

Product datasheet for **MG203622**

Elov3 (BC016468) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Elov3 (BC016468) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Elov3
Synonyms:	Cig30; CIN-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG203622 representing BC016468 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACACATCCATGAATTTCTCACGGGGTAAAAATGGACCTGATGCAACCCTATGACTTCGAGACGT
TTCAGGACTTAAGGCCCTTTTGGAGGAGTACTGGTAAGCTCATTTTCATAGTGGTCGTCTATCTGTT
GCTCATCGTTGTTGGCCAGACCTACATGAGAACCGGAAGAGCTTCAGCTTCAGAGGCCCTCTATCCTC
TGGTCCTTCTTCTGGCAATATTCAGTATCCTGGTACTCTGAGGATGTGGAAGTTTATGGCAACAGTGA
TGTTTACAGTGGCCTCAAGCAAACCGTGTGCTTTGCCATCTACACGGATGACCCGTAGTCAGATTCTG
GTCCTTTCTTTCTTCTCAGCAAGGTTGTTGAACTGGGAGACACGGCCTTCATCATCCTGCGTAAGCGT
CCACTCATCTTTGTCCACTGGTACCACCACAGCACAGTGCTACTGTTCAAGCTTTGGATAACAAGAACA
AAGTGCCTTCGGGTGGCTGGTTCATGACCATGAACTTTGGCGTCCATTCTGTCATGTACACTTACTACAC
TATGAAGGCTGCCAACTGAAGCATCCTAATCTTCTCCCATGGTCATCACCAGCCTGCAGATTCTGCAG
ATGTTCTGGGCACCATCTTTGGCATACTGAATTACATCTGGAGGCAGGAAAGGATGCCACACAACAA
CGGAACACTTCTTCTGGTCTTTATGCTATATGGGACCTATTTTCATCCTATTGCTCACTTCTTCCACCG
AGCCTACCTCAGGCCAAAGGGCAAAGTTGCATCCAAGAGCCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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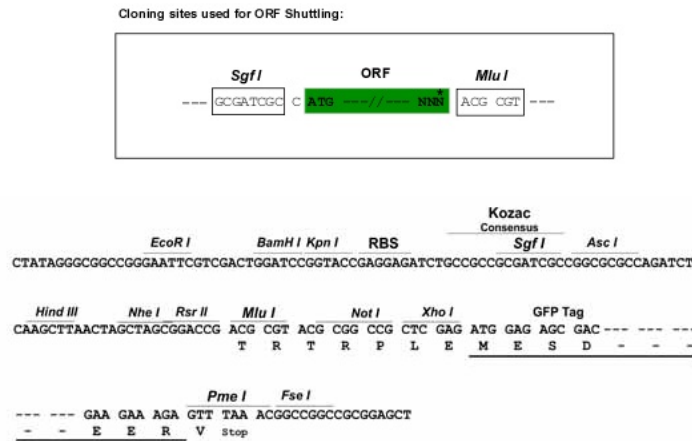
Protein Sequence: >MG203622 representing BC016468
 Red=Cloning site Green=Tags(s)

MDTSMNFSRGLKMDLMQPYDFETFQDLRPFLEEYVSSFLIVVVYLLLIIVGQTYMRTRKSFSLQRPLIL
 WSFFLAIFSILGTLRMWKFMATVMFTVGLKQTVCFAIYTDVAVRFWSFLFLLSKVVELGDTAFIILRKR
 PLIFVHWYHHSTVLLFTSFGYKNKVPSSGGWFMTMNFVHSMYTYTMKAAKLLKHPNLLPMVITSLQILQ
 MVLGTIFGILNYIWRQEKGCHTTTEHFFWSFMLYGYFILFAHFFHRAYLRPKGKVASKSQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC016468

ORF Size: 815 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: [BC016468](#), [AAH16468](#)

RefSeq Size: 1502 bp

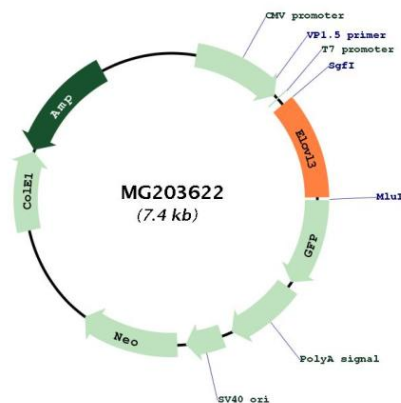
RefSeq ORF: 815 bp

Locus ID: 12686

Cytogenetics: 19 38.75 cM

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 unsaturated acyl-CoA substrates with higher activity toward C18 acyl-CoAs, especially C18:0 acyl-CoAs. May participate in the production of saturated and monounsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. Participates in the formation of certain VLCFA and triglycerides in certain cells of the hair follicles and the sebaceous glands, required for skin barrier function. Critical enzyme for lipid accumulation and metabolic activity in brown adipocytes during the early phase of the tissue recruitment. Plays a role in lipid storage and in resistance to diet-induced obesity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG203622