abcepta

LIMA1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16362a

Specification

LIMA1 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q9UHB6
Other Accession	NP_001107019.1, NP_001107018.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**85226**
Antigen Region	**135-163**

LIMA1 Antibody (N-term) - Additional Information

Gene ID 51474

Other Names
LIM domain and actin-binding protein 1, Epithelial protein lost in neoplasm, LIMA1, EPLIN, SREBP3

Target/Specificity
This LIMA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 135-163 amino acids from the N-terminal region of human LIMA1.

Dilution
WB~~1:1000

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
LIMA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LIMA1 Antibody (N-term) - Protein Information

Name LIMA1 (HGNC:24636)

Function Actin-binding protein involved in actin cytoskeleton regulation and dynamics. Increases the number and size of actin stress fibers and inhibits membrane ruffling. Inhibits actin filament

depolymerization. Bundles actin filaments, delays filament nucleation and reduces formation of branched filaments (PubMed:12566430). Acts as a negative regulator of primary cilium formation (PubMed:32496561). Plays a role in cholesterol homeostasis. Influences plasma cholesterol levels through regulation of intestinal cholesterol absorption. May act as a scaffold protein by regulating NPC1L1 transportation, an essential protein for cholesterol absorption, to the plasma membrane by recruiting MYO5B to NPC1L1, and thus facilitates cholesterol uptake (By similarity).

Cellular Location

Cytoplasm. Cell junction, focal adhesion. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, stress fiber. Cell membrane {ECO:0000250|UniProtKB:Q9ERG0}. Cell projection, ruffle. Note=Expressed in the brush border membrane of the small intestine and colocalizes with NPC1L1 and MYO5B (PubMed:29880681). Colocalizes with PXN at focal adhesions in mesangial cells (PubMed:24694988). Colocalizes with actin stress fibers in quiescent cells. PDGF stimulation induced disassembly of stress fibers and formation of peripheral and dorsal ruffles, where LIMA1 is relocalized (By similarity). {ECO:0000250|UniProtKB:Q9ERG0, ECO:0000269|PubMed:24694988, ECO:0000269|PubMed:29880681}

Tissue Location

Highly expressed in placenta, kidney, pancreas, prostate, ovary, spleen and heart. Also detected in lung, liver, brain, skeletal muscle, thymus, testis and intestine. Not detected in leukocytes. Isoform Beta expressed generally at very low levels Isoform Alpha abundant in epithelial cells from mammary gland, prostate and in normal oral keratinocytes. Low levels in aortic endothelial cells and dermal fibroblasts. Not detectable in myocardium

LIMA1 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LIMA1 Antibody (N-term) - Images
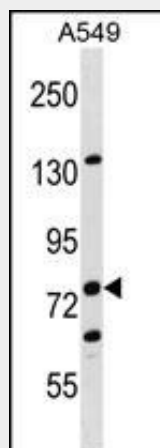
LIMA1 Antibody (N-term) (Cat. #AP16362a) western blot analysis in A549 cell line lysates

(35ug/lane).This demonstrates the LIMA1 antibody detected the LIMA1 protein (arrow).

LIMA1 Antibody (N-term) - Background

EPLIN is a cytoskeleton-associated protein that inhibits
actin filament depolymerization and cross-links filaments in
bundles (Maul et al., 2003 [PubMed 12566430]).

LIMA1 Antibody (N-term) - References

Chircop, M., et al. Cell Cycle 8(5):757-764(2009)
Abe, K., et al. Proc. Natl. Acad. Sci. U.S.A. 105(1):13-19(2008)
Jiang, W.G., et al. Mol. Cancer 7, 71 (2008) :
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)