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

# [KO]Cofilin 1 Rabbit mAb

Catalog # AP76446

## Product Information

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|---|---|
| **Application** | WB, IHC-P |
| **Primary Accession** | P23528 |
| **Reactivity** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Monoclonal Antibody |
| **Isotype** | IgG |
| **Conjugate** | Unconjugated |
| **Purification** | Affinity Purified |
| **Calculated MW** | 18502 |

## Additional Information

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| **Gene ID** | 1072 |
| **Other Names** | CFL1 |
| **Dilution** | WB~~1:1000-1:5000 IHC-P~~N/A |
| **Format** | Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA. |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

## Protein Information

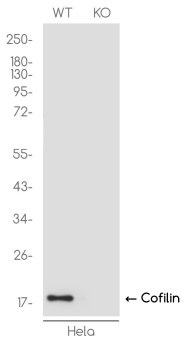
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|---|---|
| **Name** | CFL1 |
| **Synonyms** | CFL |
| **Function** | Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity (PubMed:11812157, PubMed:33670794). In conjunction with the subcortical maternal complex (SCMC), plays an essential role for zygotes to progress beyond the first embryonic cell divisions via regulation of actin dynamics (PubMed:15580268). Required for the centralization of the mitotic spindle and symmetric division of zygotes (By similarity). Plays a role in the regulation of cell morphology and cytoskeletal organization in epithelial cells (PubMed:21834987). Required for the up-regulation of atypical chemokine receptor ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation (PubMed:23633677). Required for neural tube morphogenesis and neural crest cell migration (By similarity). |

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| **Cellular Location** | Nucleus matrix. Cytoplasm, cytoskeleton. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium. Cell projection, growth cone {ECO:0000250\|UniProtKB:P18760}. Cell projection, axon {ECO:0000250\|UniProtKB:P18760}. Note=Colocalizes with the actin cytoskeleton in membrane ruffles and lamellipodia. Detected at the cleavage furrow and contractile ring during cytokinesis. Almost completely in nucleus in cells exposed to heat shock or 10% dimethyl sulfoxide |
| **Tissue Location** | Widely distributed in various tissues. |

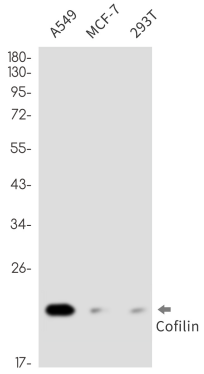
## Background

The protein encoded by this gene can polymerize and depolymerize F-actin and G-actin in a pH-dependent manner. Increased phosphorylation of this protein by LIM kinase aids in Rho-induced reorganization of the actin cytoskeleton. Cofilin is a widely distributed intracellular actin-modulating protein that binds and depolymerizes filamentous F-actin and inhibits the polymerization of monomeric G-actin in a pH-dependent manner. It is involved in the translocation of actin-cofilin complex from cytoplasm to nucleus.[supplied by OMIM, Apr 2004]

## Images

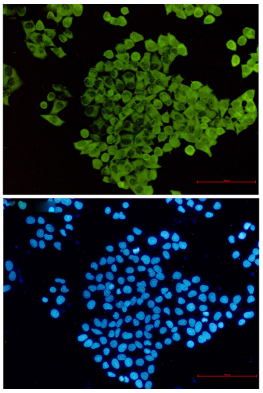


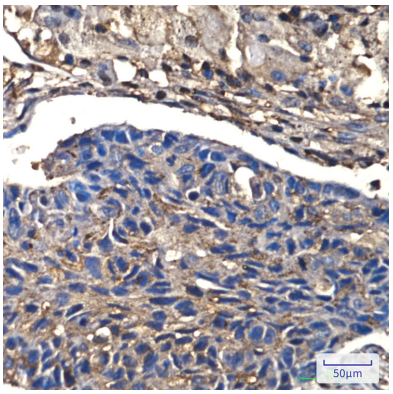

Western blot analysis of Cofilin in HeLa(WT) and Cofilin-Knockout HeLa(KO) using Cofilin antibody.




Western blot analysis of Cofilin in A549, MCF-7, 293T lysates using Cofilin antibody.

Immunocytochemistry analysis of Cofilin (green) in hela using Cofilin antibody,and DAPI(blue)






Immunohistochemistry analysis of paraffin-embedded Human lung cancer using Cofilin antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.

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