

# Product Information

## MemDX™ Membrane Protein Human LAPTM4B (Lysosomal protein transmembrane 4 beta)

Cat. No.: **MP0127J**

This product is for research use only and is not intended for diagnostic use.

This product is a 34.9 kDa Human LAPTM4B membrane protein expressed in HEK293T. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

LAPTM4B

#### Protein Length

Full-length

#### Protein Class

Transmembrane

#### Molecular Weight

34.9 kDa

#### TMD

4

#### Sequence

MTSRTRTVWPSPPRPLVPAAAAVAFGAKGTDPAEARSSRGIEEAGPRAHGRAGREPERRRSRQRRGGL  
QARRSTLLKTCARASATAPGAMKMVAPWTRFYNSCCLCCHVRTGTILLGVWYLIINAVVLLILLSALAD  
PDQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICATATYGAYKQRAAWIIPFFCYQIFDFALNMLVA  
ITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIILTFKGYLISCVWNCYRYINGRNSS  
DVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVSA

### Product Description

#### Expression Systems

HEK293T

#### Tag

C-Myc/DDK

#### Form

Liquid

**Purification**

Anti-DDK affinity column followed by conventional chromatography steps

**Purity**

> 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer**

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

**Storage**

Store at +4°C for up to one week or several months at -80°C

**Target****Target Protein**

LAPTM4B

**Full Name**

Lysosomal protein transmembrane 4 beta

**Introduction**

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.

**Alternative Names**

LAPTM4beta; LC27

**Gene ID**

[55353](#)

**UniProt ID**

[Q86VI4](#)