

Product datasheet for RC207325L1

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OriGene Technologies, Inc.

LAPTM4B (NM_018407) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: LAPTM4B (NM_018407) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: LAPTM4B

Synonyms: LAPTM4beta; LC27

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC207325).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_018407

ORF Size: 951 bp





LAPTM4B (NM_018407) Human Tagged Lenti ORF Clone - RC207325L1

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 018407.4</u>, <u>NP 060877.3</u>

 RefSeq Size:
 2242 bp

 RefSeq ORF:
 681 bp

 Locus ID:
 55353

 UniProt ID:
 Q86VI4

 Cytogenetics:
 8q22.1

Domains: Mtp

Protein Families: Transmembrane

Protein Pathways: Lysosome MW: 35 kDa

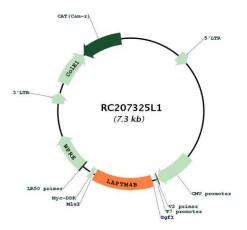
Gene Summary: Required for optimal lysosomal function (PubMed:21224396). Blocks EGF-stimulated EGFR

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 (PubMed:25588945). 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 (PubMed:25998567). Plays a role as negative regulator of TGFB1 production in regulatory T cells (PubMed:26126825). Binds ceramide and facilitates its exit from late endosome in order to control cell death

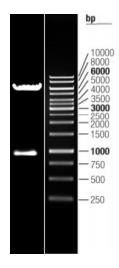
pathways (PubMed:26280656).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC207325L1



Double digestion of RC207325L1 using Sgfl and Mlul $\,$