

**Anti-Cofilin Picoband Antibody**  
Catalog # ABO12306**Specification****Anti-Cofilin Picoband Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P23528</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Cofilin-1(CFL1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Cofilin Picoband Antibody - Additional Information**

**Gene ID** 1072

**Other Names**

Cofilin-1, 18 kDa phosphoprotein, p18, Cofilin, non-muscle isoform, CFL1, CFL

**Calculated MW**

18502 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

**Subcellular Localization**

Nucleus matrix . Cytoplasm, cytoskeleton . Cell projection, ruffle membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell projection, lamellipodium membrane ; Peripheral membrane protein ; Cytoplasmic side . 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 Specificity**

Widely distributed in various tissues.

**Protein Name**

Cofilin-1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Cofilin (122-152aa DAIKKKLTGIKHELQANCYEEVKDRCTLAEK), identical to the related mouse and rat sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

**Anti-Cofilin Picoband Antibody - Protein Information**

**Name** CFL1

**Synonyms** CFL

**Function**

Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity (PubMed:<a href="http://www.uniprot.org/citations/11812157" target="\_blank">11812157</a>). 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:<a href="http://www.uniprot.org/citations/15580268" target="\_blank">15580268</a>). 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:<a href="http://www.uniprot.org/citations/21834987" target="\_blank">21834987</a>). 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:<a href="http://www.uniprot.org/citations/23633677" target="\_blank">23633677</a>). Required for neural tube morphogenesis and neural crest cell migration (By similarity).

**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 {ECO:0000250|UniProtKB:P18760}. 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.

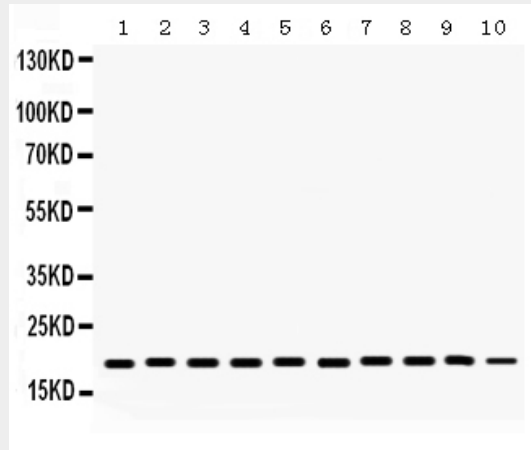
**Anti-Cofilin Picoband Antibody - Protocols**

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

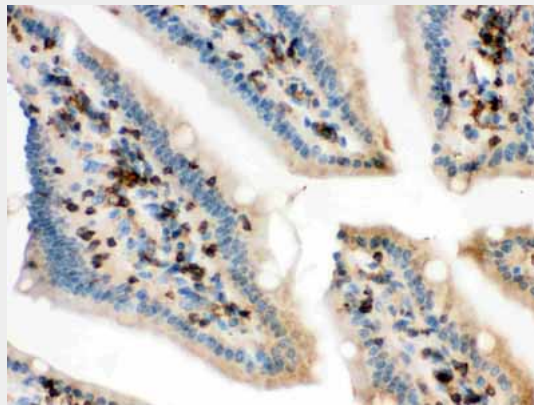
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

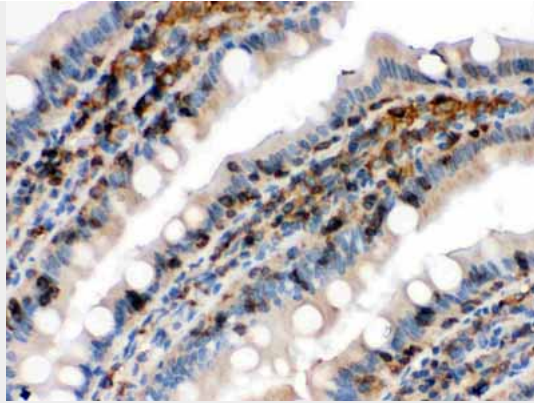
### Anti-Cofilin Picoband Antibody - Images



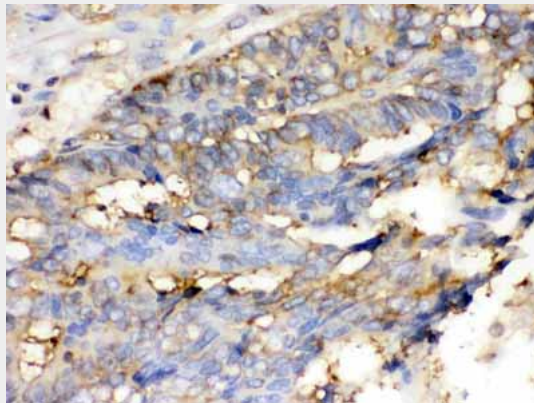
Anti- Cofilin Picoband antibody, ABO12306, Western blotting All lanes: Anti Cofilin (ABO12306) at 0.5ug/ml  
Lane 1: Rat Testis Tissue Lysate at 50ug  
Lane 2: Rat Lung Tissue Lysate at 50ug  
Lane 3: Rat Ovary Tissue Lysate at 50ug  
Lane 4: Mouse Liver Tissue Lysate at 50ug  
Lane 5: Mouse Brain Tissue Lysate at 50ug  
Lane 6: Mouse Lung Tissue Lysate at 50ug  
Lane 7: HELA Whole Cell Lysate at 40ug  
Lane 8: JURKAT Whole Cell Lysate at 40ug  
Lane 9: A549 Whole Cell Lysate at 40ug  
Lane 10: SMMC Whole Cell Lysate at 40ug  
Predicted bind size: 19KD  
Observed bind size: 19KD



Anti- Cofilin Picoband antibody, ABO12306, IHC(P) IHC(P): Mouse Intestine Tissue



Anti- Cofilin Picoband antibody, ABO12306, IHC(P)IHC(P): Rat Intestine Tissue



Anti- Cofilin Picoband antibody, ABO12306, IHC(P)IHC(P): Human Intestinal Cancer Tissue

#### **Anti-Cofilin Picoband Antibody - Background**

Cofilin, a member of the ADF/cofilin family, is actually a protein with 70% sequence homology to ADF, making it part of the ADF/cofilin family of small ADP-binding proteins. It is a ubiquitous actin-binding factor required for the reorganization of actin filaments. The protein is known to sever actin filaments by creating more positive ends on filament fragments, it can cause depolymerization at the minus end of filaments, thereby preventing their reassembly. As a long-lasting in vivo effect, cofilin recycles older ADP-F-actin, helping cell to maintain ATP-G-actin pool for sustained motility. pH, phosphorylation and phosphoinositides regulate cofilin's binding and associating activity with actin.