

# Anti-Cofilin 2 Antibody

Catalog # ABO12783

#### Specification

## Anti-Cofilin 2 Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionO9Y281HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Cofilin-2(CFL2) detection. Tested with WB, IHC-P inHuman;Mouse;Rat.Human;Mouse;Rat.

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

### Anti-Cofilin 2 Antibody - Additional Information

Gene ID 1073

**Other Names** Cofilin-2, Cofilin, muscle isoform, CFL2

Calculated MW 18737 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br> <br> Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

Subcellular Localization Nucleus matrix . Cytoplasm, cytoskeleton . Colocalizes with CSPR3 in the Z line of sarcomeres. .

**Tissue Specificity** Isoform CFL2b is expressed predominantly in skeletal muscle and heart. Isoform CFL2a is expressed in various tissues.

Protein Name Cofilin-2

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Cofilin 2 (121-153aa KDAIKKKFTGIKHEWQVNGLDDIKDRSTLGEKL), identical to the related mouse sequence.



**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 2 Antibody - Protein Information**

Name CFL2

Function

Controls reversibly actin polymerization and depolymerization in a pH-sensitive manner. Its F-actin depolymerization activity is regulated by association with CSPR3 (PubMed:<a href="http://www.uniprot.org/citations/19752190" target="\_blank">19752190</a>). It has the ability to bind G- and F-actin in a 1:1 ratio of cofilin to actin. It is the major component of intranuclear and cytoplasmic actin rods. Required for muscle maintenance. May play a role during the exchange of alpha-actin forms during the early postnatal remodeling of the sarcomere (By similarity).

**Cellular Location** Nucleus matrix. Cytoplasm, cytoskeleton. Note=Colocalizes with CSPR3 in the Z line of sarcomeres.

**Tissue Location** Isoform CFL2b is expressed predominantly in skeletal muscle and heart. Isoform CFL2a is expressed in various tissues

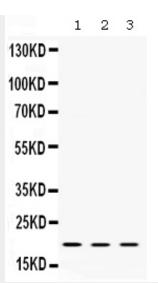
### Anti-Cofilin 2 Antibody - Protocols

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

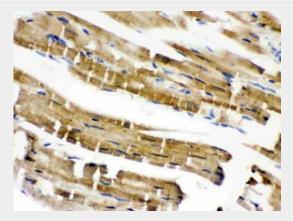
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Cofilin 2 Antibody - Images

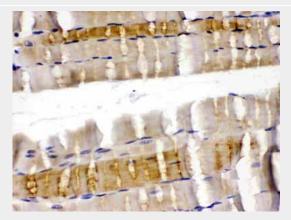




Western blot analysis of Cofilin 2 expression in rat liver extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). Cofilin 24 at 19KD was detected using rabbit anti-Cofilin 2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12783) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

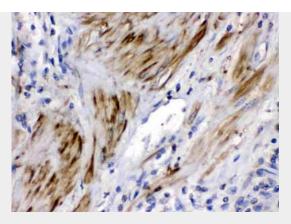


Cofilin 2 was detected in paraffin-embedded sections of mouse cardiac muscle tissues using rabbit anti- Cofilin 2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12783) at 1  $\hat{l}_4$ g/mL. The immunohistochemical section was developed using SABC method .



Cofilin 2 was detected in paraffin-embedded sections of rat skeletal muscle tissues using rabbit anti- Cofilin 2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12783) at 1  $\hat{I}_{4}^{\prime}$ g/mL. The immunohistochemical section was developed using SABC method .





Cofilin 2 was detected in paraffin-embedded sections of human prostatic cancer tissues using rabbit anti- Cofilin 2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12783) at 1  $\hat{1}_{4}$ g/mL. The immunohistochemical section was developed using SABC method .

### Anti-Cofilin 2 Antibody - Background

Cofilin 2 (muscle), also known as CFL2, is a protein which in humans is encoded by the CFL2 gene. It is mapped to 14q12. This gene encodes an intracellular protein that is involved in the regulation of actin-filament dynamics. And this protein is a major component of intranuclear and cytoplasmic actin rods. It can bind G- and F-actin in a 1:1 ratio of cofilin to actin, and it reversibly controls actin polymerization and depolymerization in a pH-dependent manner. Mutations in this gene cause nemaline myopathy type 7, a form of congenital myopathy. Alternative splicing results in multiple transcript variants.