Size:
 1635 bp

 RefSeq ORF:
 609 bp

 Locus ID:
 54325

 UniProt ID:
 Q9|L|5

 Cytogenetics:
 4 D2.1

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 exhibits activity toward saturated and monounsaturated acyl-CoA substrates, with the highest activity towards C22:0 acyl-CoA. May participate in the production of both saturated and monounsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. Important for saturated C24:0 and monounsaturated C24:1 sphingolipid synthesis. Indirectly inhibits RPE65 via production of VLCFAs.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) lacks an alternate exon in the 5' coding region and initiates translation at an alternate start codon, compared to variant 1. It encodes isoform 2, which is

shorter and has a distinct N-terminus, compared to isoform 1.