

Product datasheet for **RR204081L4V**

Laptm4b (NM_001013174) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Laptm4b (NM_001013174) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Laptm4b
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001013174
ORF Size:	681 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR204081).
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.
RefSeq:	NM_001013174.1 , NP_001013192.1
RefSeq Size:	1750 bp
RefSeq ORF:	684 bp
Locus ID:	315047
UniProt ID:	Q5U1W4
Cytogenetics:	7q22



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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 TGF β 1 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]