

## Product datasheet for **RC225384**

### **ELOVL7 (NM\_001104558) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ELOVL7 (NM_001104558) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ELOVL7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225384 representing NM_001104558 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTTCAGTGATCTTACATCGAGGACTGTGCATCTTTATGATAATTGGATCAAAGATGCTGATCCAA  
GAGTTGAAGATTGGCTCCTCATGTCTCGCCTCTGCCACAACCATCCTCCTAGGATTCTATGTCTATTT  
TGTCACCTTCTGGGACCAAAGCTCATGGAAAAATCGCAAGCCCTTGAAGTCAAGAAAGCAATGATAACG  
TACAATTTTTTCATAGTACTCTTTCTGTGTATATGTGTTATGAGTTTGTGATGTCTGGCTGGGTATAG  
GTTATTCATTTTCGATGTGACATTGTTGACTATTCACGGTCACCCACAGCTTTGAGGATGGCACGTACCTG  
CTGGCTTTATTACTTCTCCAAATTTATTGAGCTATTAGATACGATCTTTTTTGTCTGCGCAAGAAAAAT  
AGCCAAGTGACTTTCCTTCATGTATTCCATCATACCATCATGCCGTGGACCTGGTGGTTTGGAGTCAAAT  
TTGCTGCAGGTGGTTTGGGAACATTCCATGCCCTTCTAAATACAGCTGTACATGTAGTCATGTATTCCCTA  
CTATGGACTTTCTGCATTGGGGCCAGCCTACCAGAAGTATTTGGTGGAAAAAATTTTACATCATT  
CAGCTTGCCAGTTTGTATTGTCGCCATCCACATAAGCCAGTCTTTTTCATGGAGGATTGCAAGTATC  
AGTTTCCAGTCTTTCGTCGATCATTATGAGTTACAGTTTCATGTTTCTGCTGCTCTTTCTCCATTTTTG  
GTACCGTGCTTACACCAAAGGTCAGAGGTTGCCAAAACGTGAAAAATGAACTTGCAAAAACAAAGAT  
AAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC225384 representing NM\_001104558  
Red=Cloning site Green=Tags(s)

MAFSDLTSRTVHLYDNWIKDADPRVEDWLLMSSPLPQTILLGFYVYFVTS LGPKLMENRKPFE LKKAMIT  
 YNFFIVLFSVYMCYEFVMSGWGIGYSFRCDIVDYSRSPALRMARTCWLYYFSKFIELLDTIFFVLRKKN  
 SQVTFLHVFHHTIMPWTWWFGVKFAAGGLGTFHALLNTAVHVVMSYYGLSALGPAYQKYLWKKYLTSL  
 QLVQFVIVAIHISQFFMEDCKYQFPVACIIMSYSFMFLLLFLHFWRAYTKGQRLPKTVKNGTCKNKD  
 N

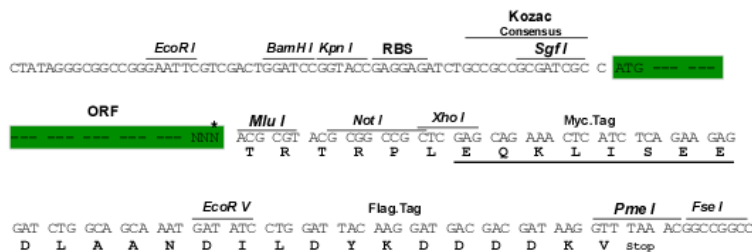
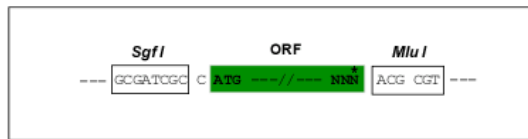
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2819\\_g09.zip](https://cdn.origene.com/chromatograms/mg2819_g09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001104558

**ORF Size:** 843 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.

**RefSeq:** [NM\\_001104558.1](#), [NP\\_001098028.1](#)

**RefSeq ORF:** 846 bp

**Locus ID:** 79993

**UniProt ID:** [A1L3X0](#)

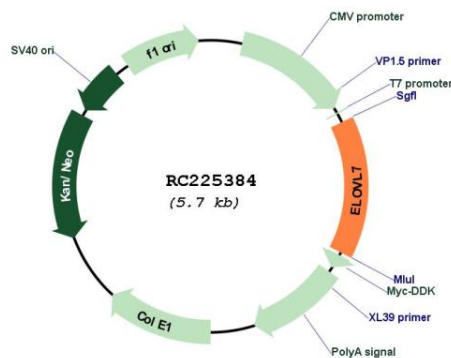
**Cytogenetics:** 5q12.1

**Protein Families:** Transmembrane

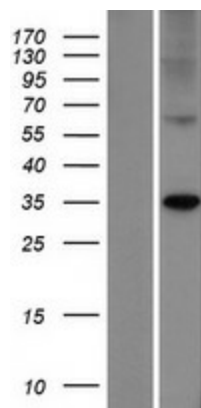
**MW:** 33.2 kDa

**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 RC225384



Western blot validation of overexpression lysate (Cat# [LY426203]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225384 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).