

Product datasheet for RC207325

LAPTM4B (NM_018407) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LAPTM4B (NM_018407) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LAPTM4B
Synonyms:	LAPTM4beta; LC27
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207325 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACGTCACGGACTCGGGTCACATGGCCGAGTCCGCCCCGCCCTCCCCGTCCCCGCCGCTGCAGCCG
TCGCCTTCGGAGCGAAGGTACCGACCCGGCAGAAGCTCGGAGCTCTCGGGGTATCGAGGAGGCAGGCC
GCGGGCGCACGGGCGAGCGGGCCGGAGCCGGAGCGGGAGGAGCCGGCAGCAGCGGCCGCGGGGCTC
CAGGCGAGGCGGTCGACGCTCTGAAAACCTGCGCGCGCTAGCGCCACTGCGCCGGAGCGATGAAGA
TGGTCGCGCCCTGGACGCGGTTCTACTCCAACAGCTGCTGTTGTGCTGCCATGTCCGACCGGCACCAT
CCTGCTCGGCGTCTGGTATCTGATCATCAATGCTGTGGTACTGTTGATTTATTGAGTGCCTGGCTGAT
CCGGATCAGTATAACTTTTCAAGTTCTGAACTGGGAGGTGACTTTGAGTTCATGGATGATGCCAATATG
GCATTGCCATTGCGATTTCTTCTCATGATCCTGATATGTGCTACGGCTACTTACGGAGCGTACAAGCA
ACGCGCAGCCTGGATCATCCCATTTCTTCTGTTACCAGATCTTTGACTTTGCCCTGAACATGTTGGTTGCA
ATCACTGTGCTTATTTATCCAACTCCATTAGGAATACATACGGCAACTGCCTCCTAATTTTCCCTACA
GAGATGATGTCATGTCAGTGAATCCTACCTGTTTGGTCCTATTATTCTTCTGTTTATTAGCATTATCTT
GACTTTTAAGGGTTACTTGATTAGCTGTGTTTGGAACTGCTACCGATAACATCAATGGTAGGAACTCCTCT
GATGTCCTGGTTTATGTTACCAGCAATGACACTACGGTGTGCTACCCCGTATGATGATGCCACTGTGA
ATGGTGTGCCAAGGAGCCACCGCCACCTTACGTGTCTGCC

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Reconstitution Method:

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [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

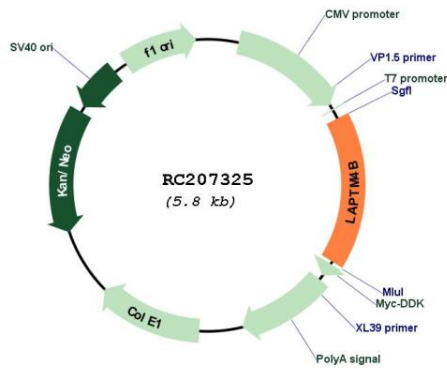
Protein Families: Transmembrane

Protein Pathways: Lysosome

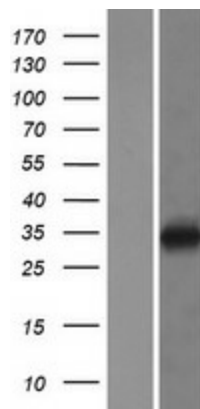
MW: 35 kDa

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]

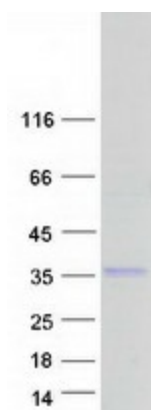
Product images:



Circular map for RC207325



Western blot validation of overexpression lysate (Cat# [LY413079]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207325 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LAPTM4B protein (Cat# [TP307325]). The protein was produced from HEK293T cells transfected with LAPTM4B cDNA clone (Cat# RC207325) using MegaTran 2.0 (Cat# [TT210002]).