

LAPTM4B Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20871a

Specification

LAPTM4B Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>O86VI4</u> Human, Rat Rabbit Polyclonal Rabbit IgG 35123

LAPTM4B Antibody - Additional Information

Gene ID 55353

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

Target/Specificity

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 195-209 amino acids from human.

Dilution WB~~1:250

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LAPTM4B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LAPTM4B Antibody - Protein Information

Name LAPTM4B (HGNC:13646)

Function Required for optimal lysosomal function (PubMed:<u>21224396</u>). 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:<u>25588945</u>). 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:<u>25998567</u>). Plays a role as negative regulator of TGFB1 production in regulatory T cells (PubMed:<u>26126825</u>). Binds ceramide and facilitates its exit from late endosome in order to control cell death pathways (PubMed:<u>26280656</u>).

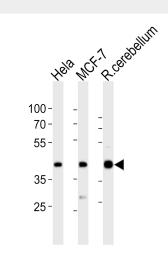
Cellular Location

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 - Protocols

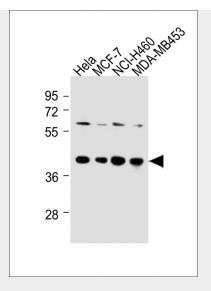
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- **Blocking Peptides**
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- LAPTM4B Antibody Images



Western blot analysis of lysates from Hela, MCF-7 cell line, rat cerebellum tissue lysate(from left to right), using LAPTM4B Antibody (4)(Cat. #AP20871a). AP20871a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.





All lanes : Anti-LAPTM4B-4 Antibody at 1:250 dilution Lane 1: Hela whole cell lysates Lane 2: MCF-7 whole cell lysates Lane 3: NCI-H460 whole cell lysates Lane 4: MDA-MB453 whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

LAPTM4B Antibody - 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).