

Product datasheet for **MG200653**

Lamtor2 (NM_031248) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Lamtor2 (NM_031248) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Lamtor2
Synonyms: 2010111E04Rik; AL022628; Mapbpip; P14; Rab25; Robld3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200653 representing NM_031248
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGCGTCCCAAGGCTTTGACGCAGGTGCTAAGCCAAGCCAACACTGGAGGAGTCCAGAGCACCTGC
 TGCTGAATAATGAGGGATCGCTGCTGGCCTACTCCGTTATGGGGACACAGATGCCCGGGTCACTGCGGC
 CATCGCCAGTAACATCTGGGCCGCTATGATAGGAACGGGAACCAAGCGTTAATGAAGACAGTCTCAA
 TTTATCCTGATGGACTGCATGGAGGGCCGTGTAGCCATTACGAGGGTGGCCAACCTTCTGCTATGTATG
 ATGCCAAGGAGACCGTAGGCTTCGGAATGCTCAAGGCTAAGGCCAGGCCCTGGTGCAGTACCTGGAGGA
 ACCCTCACCAAGTAGCAGCATCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200653 representing NM_031248
 Red=Cloning site Green=Tags(s)
 MLRPKAL TQVLSQANTGGVQSTLLLLNNEGSL LAYSGYGD TDARV TAAIASNIWAA YDRNGNQAFNEDSLK
 FILMDCMEGRVAITRVANLLLCMYAKETVGF GMLKAKAQLVQYLEEPLTQVAAS

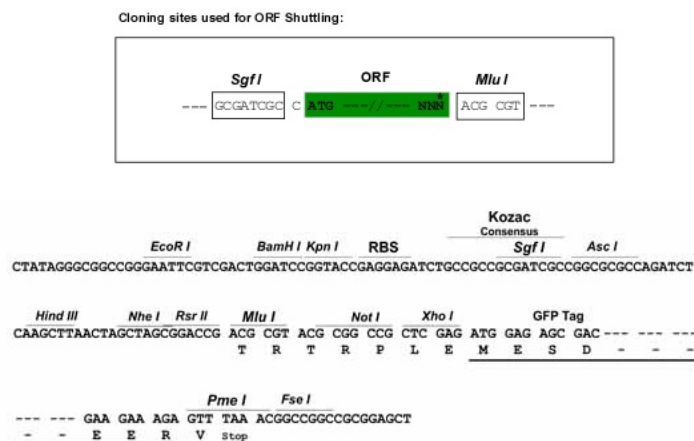
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

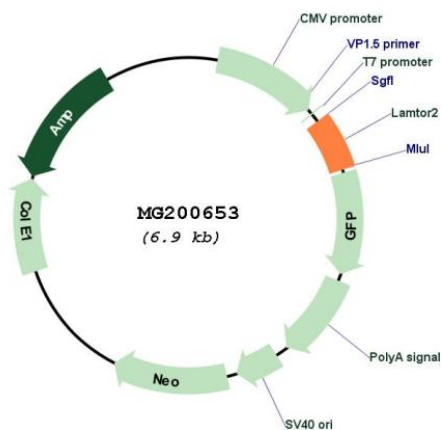


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Cloning Scheme:



Plasmid Map:



ACCN: NM_031248

ORF Size: 375 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.
RefSeq:	NM_031248.4
RefSeq Size:	586 bp
RefSeq ORF:	378 bp
Locus ID:	83409
UniProt ID:	Q9JHS3
Cytogenetics:	3 F1
Gene Summary:	<p>As part of the Ragulator complex it is involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids. Activated by amino acids through a mechanism involving the lysosomal V-ATPase, the Ragulator functions as a guanine nucleotide exchange factor activating the small GTPases Rag. Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated. Adapter protein that enhances the efficiency of the MAP kinase cascade facilitating the activation of MAPK2.</p> <p>[UniProtKB/Swiss-Prot Function]</p>