

Anti-Cofilin Picoband Antibody
Catalog # ABO11757**Specification**

Anti-Cofilin Picoband Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	P23528
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Cofilin-1(CFL1) detection. Tested with WB, IHC-P, ELISA 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

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

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 Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human Cofilin recombinant protein (Position: A2-L166). Human Cofilin shares 99% amino acid (aa) sequences identity with both mouse and rat Cofilin.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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.

Sequence Similarities

Belongs to the actin-binding proteins ADF family.

Anti-Cofilin Picoband Antibody - Protein Information

Name CFL1

Synonyms CFL

Function

Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity (PubMed:11812157). 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).

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

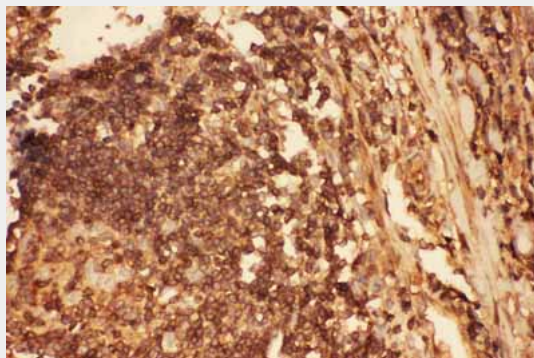
Widely distributed in various tissues.

Anti-Cofilin Picoband Antibody - Protocols

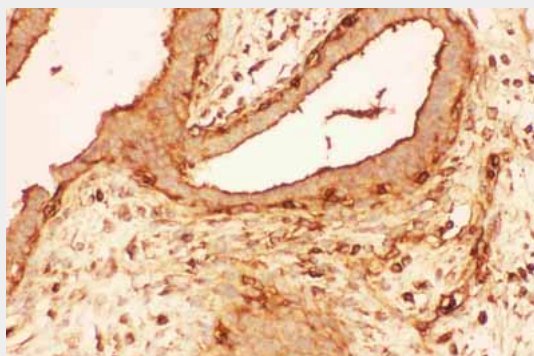
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

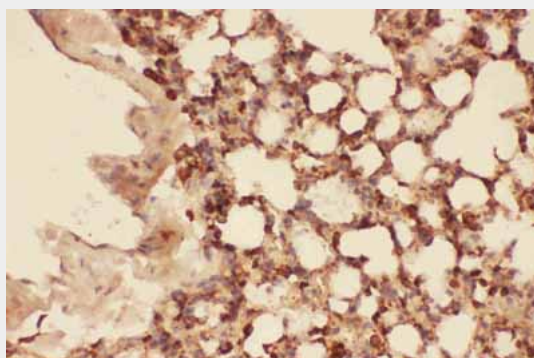
Anti-Cofilin Picoband Antibody - Images



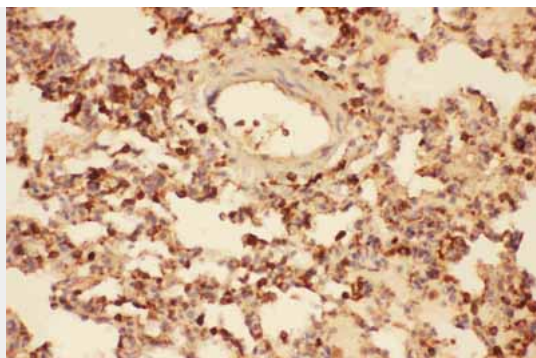
Anti-Cofilin Picoband antibody, ABO11757-1.JPGIHC(P): Human Intestinal Cancer Tissue



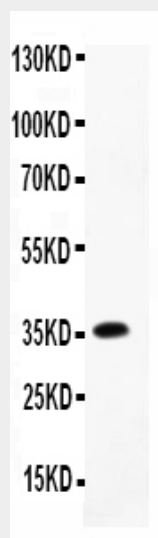
Anti-Cofilin Picoband antibody, ABO11757-2.JPGIHC(P): Human Mammary Cancer Tissue



Anti-Cofilin Picoband antibody, ABO11757-3.JPGIHC(P): Mouse Lung Tissue



Anti-Cofilin Picoband antibody, ABO11757-4.JPGIHC(P): Rat Lung Tissue



Anti-Cofilin Picoband antibody, ABO11757-5.jpgAll lanes: Anti-Cofilin(ABO11757) at 0.5ug/mlWB:
Recombinant Human Cofilin Protein 0.5ngPredicted bind size: 36KDObserved bind size: 36KD

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.