

Product datasheet for MR202675L4

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OriGene Technologies, Inc.

Laptm4b (NM_033521) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Laptm4b (NM_033521) Mouse Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Laptm4b

Synonyms: C330023P13Rik; LAPTM4beta

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

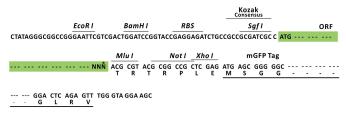
ORF Nucleotide The ORF insert of this clone is exactly the same as(MR202675).

Sgfl-Mlul

Sequence:

Restriction Sites: Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_033521

ORF Size: 684 bp



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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: <u>NM 033521.3</u>, <u>NP 277056.1</u>

 RefSeq Size:
 1897 bp

 RefSeq ORF:
 684 bp

 Locus ID:
 114128

 UniProt ID:
 Q91XQ6

 Cytogenetics:
 15 B3.1

Gene Summary: Required for optimal lysosomal function. Blocks EGF-stimulated EGFR intraluminal sorting

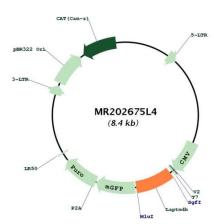
and degradation. Conversely by binding with the phosphatidylinositol 4,5-bisphosphate, regulates its PIP5K1C interaction, inhibits HGS ubiquitination and relieves LAPTM4B inhibition of EGFR degradation. Recruits SLC3A2 and SLC7A5 (the Leu transporter) to the lysosome, promoting entry of leucine and other essential amino acid (EAA) into the lysosome,

stimulating activation of proton-transporting vacuolar (V)-ATPase protein pump (V-ATPase) and hence mTORC1 activation. Plays a role as negative regulator of TGFB1 production in regulatory T cells. Binds ceramide and facilitates its exit from late endosome in order to

control cell death pathways.[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR202675L4