

Product datasheet for RC207325L4V

OriGene Technologies, Inc.

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LAPTM4B (NM_018407) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: LAPTM4B (NM_018407) Human Tagged ORF Clone Lentiviral Particle

Symbol: LAPTM4B

Synonyms: LAPTM4beta; LC27

Mammalian Cell

Selection:

Puromycin

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

Tag: mGFP

ACCN: NM_018407

ORF Size: 951 bp

ORF Nucleotide

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

Sequence:

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.

RefSeg: NM 018407.4, NP 060877.3

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]