

## Product datasheet for SC113934

### ELOVL2 (NM\_017770) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ELOVL2 (NM_017770) Human Untagged Clone
Tag:	Tag Free
Symbol:	ELOVL2
Synonyms:	SSC2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC113934 sequence for NM_017770 edited (data generated by NextGen Sequencing)

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ATGGAACATCTAAAGGCCTTTGATGATGAAATCAATGCTTTTTGGACAATATGTTTGG
CCGCGAGATTCTCGAGTCAGAGGGTGGTTCATGTTGACTCTTACCTTCTACCTTTTTT
CTTACTGTCATGTATCTGCTCTCAATATGGCTGGGTAACAAGTATATGAAGAACAGACCT
GCTCTTCTCTCAGGGGTATCCTCACCTTGATAATCTTGAATCACACTTCTCTCCGCG
TACATGCTGGCAGAGCTCATTCTCTCCACTTGGGAAGGAGGCTACAACCTACAGTGTCAA
GATCTTACCAGCGCAGGGGAAGCTGACATCCGGGTAGCCAAGGTGCTTTGGTGGTACTAT
TTCTCAAATCAGTAGAGTTCCTGGACACAATTTCTTCGTTTTGCGGAAAAAACGAGT
CAGATTACTTTTCTTCATGTATATCATCATGCTTCTATGTTAACATCTGGTGGTGTGC
TTGAAGTGGATACCTTGTGGACAAAGTTTCTTTGGACCAACACTGAACAGTTTTATCCAC
ATTCTTATGTACTCCTACTATGGACTTTCTGTGTTCCATCTATGCACAAGTATCTTTGG
TGAAGAAATATCTCACACAGGCTCAGCTGGTGCAGTTCGTGCTCACCATCACGCACACC
ATGAGCGCCGTCGTGAAACCGTGTGGCTTCCCCTTCGGTTGTCTCATCTTCCAGTCATCT
TATATGCTAACGTTAGTCATCCTCTTCTTAAATTTTTACGTTTCAGACATACCGAAAAAG
CCAATGAAGAAAGATATGCAAGAGCCACCTGCAGGGAAAGAGTGAAGAAATGGTTTTTCC
AAAGCCTACTTCACTGCAGCAAATGGAGTGATGAACAAGAAAGCACAATAA

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Clone variation with respect to NM\_017770.3



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_017770 unedited  
 CTATAGGGCGCCGCGATTTCGGCACGAGGGCGCCGAGATAGCGCCGGGCAGAGGGACCCG  
 GCTACCCCTGGACAGCGCATCGCCGCCGCCCGGGTCGCCGCGCCACAGCCGCTGCGGATC  
 ATGGAACATCTAAAGGCCTTTGATGATGAAATCAATGCTTTTTTGGACAATATGTTTGA  
 CCGCGAGATTCTCGAGTCAGAGGGTGGTTCATGTTGGACTCTTACCTTCTACCTTTTTT  
 CTTACTGTATGTATCTGCTCTCAATATGGCTGGGTAACAAGTATATGAAGAACAGACCT  
 GCTCTTTCTCTCAGGGGTATCCTCACCTTGATAATCTTGAATCACACTTCTCTCCGCG  
 TACATGCTGGCAGAGCTATTCTCTCCACTTGGGAAGGAGGCTACAACCTACAGTGTCAA  
 GATCTTACCAGCGCAGGGGAAGCTGACATCCGGGTAGCCAAGGTCTTTGGTGGTACTAT  
 TTCTCAAATCAGTAGAGTTCCTGGACACAATTTCTTCGTTTTGCGGAAAAAACGAGT  
 CAGATTACTTTTTCTCATGTATATCATCATGCTTCTATGTTTAAACATCTGGTGGTGTGC  
 TTGAACTGGATACCTTGTGGACAAAGTTTCTTTGGACCAACACTGAACAGTTTTATCCAC  
 ATTCTTATGTA CTACTATGGACTTTCTGTGTTCCATCTATGCACAAGTATCTTTTG  
 GTGGAAGAAATATCTCACACAGGCTCAGCTGGTGCAGTTCGTGCTCACCATCACGCACAC  
 CATGAAGCGCCGTCGTGAAAACGTGTTGGCTCCCTTTTCGNTGNCTCATCTTCCAGNCA  
 TCTTATATGCTAACGTTAGNCATCCTCTTCTTAAATTTTACGTTCAA

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_017770 unedited  
 TACCGCGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTAAATGTA AAAATCAATT  
 TATTATAACAATCATAGATAATGCTTTTTATCTACAAAGAAAATGGCTTCTGCAGCC  
 TCCCTGTCTACTCCATTCATGATACTATGTTCTTAAGATATAATTACTTTCAAAGGAAAA  
 CAAAGCGATATCCATATTTTCAAACAAGGAAGCCCCCAGACACATTTATGAACGATATG  
 GAAATATTGGAAGAAGCTCAAATGGACTCCTAGATACAAAAGGCTGTTCTGCCCATCACA  
 GTAACACTGTTTTGCCTTAAAATAAAAATAATAAAATATTTCTCAAATGCAGGGGTGAG  
 GACTTTACCCCGTAACATGCCTAAGTGGTTCGATATATAATTTTATGAGCTTGACAAATTG  
 CTATGTTTAAATCCATTCAGTTAACATTCATTTTGTAGTTTAAAAAATGGGGGAATT  
 ATTAATAGATATGCTTTACAGTATTTAAGTATTTTCATCCCATGGGTCAGAGGAAATTT  
 GAGAGAAGACATCTCCATTTTTTTTTAATAGATTATAGAAATATAATTTTTCAATAGTT  
 TTAGAAAAATCACATTAATAAGCATTGTTGTTTGAAGTTACAACACTTAACGACA  
 GGTTAAAAATGTTACCTGATTTATTTTTGGTGCTAAGATTTTATAACTATTTTTTAAT  
 TAGCCCTTGATGTTTAAAGCTANTAGTGTATGAAGCATCTTGNATTGAAGACC  
 AAATTGGNAATACACATCATGAATGAAACCTCTCTAGTCACTGGCATTAGTTGAAGT  
 ATAAGCTACCCACATTTTCACTTTCATCAGAGAGTTNCAAGCTGCCCTGTAAGCTG  
 CTTGACTTNGTCTGCTGAAGGAAGCTCCNTCCTTGATACAGATATGAGCCCCAGNAAAC  
 ATCCNGATGGCCGGTATGCTATGCACTGAGACCTTAGGCCTNACTGGCCGTAAGAATAAC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_017770

**Insert Size:**

4500 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_017770.2</a> , <a href="#">NP_060240.2</a>
<b>RefSeq Size:</b>	4038 bp
<b>RefSeq ORF:</b>	891 bp
<b>Locus ID:</b>	54898
<b>UniProt ID:</b>	<a href="#">Q9NXB9</a>
<b>Cytogenetics:</b>	6p24.2
<b>Domains:</b>	ELO
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Biosynthesis of unsaturated fatty acids
<b>Gene Summary:</b>	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]