

# FLNA Antibody [Knockout Validated]

Mouse Monoclonal Antibody (Mab)
Catalog # AW5707

# **Specification**

# FLNA Antibody [Knockout Validated] - Product Information

Application IF, WB,E Primary Accession P21333

Reactivity Human, Mouse, Rat

Host Mouse
Clonality Monoclonal
Isotype IgG1
Antigen Source Human

# FLNA Antibody [Knockout Validated] - Additional Information

**Gene ID 2316** 

**Antigen Region** 

1-360

## **Other Names**

Filamin-A, FLN-A, Actin-binding protein 280, ABP-280, Alpha-filamin, Endothelial actin-binding protein, Filamin-1, Non-muscle filamin, FLNA, FLN1

### **Dilution**

IF~~1:25

WB~~1:500-1:2000

# Target/Specificity

Purified His-tagged FLNA protein was used to produced this monoclonal antibody.

### **Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

### 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 [Knockout Validated] is for research use only and not for use in diagnostic or therapeutic procedures.

# FLNA Antibody [Knockout Validated] - 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:<a href="http://www.uniprot.org/citations/25358863" target="blank">25358863</a>).

### **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.

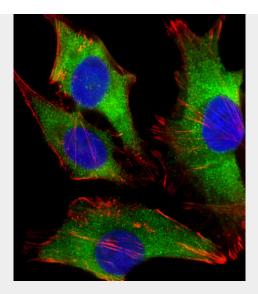
## FLNA Antibody [Knockout Validated] - Protocols

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

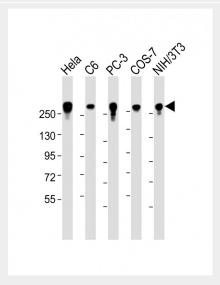
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# FLNA Antibody [Knockout Validated] - Images



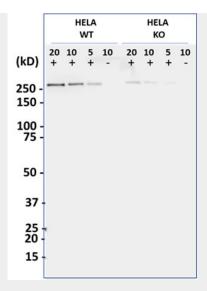


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling FLNA with AM2240B at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NA166821) secondary antibody at 1/200 dilution (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).



All lanes : Anti-FLNA Antibody at 1:4000 dilution Lane 1: Hela whole cell lysate Lane 2: C6 whole cell lysate Lane 3: PC-3 whole cell lysate Lane 4: COS-7 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 280 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





A single >250 kDa band for the Hela wild type lysate was observed (3 ug/ml anti- FLNA) vs the predicted size of 280.7 kDa. The molecular weight discrepancy could be due a post-translationally modified form of the target protein, a splice-variant form of the target protein, or an unrelated protein which shares the antibody-reactive epitope. A weaker band of similar size was observed in the knock out lysate in the 20, 10, and 5 ug lanes, suggesting incomplete knockout of the target gene.

# FLNA Antibody [Knockout Validated] - Background

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# FLNA Antibody [Knockout Validated] - 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).

# FLNA Antibody [Knockout Validated] - Citations

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