

## Product datasheet for SC113496

### LAPTM4B (NM\_018407) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LAPTM4B (NM_018407) Human Untagged Clone
Tag:	Tag Free
Symbol:	LAPTM4B
Synonyms:	LAPTM4beta; LC27
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC113496 sequence for NM_018407 edited (data generated by NextGen Sequencing) ATGACGTCACGGACTCGGGTACATGGCCAAGTCCGCCCCGCCCTCCCGTCCCCGCC GCTGCAGCGGTTCGCTTCGGAGCGAAGGGTACCGACCCGGCAGAAGCTCGGAGCTCTCGG GGTATCGAGGAGGCAGGCCCGGGCGCACGGGCGAGCGGGCGGAGCCGGAGCGGCGG AGGAGCCGGCAGCAGCGCGCGGGCTCCAGGCGAGCGGTCGACGCTCCTGAAAAC TGCGCGCGCGCTCGGCCACTGCGCCCGGAGCGATGAAGATGGTCGCGCCCTGGACGCG TTCTACTCCAACAGCTGCTGCTTGTGCTGCCATGTCCGCACCGGCACCATCCTGCTCGG GTCTGGTATCTGATCATCAATGCTGTGGTACTGTTGATTTTATTGAGTGCCCTGGCTGAT CCGGATCAGTATAACTTTTCAAGTTCTGAACTGGGAGGTGACTTTGAGTTCATGGATGAT GCCAACATGTGCATTGCCATTGCGATTTCTTCTCATGATCCTGATATGTGCTATGGCT ACTTACGGAGCGTACAAGCAACGCGCAGCCTGGATCATCCATTCTTCTGTTACCAGATC TTTGACTTTGCCCTGAACATGTTGGTTGCAATCACTGTGCTTATTTATCCAAACTCCATT CAGGAATACATACGGCAACTGCCTCCTAATTTTCCCTACAGAGATGATGTCATGTCAGTG AATCCTACCTGTTTGGTCCTTATTATTCTTCTGTTTATTAGCATTATCTTGACTTTTAAG GGTACTTGATTAGCTGTGTTTGGAACTGCTACCGATACATCAATGGTAGGAACTCCTCT GATGTCCTGGTTTATGTTACCAGCAATGACACTACGGTGTGCTACCCCGTATGATGAT GCCACTGTGAATGGTGTGCCAAGGAGCCACCGCCACCTTACGTGTCTGCCTAA
	Clone variation with respect to NM_018407.4
Restriction Sites:	NotI-NotI
ACCN:	NM_018407
Insert Size:	1110 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_018407.3</a> , <a href="#">NP_060877.3</a>
<b>RefSeq Size:</b>	2245 bp
<b>RefSeq ORF:</b>	954 bp
<b>Locus ID:</b>	55353
<b>UniProt ID:</b>	<a href="#">Q86VI4</a>
<b>Cytogenetics:</b>	8q22.1
<b>Domains:</b>	Mtp
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Lysosome
<b>Gene Summary:</b>	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]