

LAPTM4B Blocking Peptide
Synthetic peptide
Catalog # BP20871a**Specification**

LAPTM4B Blocking Peptide - Product InformationPrimary Accession [Q86VI4](#)**LAPTM4B Blocking Peptide - Additional Information**

Gene ID 55353

Other Names

Lysosomal-associated transmembrane protein 4B, Lysosome-associated transmembrane protein 4-beta, LAPTM4B

Target/Specificity

The synthetic peptide sequence is selected from aa 195-209 of HUMAN LAPTM4B

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LAPTM4B Blocking Peptide - Protein InformationName LAPTM4B ([HGNC:13646](#))**Function**

Required for optimal lysosomal function (PubMed: [21224396](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25998567)). Plays a role as negative regulator of TGFB1 production in regulatory T cells (PubMed: [26126825](http://www.uniprot.org/citations/26126825)). Binds ceramide and facilitates its exit from late endosome in order to control cell death pathways (PubMed: [26280656](http://www.uniprot.org/citations/26280656)).

Cellular Location

Endomembrane system; Multi-pass membrane protein. Late endosome membrane. Cell membrane. Cell projection. Lysosome membrane. Endosome membrane. Endosome, multivesicular body membrane. Endosome, multivesicular body lumen

LAPTM4B Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

LAPTM4B Blocking Peptide - Images**LAPTM4B Blocking Peptide - References**

Shao G.-Z.,et al.Oncogene 22:5060-5069(2003).
Hogue D.L.,et al.Submitted (OCT-2000) to the EMBL/GenBank/DDBJ databases.
Otsuki T.,et al.DNA Res. 12:117-126(2005).
Wiemann S.,et al.Genome Res. 11:422-435(2001).