

## Product datasheet for **TP307325L**

### LAPTM4B (NM\_018407) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human lysosomal protein transmembrane 4 beta (LAPTM4B), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC207325 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MTSRTRVTWPSPRPLVPAAAAVAFGAKGTDPAEARSSRGIEEAGPRAHGRAGREPERRRSRQRRGGL  
QARRSTLLKTCARASATAPGAMKMWAPWTRFYSNSCCLCHVRTGILLGVWYLIINAVLLILLSALAD  
PDQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICATATYGAYKQRAAWIIPFFCYQIFDFALNMLVA  
ITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIIILTFKGYLISCVWNCYRYINGRNS  
DVLVVVTSNDTTVLLPPYDDATVNGAAKEPPPPYVSA

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	34.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_060877</a></u>
Locus ID:	55353



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UniProt ID: [Q86VI4](#)

RefSeq Size: 2242

Cytogenetics: 8q22.1

RefSeq ORF: 951

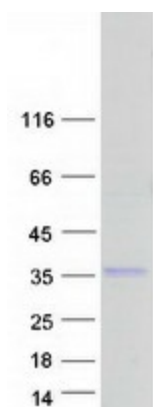
Synonyms: LAPTM4beta; LC27

**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]

**Protein Families:** Transmembrane

**Protein Pathways:** Lysosome

### Product images:



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]).