

## Product datasheet for **RN206070**

### Elov12 (NM\_001109118) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Elov12 (NM\_001109118) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Elov12  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >RN206070 representing NM\_001109118  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTTGGACCACGGGATTCTCGAGTTCGAGGGTGGTTCCTGCTGGACTTTACCTCCCCACCTTCACCC  
TCACCATCGTGTATCTGCTCTCAATATGGCTGGGTAACAAGTACATGAAGAACAGGCCTGCTCTTTCTCT  
CAGGGGAATCCTCACCTTGATAACCTCGGAATCACACTTCTTTCTGCATATATGCTGGTGGAGCTCGTT  
CTCTCCAGCTGGGAAGGAGGCTACAACCTGCAGTGTGAGAATCTGGACAGCGCAGGAGAAGGCGATATCC  
GGGTAGCCAAGGCTTTGGTGGTACTACTTCTCAAACCTGGTGGAGTTCTGGACAGCATCTTCTTTGT  
TCTTCGAAAAAGACCAGTCAGATCACCTTCCTTCATGTCTATCACCATGCGTCCATGTTTAAACATCTGG  
TGGTGTGTTTTGAACTGGATACCTTGTGGTCAAAGCTTCTTCGGACCAACCCTGAACAGCTTTATCCACA  
TCCTCATGTACTCCTACTACGGGCTGTCTGTGTTCCCGTCCATGCACAGGTACCTTTGGTGAAGAAATA  
CCTCACGCAGGCCAGCTGGTACAGTTTGTACTGACCATCACGCACAGCTGAGTGCCGTGGTGAAGCCC  
TGTGGCTTCCCCTTTGGCTGTCTCATCTCCAGTCTTCTACATGATGACACTGGTTATCCTGTTCTTAA  
ACTTCTATATTAGACATACCGAAAAAGCCAATGAAGAAGGAGATGCCAGAAGGAGCCGCAGGGAAGA  
AGTGAAGAAATGGTTTCCCAAAGCCCACTCCATCGCAGCTAATGGCGTGACGGACAAGAAGTGCAATGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2702\\_d08.zip](https://cdn.origene.com/chromatograms/ja2702_d08.zip)  
**Restriction Sites:** Sgfl-MluI  
**ACCN:** NM\_001109118  
**Insert Size:** 840 bp



<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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_001109118.1</a> , <a href="#">NP_001102588.1</a>
<b>RefSeq Size:</b>	3731 bp
<b>RefSeq ORF:</b>	840 bp
<b>Locus ID:</b>	498728
<b>UniProt ID:</b>	<a href="#">D4A612</a>
<b>Cytogenetics:</b>	17p14
<b>Gene Summary:</b>	<p>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]</p>