

## **Product datasheet for MC211959**

## Lamtor2 (NM\_031248) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: Lamtor2 (NM\_031248) Mouse Untagged Clone

Tag: Tag Free
Symbol: Lamtor2

**Synonyms:** 2010111E04Rik; AL022628; Mapbpip; P14; Rab25; Robld3

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC211959 representing NM\_031248

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACCCCTCACCCAAGTAGCAGCATCATAA

 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul ACCN: NM\_031248

**Insert Size:** 378 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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).



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**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:** <u>NM 031248.3</u>, <u>NP 112538.1</u>

RefSeq Size: 586 bp
RefSeq ORF: 378 bp
Locus ID: 83409
UniProt ID: Q9]HS3
Cytogenetics: 3 F1

**Gene Summary:** 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.

[UniProtKB/Swiss-Prot Function]