

## Product datasheet for **RG237051**

### **ELOVL7 (NM\_001297617) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ELOVL7 (NM_001297617) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ELOVL7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237051 representing NM_001297617. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAAAAGCCATTAATATTCTATATCCAAGAGTTGAAGATTGGCTCCTCATGTCCTCGCCTCTGCCA
CAAACCATCCTCCTAGGATTCTATGTCTATTTTGTCACTTCCTGGGACCAAAGCTCATGGAAAATCGC
AAGCCCTTTGAACTCAAGAAAGCAATGATAACGTACAATTTTTCATAGTACTCTTTTCTGTGTATAG
TGTTATGAGTTTGTGATGTCTGGCTGGGTATAGGTTATTCATTCGATGTGACATTGTTGACTATTCA
CGGTCACCCACAGCTTTGAGGATGGCAGTACCTGCTGGCTTTATTACTTCTCCAAATTTATTGAGCTA
TTAGATACGATCTTTTTTGTCTGCGCAAGAAAAATGCCAAGTGACTTTCCTTCATGTATTCCATCAT
ACCATCATGCCGTGGACCTGGTGGTTTGGAGTCAAATTTGCTGCAGGTGGTTTGGGAACATTCCATGCC
CTTCTAAATACAGCTGTACATGTAGTCATGTATTCTACTATGGACTTTCTGCATTGGGGCCAGCCTAC
CAGAAGTATTTGGTGGAAAAATATTTGACATCATTACAGCTTGCCAGTTTGTATTGTCGCCATC
CACATAAGCCAGTTCTTTTTCATGGAGGATTGCAAGTATCAGTTTCCAGTCTTTGCGTGCATCATTATG
AGTTACAGTTTCATGTTTCTGCTCTTTCTCCATTTTGGTACCGTGCTTACACCAAAGGTCAGAGG
TTGCCCAAACGTGAAAAATGGAAGTTCGAAAAACAAAGATAAT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



[View online »](#)

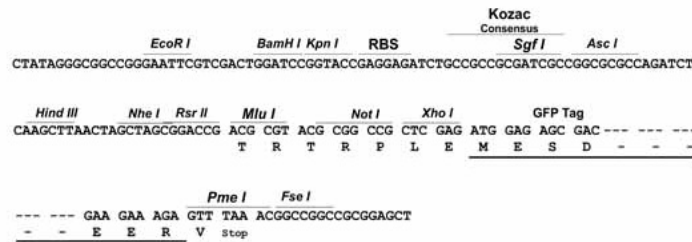
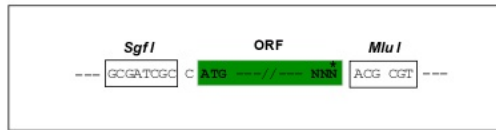
**Protein Sequence:** >Peptide sequence encoded by RG237051  
 Blue=ORF Red=Cloning site Green=Tag(s)

MEKPINILYPRVEDWLLMSSPLPQTILLGFYVYFVTSLGPKLMENRKPFEKAMITYNFFIVLFSVYM  
 CYEFVMSGWIGYSFRCDIVDYSRPTALRMARTCWLYYFSKFIELLDTIFFVLRKKNSQVTLHFVHH  
 TAMPWTWWFGVKFAAGGLGTFHALLNTAVHVMYSYYGLSALGPAYQKYLWKKYLTSLQLVQFVIVAI  
 HISQFFMEDCKYQFPVACIIMSYSFMFLLLFLHFWRAYTKGQRLPKTVKNGTCKNKDN  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_001297617

**ORF Size:** 804 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).

**RefSeq:** [NM\\_001297617.2](#)

**RefSeq Size:** 4249 bp

**RefSeq ORF:** 807 bp

Locus ID: 79993

UniProt ID: [A1L3X0](#)

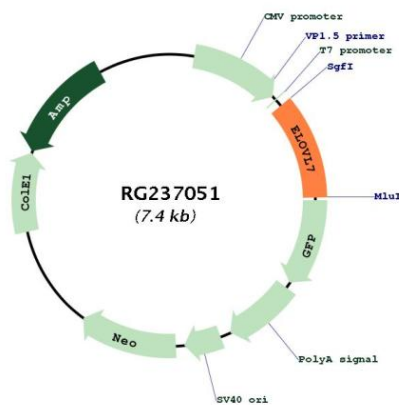
Cytogenetics: 5q12.1

Protein Families: Transmembrane

MW: 32.3 kDa

**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 with higher activity toward C18 acyl-CoAs, especially C18:3(n-3) acyl-CoAs and C18:3(n-6)-CoAs. Also active toward C20:4-, C18:0-, C18:1-, C18:2- and C16:0-CoAs, and weakly toward C20:0-CoA. Little or no activity toward C22:0-, C24:0-, or C26:0-CoAs. May participate in the production of saturated and 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 RG237051