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LAPTM4B-3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20870a

Product Information

Application	WB, E
Primary Accession	Q86VI4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42247
Calculated MW	35123

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 80-114 amino acids from human.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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-3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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).

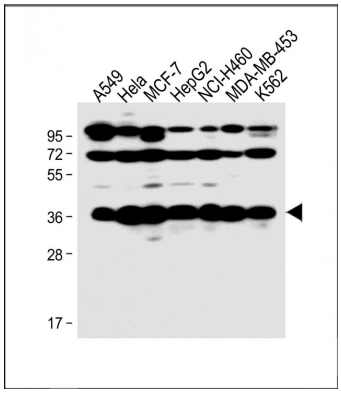
Cellular Location

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

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).

Images



All lanes : Anti-LAPTM4B-3 Antibody at 1:1000 dilution Lane 1: A549 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: HepG2 whole cell lysate Lane 5: NCI-H460 whole cell lysate Lane 6: MDA-MB-453 whole cell lysate Lane 7: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 35 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Increased levels of LAPTM4B, VEGF and survivin are correlated with tumor progression and poor prognosis in breast cancer patients.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.