

# **Rabbit Anti-Cofilin antibody**

# SL21842R

<b>Product Name:</b>	Cofilin
Chinese Name:	肌动蛋白Binding proteinCFL抗体
Alias:	non-muscle isoform; 18 kDa phosphoprotein; CFL 1; CFL1; CFL1; COF1_HUMAN; Cofilin 1; Cofilin 1 non muscle; Cofilin; Cofilin non muscle isoform; Cofilin-1; p18 antibody.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Horse, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	20kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Cofilin:
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Controls reversibly actin polymerization and depolymerization in a pH-sensitive manner. 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.
	Function:

Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity. Regulates actin cytoskeleton dynamics. Important for normal progress through mitosis and normal cytokinesis. Plays a role in the regulation of cell morphology and cytoskeletal organization.

#### **Subunit:**

Can bind G- and F-actin in a 1:1 ratio of cofilin to actin. It is a major component of intranuclear and cytoplasmic actin rods.

#### **Subcellular Location:**

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

Widely distributed in various tissues.

#### Post-translational modifications:

Inactivated by phosphorylation on Ser-3. Phosphorylated on Ser-3 in resting cells (By similarity). Dephosphorylated by PDXP/chronophin; this restores its activity in promoting actin filament depolymerization. The phosphorylation of Ser-24 may prevent recognition of the nuclear localization signal (By similarity).

#### Similarity:

Belongs to the actin-binding proteins ADF family. Contains 1 ADF-H domain.

### SWISS:

P23528

#### Gene ID:

1072

#### Database links:

Entrez Gene: 1072 Human

Entrez Gene: 12631 Mouse

Entrez Gene: 29271 Rat

Omim: 601442 Human

SwissProt: P23528 Human

SwissProt: P18760 Mouse

SwissProt: P45592 Rat

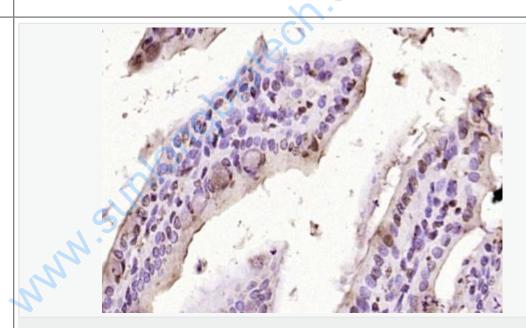
Unigene: 170622 Human

Unigene: 329655 Mouse

Unigene: 11675 Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



#### Picture:

Paraformaldehyde-fixed, paraffin embedded (mouse intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cofilin) Polyclonal Antibody, Unconjugated (SL21842R) at 1:200 overnight at 4°C, followed by operating according to SP

Kit(Rabbit) (sp-0023) instructions and DAB staining.

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