

# **FLNA Antibody**

Mouse Monoclonal Antibody (Mab) Catalog # AM2240b

## **Product Information**

Application WB, IF, E Primary Accession P21333

**Reactivity** Human, Mouse, Rat

**Host** Mouse **Clonality** Monoclonal

**Isotype** IgG1

**Clone Names** 1273CT424.104.153

Calculated MW 280739 Antigen Region 1-360

## **Additional Information**

**Gene ID** 2316

Other Names Filamin-A, FLN-A, Actin-binding protein 280, ABP-280, Alpha-filamin,

Endothelial actin-binding protein, Filamin-1, Non-muscle filamin, FLNA, FLN,

FLN1

**Target/Specificity** Purified His-tagged FLNA protein was used to produced this monoclonal

antibody.

**Dilution** WB~~1:4000 IF~~1:25 E~~Use at an assay dependent concentration.

Format Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V)

sodium azide.

**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** FLNA Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

## **Protein Information**

Name FLNA

Synonyms FLN, FLN1

**Function** Promotes orthogonal branching of actin filaments and links actin filaments

to membrane glycoproteins. Anchors various transmembrane proteins to the actin cytoskeleton and serves as a scaffold for a wide range of cytoplasmic

signaling proteins. Interaction with FLNB may allow neuroblast migration from the ventricular zone into the cortical plate. Tethers cell surface- localized furin, modulates its rate of internalization and directs its intracellular trafficking (By similarity). Involved in ciliogenesis. Plays a role in cell-cell contacts and adherens junctions during the development of blood vessels, heart and brain organs. Plays a role in platelets morphology through interaction with SYK that regulates ITAM- and ITAM-like-containing receptor signaling, resulting in by platelet cytoskeleton organization maintenance (By similarity). During the axon guidance process, required for growth cone collapse induced by SEMA3A-mediated stimulation of neurons (PubMed:25358863).

#### **Cellular Location**

Cytoplasm, cell cortex. Cytoplasm, cytoskeleton {ECO:0000250 | UniProtKB:Q8BTM8}. Perikaryon {ECO:0000250 | UniProtKB:Q8BTM8}. Cell projection, growth cone {ECO:0000250 | UniProtKB:Q8BTM8}. Cell projection, podosome {ECO:0000250 | UniProtKB:Q8BTM8}. Note=Colocalizes with CPMR1 in the central region of DRG neuron growth cone (By similarity). Following SEMA3A stimulation of DRG neurons, colocalizes with F-actin (By similarity). Localized to the core of myotube podosomes (By similarity). {ECO:0000250 | UniProtKB:Q8BTM8}

**Tissue Location** 

Ubiquitous.

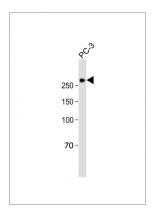
# **Background**

Promotes orthogonal branching of actin filaments and links actin filaments to membrane glycoproteins. Anchors various transmembrane proteins to the actin cytoskeleton and serves as a scaffold for a wide range of cytoplasmic signaling proteins. Interaction with FLNA may allow neuroblast migration from the ventricular zone into the cortical plate. Tethers cell surface-localized furin, modulates its rate of internalization and directs its intracellular trafficking (By similarity). Involved in ciliogenesis.

### References

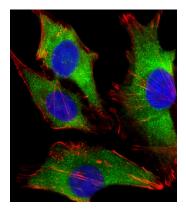
Gorlin J.B., et al. J. Cell Biol. 111:1089-1105(1990). Patrosso M.C., et al. Genomics 21:71-76(1994). Chen E.Y., et al. Hum. Mol. Genet. 5:659-668(1996). Li J., et al. Mol. Cell. Proteomics 9:2517-2528(2010). Ota T., et al. Nat. Genet. 36:40-45(2004).

# **Images**

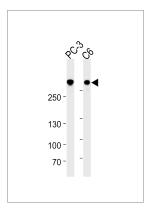


All lanes: Anti-FLNA at 1:1000 dilution + PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution. Observed band size: 280 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Immunofluorescent analysis of 4%



paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling FLNA with AM2240B at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NA166821) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).



FLNA Antibody (Cat. #AM2240b) western blot analysis in PC-3 and C6 cell line lysates (35µg/lane). This demonstrates the FLNA antibody detected the FLNA protein (arrow).

# **Citations**

• Filamin A Expression Negatively Regulates Sphingosine-1-Phosphate-Induced NF-κB Activation in Melanoma Cells by Inhibition of Akt Signaling.

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