

Product datasheet for **MG210380**

Letm1 (NM_019694) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Letm1 (NM_019694) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Letm1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210380 representing NM_019694
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGGATCGCC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210380 representing NM_019694
 Red=Cloning site Green=Tags(s)

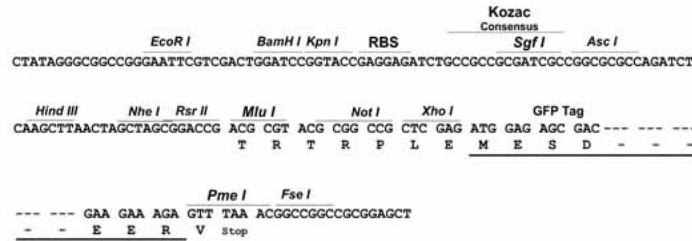
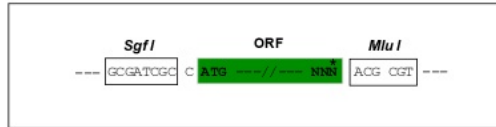
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TRTRPLE - GFP Tag - V

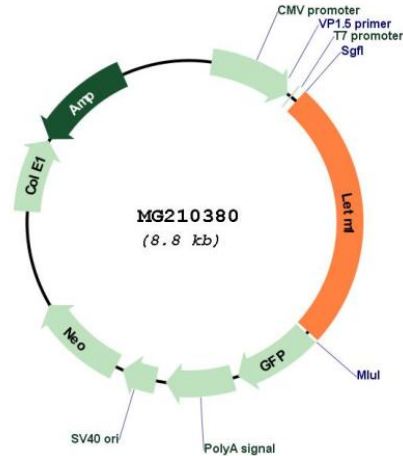
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_019694

ORF Size: 2214 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_019694.1](#), [NP_062668.1](#)

RefSeq Size: 3480 bp

RefSeq ORF: 2217 bp

Locus ID: 56384

UniProt ID: [Q9Z2I0](#)

Cytogenetics: 5 B2

Gene Summary: Mitochondrial proton/calcium antiporter that mediates proton-dependent calcium efflux from mitochondrion (PubMed:27669901). Crucial for the maintenance of mitochondrial tubular networks and for the assembly of the supercomplexes of the respiratory chain (By similarity). Required for the maintenance of the tubular shape and cristae organization (By similarity). In contrast to SLC8B1/NCLX, does not constitute the major factor for mitochondrial calcium extrusion (By similarity).[UniProtKB/Swiss-Prot Function]