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

FLNA Antibody [Knockout Validated]

Mouse Monoclonal Antibody (Mab)
Catalog # AW5707

Specification

FLNA Antibody [Knockout Validated] - Product Information

Application	**WB, IF,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, FLN, FLN1

Dilution
WB~~1:500-1:2000
IF~~1:25

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: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.

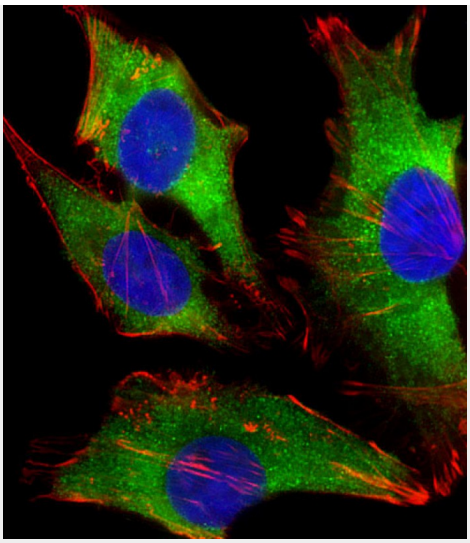
FLNA Antibody [Knockout Validated] - Protocols

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

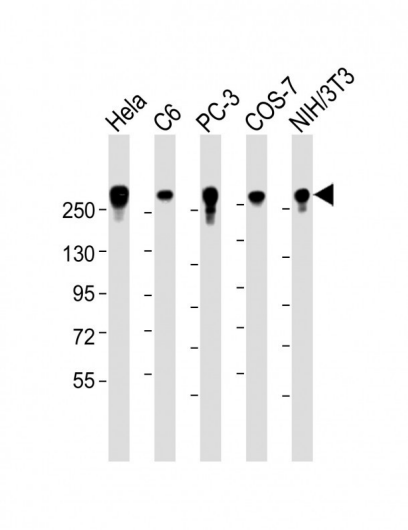
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FLNA Antibody [Knockout Validated] - Images

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

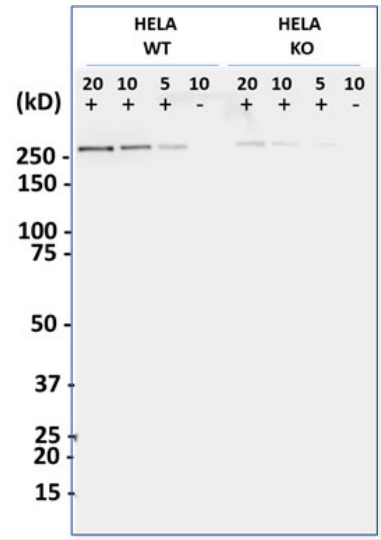


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling FLNA with AM2240B at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NA166821) secondary antibody at 1/200 dilution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

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



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

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.

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

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