

Product datasheet for **MG204005**

Elov12 (NM_019423) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Elov12 (NM_019423) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Elov12
Synonyms: AI317360; Ssc2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG204005 representing NM_019423
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGAGCAGCTGAAGGCCTTTGATAATGAAGTCAATGCTTTCTTGGACAACATGTTTGGACCACGAGATT
 CTCGAGTTCGCGGGTGGTTCCTGCTGGACTTTACCTTCCCACCTTCATCCTCACCATCACGTACCTGCT
 CTCGATATGGCTGGTAACAAGTACATGAAGAACAGGCCTGCTGTCTCTCAGGGGCATCCTCACCTTG
 TATAACCTCGCAATCACACTTCTTCTGCGTATATGCTGGTGGAGCTCATCCTCTCCAGCTGGGAAGGAG
 GTTACAACCTGCAGTGCAGAATCTCGACAGTGCAGGAGAAGGTGATGTCGGGTAGCCAAGGTCTTGTG
 GTGGTACTACTTCTCAAACCTAGTGGAGTTCCTGGACACGATTTCTTTGTTCTACGAAAAAAGACCAAT
 CAGATCACCTTCTTTCATGTCTATCACACGCGTCCATGTTCAACATCTGGTGGTGTGTTTTGAACCTGGA
 TACCTTGTGGTCAAAGCTTCTTTGGACCCACCCTGAACAGCTTTATCCACATTCTCATGTAATCCTACTA
 CGGCCTGTCTGTGTTCCCGTCCATGCACAAGTACCTTTGGTGGAAAGAAGTACCTCACACAGGCTCAGCTG
 GTGCAGTTCGTAATCACCATCACGCACACGCTGAGTCCGTGGTGAAGCCCTGTGGCTTCCCCTTTGGCT
 GTCTCATCTTCCAGTCTTCTATATGATGACGCTGGTCACTCTTCTTAACTTCTATATTCAGACATA
 CCGGAAAAAGCCAGTGAAGAAAGAGCTGCAAGAGAAAAGAAGTGAAGAATGGTTTCCCAAGCCCACTTA
 ATTGTGGCTAATGGCATGACGGACAAGAAGGCTCAA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

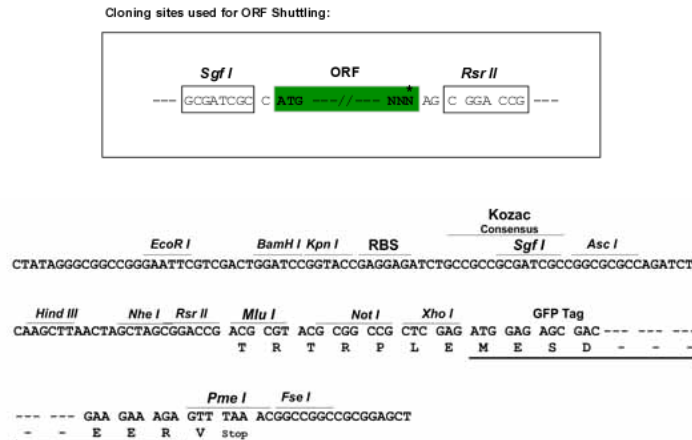
Protein Sequence: >MG204005 representing NM_019423
 Red=Cloning site Green=Tags(s)

MEQLKAFDNEVNAFLDNMFGPRDSRVRGWFLLDLSYLPTFILTITYLLSIWLGNKYMKNRPALSLRGILTL
 YNLAITLLSAYMLVELILSSWEGGYNLQCQNLD SAGEGDVRAKVLWVYF SKLVEFLDTIFFVLRKKTN
 QITFLVYHHASMFNIWCVLNIWIPCGQSF FGP TLNSF IHILMYSYYGLSVFSPMHKYLWKKYL TQAQL
 VQFVLTITHTLSAVVKPCGFPFGCLIFQSSYMMTLVILFLNFYIQTYRKKPVKKELQEKEVKNGFPKAHL
 IVANGMTDKKAQ

SGP TRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_019423

ORF Size: 876 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_019423.2](#), [NP_062296.1](#)

RefSeq Size: 3708 bp

RefSeq ORF: 879 bp

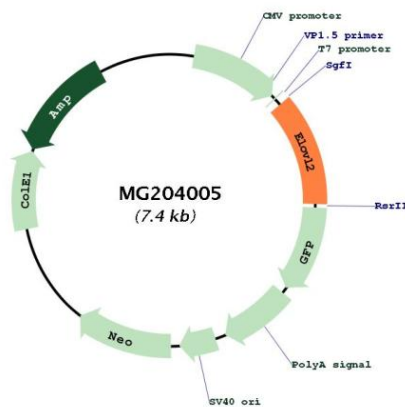
Locus ID: 54326

UniProt ID: [Q9JLJ4](#)

Cytogenetics: 13 A3.3

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 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. Essential for the formation of C24:5(n-6) up to C30:5(n-6) PUFAs in testis, these fatty acids being indispensable for normal spermatogenesis and fertility.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG204005