

Product datasheet for **RG232087**

ELOVL1 (NM_001256402) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ELOVL1 (NM_001256402) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ELOVL1
Synonyms: CGI-88; IKSHD; Ssc1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG232087 representing NM_001256402
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGGGCTGGCTGAGCACCTATACCTGGCGCTGTGACCCTGTGGACTATTCCAACAGCCCTGAGGCAC
TTAGGATGGTTCGGGTGGCCTGGCTCTTCTCTTCCAAGTTCATTGAGCTGATGGACACAGTGATCTT
TATTCTCCGAAAGAAAGACGGGCAGGTGACCTTCTACATGTCTCCATCACTCTGTGCTCCCTGGAGC
TGGTGGTGGGGGTAAGATTGCCCGGGAGGAATGGGCTCTTCCATGCCATGATAAACTTCCGTGC
ATGTCATAATGTACCTGTACTACGGATTATCTGCCTTTGGCCCTGTGGCACAACCCTACCTTTGGTGGAA
AAAGCACATGACAGCCATTCAGCTGATCCAGTTTGTCTGGTCTCACTGCACATCTCCAGTACTACTTT
ATGTCCAGCTGTAACACCAGTACCCAGTCATTATTACCTCATCTGGATGTATGGCACCATCTTCTTCA
TGCTGTTCTCCAATTCTGGTATCACTCTTATACCAAGGGCAAGCGGCTGCCCGTGCATTCAGCAAAA
TGGAGCTCCAGGTATTGCCAAGGTCAAGGCCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG232087 representing NM_001256402
Red=Cloning site Green=Tags(s)

MSGWLSTYTWRCDPVDYSNSPEALRMVRVAWLFLFSKFIELMDTVIFILRKKDGQVTFLLHVFHHSVLPWS
WWWGVKIAPGGMGSFHAMINSSVHVIMYLYYGLSAFGPVAQPYLWKKHMTAIQLIQFVLSLHISQYFF
MSSCNYQYPVIIHLIWMYGTIFFMLFSNFWYHSYTKGKRLPRALQQNGAPGIAKVKAN

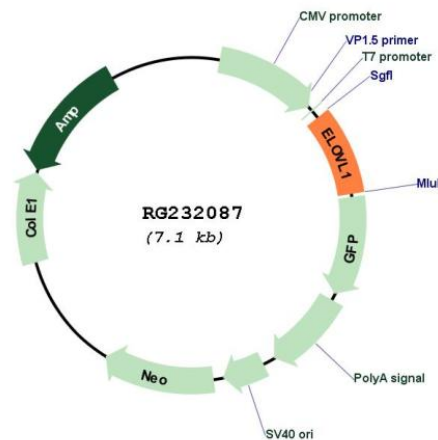
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001256402

ORF Size: 594 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_001256402.2](#)

RefSeq Size: 1347 bp

RefSeq ORF: 597 bp

Locus ID: 64834

UniProt ID: [Q9BW60](#)

Cytogenetics: 1p34.2

Protein Families: Transmembrane

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 exhibits activity toward saturated and monounsaturated acyl-CoA substrates, with the highest activity towards C22:0 acyl-CoA. May participate in the production of both saturated and monounsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. Important for saturated C24:0 and monounsaturated C24:1 sphingolipid synthesis. Indirectly inhibits RPE65 via production of VLCFAs.[UniProtKB/Swiss-Prot Function]