OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG204173

Elovl5 (NM_134255) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Elovl5 (NM_134255) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Elovl5
Synonyms:	1110059L23Rik; AI747313; AU043003; HELO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG204173 representing NM_134255
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAACATTTCGATGCGTCACTCAGTACCTATTTCAAGGCCTTCCTGGGCCCCCGAGATACAAGAGTCA
AAGGATGGTTCCTCCTGGACAATTACATCCCTACGTTTGTCTGTTCTGTTATTTACTTACTCATTGTATG
GCTGGGACCAAAATACATGAAGAACCGGCAGCCGTTCTCTTGCCGAGGCATCCTGCAGTTGTATAACCTT
GGACTCACCCTGCTGTCTCTCTACATGTTCTATGAGTTGGTGACAGGTGTGTGGGAAGGCAAATACAACT
TTTTCTGCCAGGGAACACGCAGCGCGGGAGAATCCGATATGAAGATCATCCGCGTCCTCTGGTGGTACTA
CTTCTCCAAACTCATCGAATTCATGGACACCTTTTTCTTCATCCTTCGCAAGAACAACCACCAGATCACC
GTGCTCCATGTCTACCACCACGCTACCATGCTCAACATCTGGTGGTTTGTGATGAACTGGGTTCCCTGCG
GCCATTCATATTTTGGTGCGACACTCAACAGCTTCATCCATGTCCTCATGTACTCGTACTATGGTCTGTC
CTCCATCCCGTCCATGCGTCCCTACCTCTGGTGGAAAAAGTACATCACTCAAGGGCAGCTGGTCCAGTTT
GTGCTGACAATCATCCAGACGACCTGCGGGGTCTTCTGGCCATGCTCCTTCCCTCTCGGGTGGCTGTTCT
TCCAGATTGGATACATGATTTCCCTGATTGCTCTCTTCACAAACTTCTACATTCAGACTTACAACAAGAA
AGGGGCCTCTCGGAGGAAAGAACACCTGAAGGGCCACCAGAACGGGTCTGTGGCCGCCGTCAACGGACAC
ACCAACAGCTTCCCTTCCCTGGAAAACAGCGTGAAGCCCAGGAAGCAGCGAAAGGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

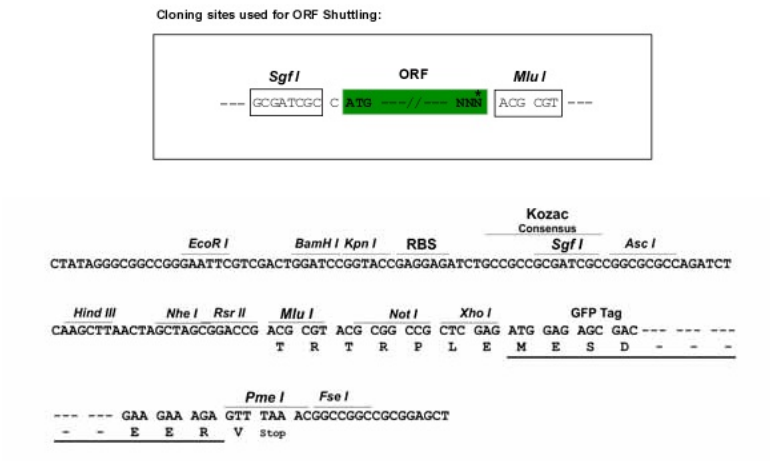
>MG204173 representing NM_134255
Red=Cloning site Green=Tags(s)

MEHFDASLSTYFKAFLGPRDTRVKGWFLLDNYIPTFVCSVIYLLIVWLGPKYMKNRQPFSCRGILQLYNL
GLTLLSLYMFYELVTGVWEGKYNFFCQGTRSAGESDMKIIRVLWWYYFSKLIEFMDTFFFILRKNNHQIT
VLHVYHHATMLNIWWFVMNWVPCGHSYFGATLNSFIHVLMYSYYGLSSIPSMRPYLWWKKYITQGQLVQF
VLTIIQTTCGVFWPCSFPLGWLFFQIGYMISLIALFTNFYIQTYNKKGASRRKEHLKGHQNGSVAAVNGH
TNSFPSLENSVKPRKQRKD

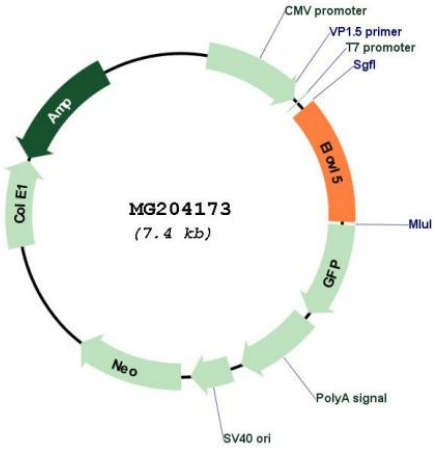
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_134255

ORF Size: 897 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_134255.1

RefSeq Size: 2773 bp

RefSeq ORF: 900 bp

Locus ID: 68801

UniProt ID: Q8BHI7

Cytogenetics: 9 E1

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 acts specifically toward polyunsaturated acyl-CoA with the higher activity toward C18:3(n-6) acyl-CoA. May participate in the production of monounsaturated and of polyunsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators (By similarity). In conditions where the essential linoleic and alpha linoleic fatty acids are lacking it is also involved in the synthesis of Mead acid from oleic acid (PubMed:24184513). [UniProtKB/Swiss-Prot Function]