

## Product datasheet for PH307325

### LAPTM4B (NM\_018407) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	LAPTM4B MS Standard C13 and N15-labeled recombinant protein (NP_060877)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC207325
Predicted MW:	35 kDa
Protein Sequence:	>RC207325 protein sequence Red=Cloning site Green=Tags(s)  MTSRTRVTWPSPPRPLPVPAAAAVAFGAKGTDPAEARSSRGIEEAGPRAHGRAGREPERRRSRQRRGGL QARRSTLLKTCARASATAPGAMKVPWTRFYNSCCLCCHVRTGTILLGVWYLIINAVLLILLALAD PDQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICATATYGAYKQRAAWIIPFFCYQIFDFALNMLVA ITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIIILTFKGYLISCVWNCYRYINGRNSS DVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVSA  TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u><a href="#">NP_060877</a></u>
RefSeq Size:	2242
RefSeq ORF:	951
Synonyms:	LAPTM4beta; LC27
Locus ID:	55353



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UniProt ID: [Q86VI4](#)

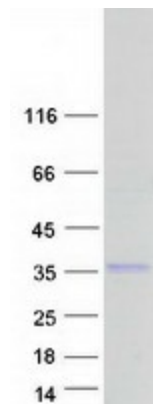
Cytogenetics: 8q22.1

**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]).