

Product datasheet for RC200027

ELOVL1 (NM_022821) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ELOVL1 (NM_022821) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ELOVL1
Synonyms:	CGI-88; IKSHD; Ssc1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200027 representing NM_022821 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGCTGTTGTGAACCTGTACCAAGAGGTGATGAAGCACGCAGATCCCCGGATCCAGGGCTACCCTC
TGATGGGGTCCCCCTTGCTAATGACCTCCATTCTCCTGACCTACGTGACTTCGTTCTCTCACTTGGGCC
TCGCATCATGGCTAATCGGAAGCCCTCCAGCTCCGTGGCTTCATGATTGTCTACAACCTCTCACTGGTG
GCACTCTCCCTCTACATTGTCTATGAGTTCCTGATGTCGGGCTGGCTGAGCACCTATACCTGGCGCTGTG
ACCCTGTGGACTATTCCAACAGCCCTGAGGCATTAGGATGGTTCGGGTGGCCTGGCTCTTCTCTTCTC
CAAGTTCATTGAGCTGATGGACACAGTGATCTTTATTCTCCGAAAGAAAGACGGGCAGGTGACCTTCCTA
CATGTCTTCCATCACTCTGTGCTTCCCTGGAGCTGGTGGTGGGGGTAAGATTGCCCGGGAGGAATGG
GCTCTTCCATGCCATGATAAACTTCCCGTGATGTCATAATGTACCTGTACTACGGATTATCTGCCTT
TGGCCCTGTGGCACAACCCTACCTTTGGTGGAAAAAGCACATGACAGCCATTGAGCTGATCCAGTTTGTG
CTGGTCTCACTGCACATCTCCAGTACTACTTTATGTCCAGCTGTAACCTACCAGTACCCAGTCATTATTC
ACCTCATCTGGATGATGGACCATCTTCTTATGCTGTTCTCCAACCTCTGGTATCACTTTATACCAA
GGCAAGCGGCTGCCCGTGCACTTCAGCAAAATGGAGCTCCAGGTATTGCCAAGGTCAAGGCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200027 representing NM_022821
Red=Cloning site Green=Tags(s)

MEAVVNLYQEVMKHADPRIQGYPLMGSPLLMSTILLSITYVYFVLSLGRIMANRKPFLRGFMIVYNFSLV
 ALSLYIVYEFMSGWLSYTWRCDPVDYSNSPEALRMVRVAWLFLFSKFIELMDTVIFILRKKDGGQVTF
 HVFHHSVLPWSWWWGVKIAPGGMGSFHAMINSSVHVIMYLYYGLSAFGPVAQPYLWWKHMATAIQLIQFV
 LVSLHISQYYFMSSCNYPVVIHLIWMYGTIFFMLFSNFWYHSYTKGKRLPRALQQNGAPGIKVKAN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3921_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_022821

ORF Size: 837 bp

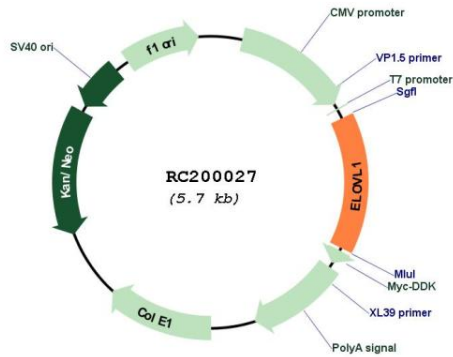
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

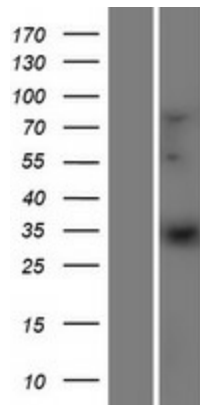
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_022821.4
RefSeq Size:	1501 bp
RefSeq ORF:	840 bp
Locus ID:	64834
UniProt ID:	Q9BW60
Cytogenetics:	1p34.2
Domains:	ELO
Protein Families:	Transmembrane
MW:	32.5 kDa
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]

Product images:



Circular map for RC200027



Western blot validation of overexpression lysate (Cat# [LY411528]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200027 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).