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LAPTM4B Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP8774a

Specification

LAPTM4B Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	Q86VI4
Other Accession	NP_060877

LAPTM4B Antibody (N-term) 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 used to generate the antibody AP8774a was selected from the N-term region of human LAPTM4B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 Antibody (N-term) Blocking Peptide - Protein Information

Name LAPTM4B (HGNC:13646)

Function
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).

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 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

LAPTM4B Antibody (N-term) Blocking Peptide - Images

LAPTM4B Antibody (N-term) Blocking Peptide - Background

LAPTM4B belongs to the LAPTM4/LAPTM5 transporter family. It has an active role in disease progression of malignant cells and is involved in cell proliferation and multidrug resistance. The genetic polymorphism of LAPTM4B is a potential risk factor for the development of colon cancer and gastric cancer. The research results also indicated that LAPTM4B may be a clinically useful prognostic indicator for ovarian carcinoma and may play a role in human hepatocellular carcinoma.

LAPTM4B Antibody (N-term) Blocking Peptide - References

Rikova K., et.al., Cell 131:1190-1203(2007).