10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LIMA1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16362a

Product Information

Application	WB, E
Primary Accession	Q9UHB6
Other Accession	NP_001107019.1, NP_001107018.1
Reactivity	Human
Predicted	Bovine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35284
Calculated MW	85226
Antigen Region	135-163

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 E~~Use at an assay dependent concentration.
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.

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, PubMed:33999101). 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. Cell projection, lamellipodium. 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). Localized at the lamellipodia, just behind lamellipodia actin ruffles (PubMed:33999101) {ECO:0000250|UniProtKB:Q9ERG0, ECO:0000269|PubMed:24694988, ECO:0000269|PubMed:29880681, ECO:0000269|PubMed:33999101}
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

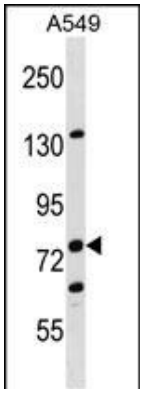
Background

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

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)

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).

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