

## OriGene Technologies, Inc.

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## Product datasheet for RC207325L2V

## 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:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_018407
ORF Size:	951 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC207325).
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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<u>NM 018407.4, NP 060877.3</u>
RefSeq Size:	2242 bp
RefSeq ORF:	681 bp
Locus ID:	55353
UniProt ID:	<u>Q86VI4</u>
Cytogenetics:	8q22.1
Domains:	Mtp
Protein Families:	Transmembrane



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<b>ORIGENE</b> LAPTM4B (NM_018407) Human Tagged ORF Clone Lentiviral Particle – RC207325L2V	
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]

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