

## Product datasheet for **TP307325**

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

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human lysosomal protein transmembrane 4 beta (LAPTM4B), 20 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA Clone or AA Sequence:** >RC207325 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MTSRTRVTWPSPRPLVPAAAAVAFGAKGTDPAEARSSRGIEEAGPRAHGRAGREPERRRSRQRRGGL  
QARRSTLLKTCARASATAPGAMKMPVAPWTRFYSNSCCLCCHVRTGTILLGVWYLIINAVLLILLSALAD  
PDQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICATATYGAYKQRAAWIIPFFCYQIFDFALNMLVA  
ITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISILTFKGYLISCVWNCYRYINGRNS  
DVLVVVTSNDTTVLLPPYDDATVNGAAKEPPPPYVSA

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**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:** [NP\\_060877](#)  
**Locus ID:** 55353



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UniProt ID: [Q86VI4](#)

RefSeq Size: 2242

Cytogenetics: 8q22.1

RefSeq ORF: 951

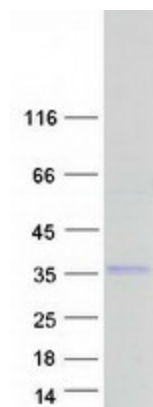
Synonyms: LAPTM4beta; LC27

**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]).