

Anti-Cofilin 2 Antibody
Catalog # ABO12783**Specification**

Anti-Cofilin 2 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	Q9Y281
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Cofilin-2(CFL2) 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 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
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 Na₃.

Immunogen

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

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: [19752190](http://www.uniprot.org/citations/19752190)). 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.

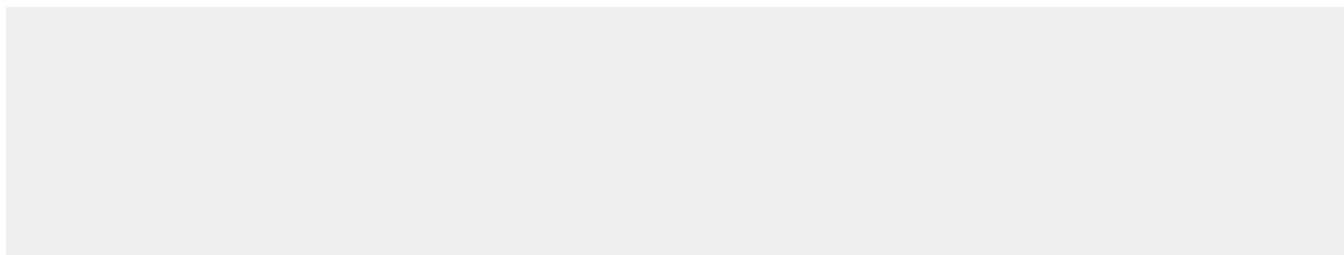
Tissue Location

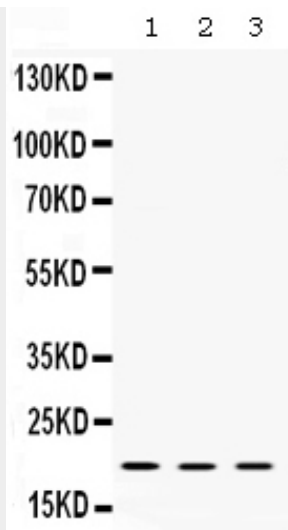
Isoform CFL2b is expressed predominantly in skeletal muscle and heart. Isoform CFL2a is expressed in various tissues

Anti-Cofilin 2 Antibody - Protocols

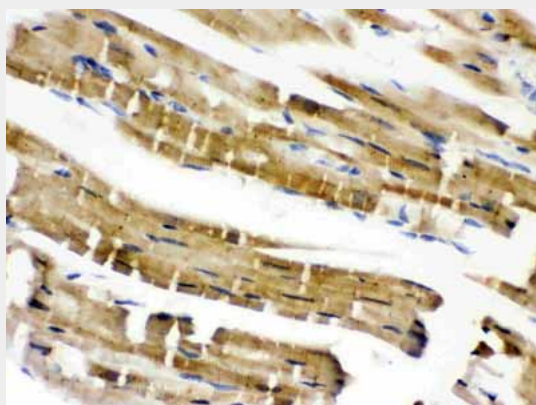
Provided below are standard protocols that you may find useful for product applications.

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

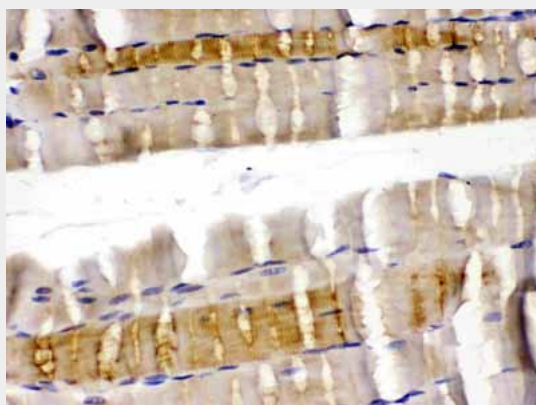
Anti-Cofilin 2 Antibody - Images



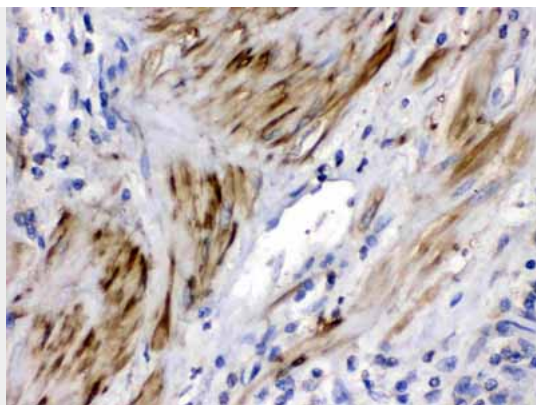
Western blot analysis of Cofilin 2 expression in rat liver extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). Cofilin 24 at 19KD was detected using rabbit anti-Cofilin 2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12783) at 0.5 µg/mL. The blot was developed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