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Product datasheet for MR204005

Elovl2 (NM_019423) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Elovl2 (NM_019423) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Elovl2
Synonyms:	AI317360; Ssc2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR204005 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCAGCTGAAGGCCTTTGATAATGAAGTCAATGCTTTCTTGGACAACATGTTTGGACCACGAGATT
CTCGAGTTCGCGGGTGGTTCCTGCTGGACTCTTACCTTCCCACCTTCATCCTCACCATCACGTACCTGCT
CTCGATATGGCTGGGTAACAAGTACATGAAGAACAGGCCTGCTCTGTCTCTCAGGGGCATCCTCACCTTG
TATAACCTCGCAATCACACTTCTTTCTGCGTATATGCTGGTGGAGCTCATCCTCTCCAGCTGGGAAGGAG
GTTACAACTTGCAGTGTCAGAATCTCGACAGTGCAGGAGAAGGTGATGTCCGGGTAGCCAAGGTCTTGTG
GTGGTACTACTTCTCCAAACTAGTGGAGTTCCTGGACACGATTTTCTTTGTTCTACGAAAAAAGACCAAT
CAGATCACCTTCCTTCATGTCTATCACCACGCGTCCATGTTCAACATCTGGTGGTGTGTTTTGAACTGGA
TACCTTGTGGTCAAAGCTTCTTTGGACCCACCCTGAACAGCTTTATCCACATTCTCATGTACTCCTACTA
CGGCCTGTCTGTGTTCCCGTCCATGCACAAGTACCTTTGGTGGAAGAAGTACCTCACACAGGCTCAGCTG
GTGCAGTTCGTACTCACCATCACGCACACGCTGAGTGCCGTGGTGAAGCCCTGTGGCTTCCCCTTTGGCT
GTCTCATCTTCCAGTCTTCCTATATGATGACGCTGGTCATCCTGTTCTTAAACTTCTATATTCAGACATA
CCGGAAAAAGCCAGTGAAGAAAGAGCTGCAAGAGAAAGAAGTGAAGAATGGTTTCCCCAAAGCCCACTTA
ATTGTGGCTAATGGCATGACGGACAAGAAGGCTCAA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

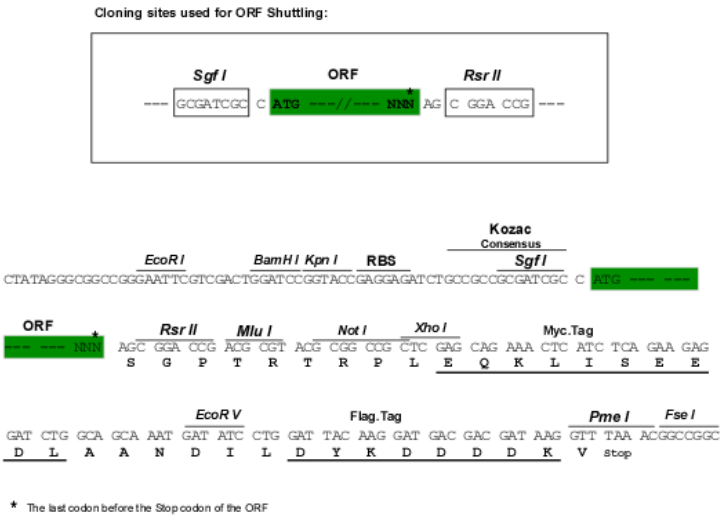
>MR204005 protein sequence
Red=Cloning site Green=Tags(s)

MEQLKAFDNEVNAFLDNMFGPRDSRVRGWFLLDSYLPTFILTITYLLSIWLGNKYMKNRPALSLRGILTL
YNLAITLLSAYMLVELILSSWEGGYNLQCQNLDSAGEGDVRVAKVLWWYYFSKLVEFLDTIFFVLRKKTN
QITFLHVYHHASMFNIWWCVLNWIPCGQSFFGPTLNSFIHILMYSYYGLSVFPSMHKYLWWKKYLTQAQL
VQFVLTITHTLSAVVKPCGFPFGCLIFQSSYMMTLVILFLNFYIQTYRKKPVKKELQEKEVKNGFPKAHL
IVANGMTDKKAQ

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_019423

ORF Size: 879 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: 3837 bp

RefSeq ORF: 879 bp

Locus ID: 54326

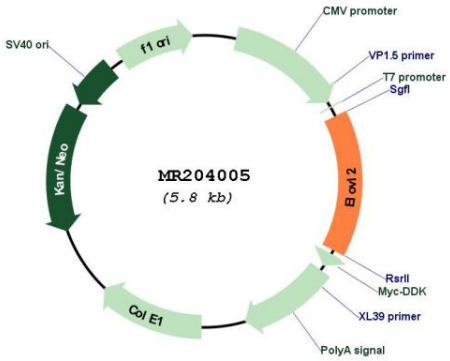
UniProt ID: Q9JLJ4

Cytogenetics: 13 A3.3

MW: 34.2 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 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 MR204005