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EPLIN Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS16432

Specification

EPLIN Antibody (N-Terminus) - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q9UHB6
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**85kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **IF~~1:50~200** **E~~N/A**

EPLIN Antibody (N-Terminus) - Additional Information

Gene ID 51474

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

Target/Specificity
LIMA1 antibody is human specific. At least four isoforms of LIMA1 are known to exist; this antibody will only detect the three largest isoforms.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
EPLIN Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

EPLIN Antibody (N-Terminus) - 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}

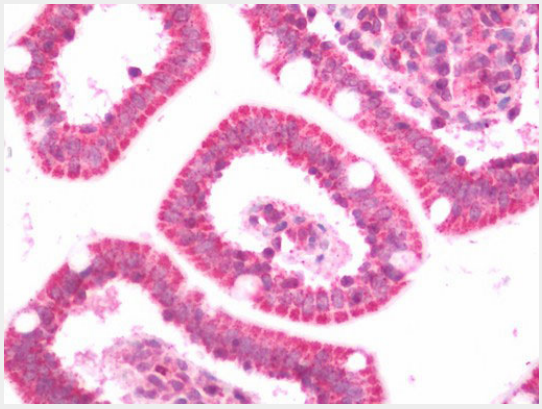
Tissue Location
Highly expressed in placenta, kidney, pancreas, prostate, ovary, spleen and heart. Also detected in lung, liver, brain, skeletal muscle, thymus, testis and intestine. Not detected in leukocytes. Isoform Beta expressed generally at very low levels Isoform Alpha abundant in epithelial cells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

EPLIN Antibody (N-Terminus) - 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

EPLIN Antibody (N-Terminus) - Images



Human Small Intestine: Formalin-Fixed, Paraffin-Embedded (FFPE)

EPLIN Antibody (N-Terminus) - Background

Binds to actin monomers and filaments. 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.

EPLIN Antibody (N-Terminus) - References

Maul R.S.,et al.Oncogene 18:7838-7841(1999).
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).
Wiemann S.,et al.Genome Res. 11:422-435(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.