

Product datasheet for **RN204081**

Lptm4b (NM_001013174) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Lptm4b (NM_001013174) Rat Untagged Clone
Tag: Tag Free
Symbol: Lptm4b
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN204081 representing NM_001013174
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGATGGTCGCGCCCTGGACTCGGTTCTATCCACAGCTGCTGCCTGTGCTGCCATGTCCGCACCG
 GCACCATCCTGTTGGGCATCTGGTACCTGATCATCAATGCCGTGGTCTGTTGATCCTGCTGAGTGCCT
 GGCCGATCCCGATCAGTATCACTTTTCAGGCTCTGAAGTGGGGAATTTGAGTTCATGGACGATGCC
 AACATGTGCATTGCTATCGCGATCTCTCCTCATGATCCTGATCTGTGCCATGGCTACCTACGGTGCAT
 ACAAGCAACACGCTGCCTGGATCATCCCGTTCTTCTGTTACCAGATCTTTGATTTCCGCCCTGAATACTTT
 GGTTGCAATCACCGTGTCTACCCCACTCCATTCAGGAGTACATAAGACAGCTGCCCCCAGCTTT
 CCCTACAGAGATGACATAATGTCAGTGAACCTACCTGTTTGGTCTTGTCTCTTCTCATAGGCA
 TTATTTTGACATTTAAGGGCTACTTGATCAGCTGTGTTGGAGCTGTACAGGTACATCAATGCCAGGAA
 CTCCTCTGATGTTCTGGTTTACGTTACCAGCAACGATACCACGGTGTGTTGCCACCATACGATGATGCC
 ACTGCTGTGACCGCACTGCCAAGGAGCCACCGCCACCTTACGTGTCTGCC**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001013174
Insert Size: 684 bp

OTI Disclaimer: 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).



[View online »](#)

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:	<ol style="list-style-type: none">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_001013174.1</u> , <u>NP_001013192.1</u>
RefSeq Size:	1750 bp
RefSeq ORF:	684 bp
Locus ID:	315047
UniProt ID:	<u>Q5U1W4</u>
Cytogenetics:	7q22
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 TGFB1 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]