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Product datasheet for RG232289

ELOVL1 (NM_001256401) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ELOVL1 (NM_001256401) 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:

>RG232289 representing NM_001256401
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGGCTGTTGTGAACTTGTACCAAGAGGTGATGAAGCACGCAGATCCCCGGATCCAGGGCTACCCTC
TGATGGGGTCCCCCTTGCTAATGACCTCCATTCTCCTGACCTACGTGTACTTCGTTCTCTCACTTGGGCC
TCGCATCATGGCTAATCGGAAGCCCTTCCAGCTCCGTGGCTTCATGATTGTCTACAACTTCTCACTGGTG
GCACTCTCCCTCTACATTGTCTATGAGATGGTTCGGGTGGCCTGGCTCTTCCTCTTCTCCAAGTTCATTG
AGCTGATGGACACAGTGATCTTTATTCTCCGAAAGAAAGACGGGCAGGTGACCTTCCTACATGTCTTCCA
TCACTCTGTGCTTCCCTGGAGCTGGTGGTGGGGGGTAAAGATTGCCCCGGGAGGAATGGGCTCTTTCCAT
GCCATGATAAACTCTTCCGTGCATGTCATAATGTACCTGTACTACGGATTATCTGCCTTTGGCCCTGTGG
CACAACCCTACCTTTGGTGGAAAAAGCACATGACAGCCATTCAGCTGATCCAGTTTGTCCTGGTCTCACT
GCACATCTCCCAGTACTACTTTATGTCCAGCTGTAACTACCAGTACCCAGTCATTATTCACCTCATCTGG
ATGTATGGCACCATCTTCTTCATGCTGTTCTCCAACTTCTGGTATCACTCTTATACCAAGGGCAAGCGGC
TGCCCCGTGCACTTCAGCAAAATGGAGCTCCAGGTATTGCCAAGGTCAAGGCCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

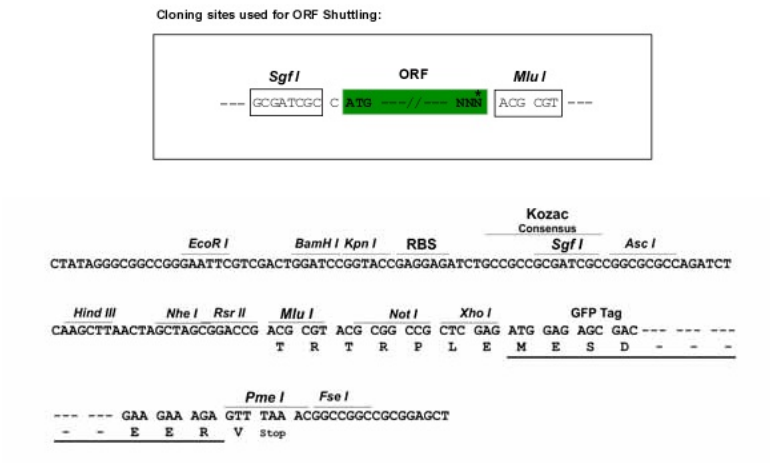
>RG232289 representing NM_001256401
Red=Cloning site Green=Tags(s)

MEAVVNLYQEVMKHADPRIQGYPLMGSPLLMTSILLTYVYFVLSLGPRIMANRKPFQLRGFMIVYNFSLV
ALSLYIVYEMVRVAWLFLFSKFIELMDTVIFILRKKDGQVTFLHVFHHSVLPWSWWWGVKIAPGGMGSFH
AMINSSVHVIMYLYYGLSAFGPVAQPYLWWKKHMTAIQLIQFVLVSLHISQYYFMSSCNYQYPVIIHLIW
MYGTIFFMLFSNFWYHSYTKGKRLPRALQQNGAPGIAKVKAN

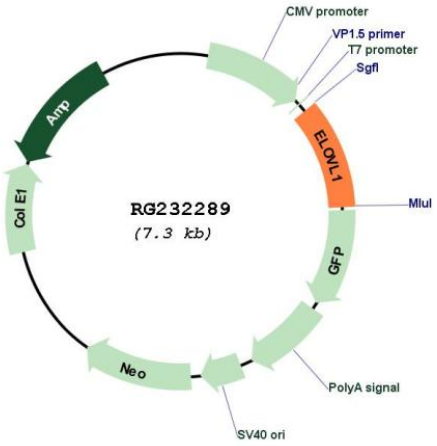
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001256401

ORF Size: 756 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_001256401.1, NP_001243330.1
RefSeq Size:	1457 bp
RefSeq ORF:	759 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]