



Rabbit Anti-cofilin antibody

SL2759R

Product Name:	cofilin
Chinese Name:	丝切蛋白抗体
Alias:	18 kDa phosphoprotein; CFL 1; CFL; CFL1; Cofilin 1; Cofilin 1 non muscle; Cofilin non muscle isoform; p18; COF1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=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:	18kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	Synthetic peptide from the human cofilin conjugated to KLH:2-100/166
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:	PubMed
Product Detail:	The protein encoded by this gene can polymerize and depolymerize F-actin and G-actin in a pH-dependent manner. Increased phosphorylation of this protein by LIM kinase aids in Rho-induced reorganization of the actin cytoskeleton. Cofilin is a widely distributed intracellular actin-modulating protein that binds and depolymerizes filamentous F-actin and inhibits the polymerization of monomeric G-actin in a pH-dependent manner. It is involved in the translocation of actin-cofilin complex from cytoplasm to

nucleus.[supplied by OMIM, Apr 2004].

Function:

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.

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. 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. 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.

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

[Oimim: 601442](#)Human

[SwissProt: P23528](#)Human

[SwissProt: P18760](#)Mouse

[SwissProt: P45592](#)Rat

[Unigene: 170622](#)Human

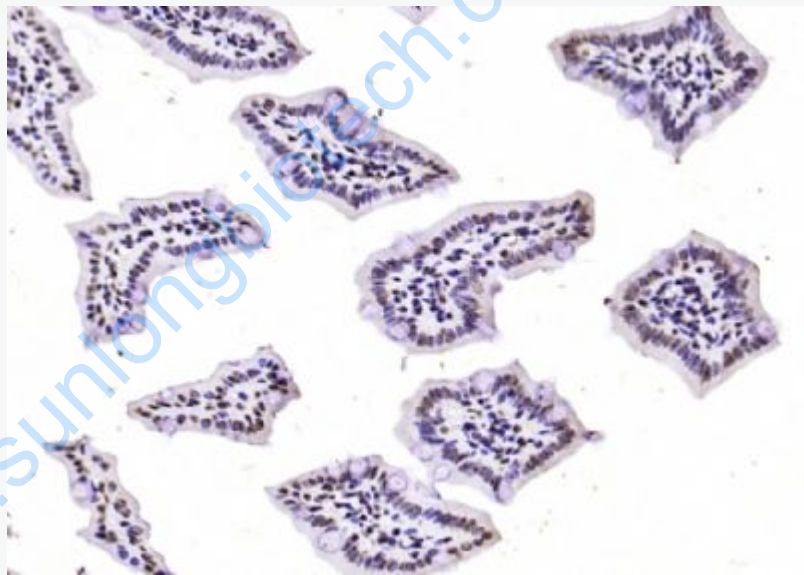
[Unigene: 329655](#)Mouse

[Unigene: 11675](#)Rat

Important Note:

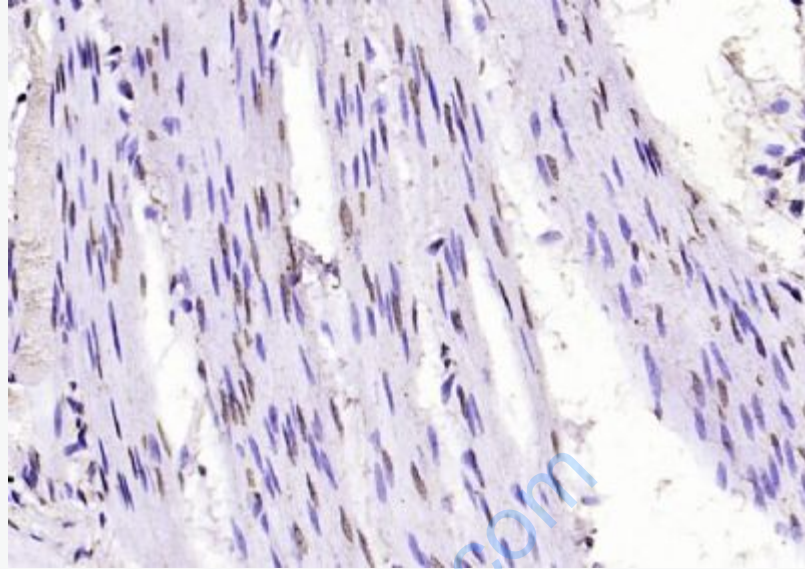
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丝切蛋白(cofilin)是Cytoskeleton塑形的重要调节因素,其主要功能是分解肌动蛋白微丝和增加肌动蛋白单体从肌动蛋白微丝的末端解离的速度,从而促进肌动蛋白微丝的循环,是目前为止已发现的肌动蛋白Binding protein家族中唯一能够改变肌动蛋白微丝扭曲结构的蛋白.

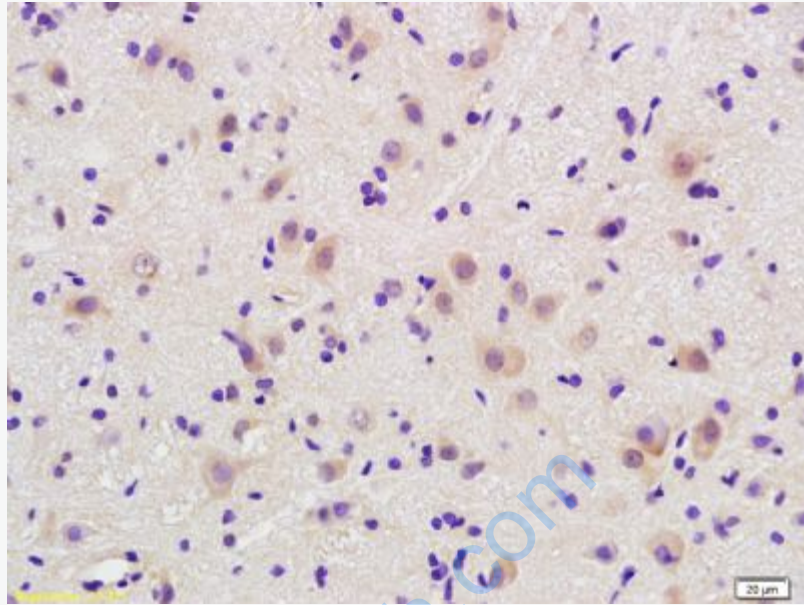


Picture:

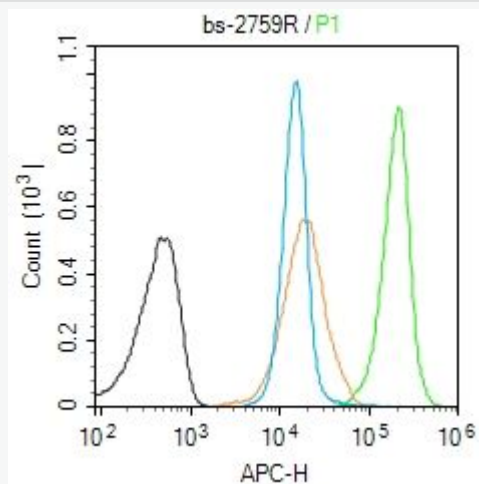
Paraformaldehyde-fixed, paraffin embedded (mouse intestine tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (cofilin) Polyclonal Antibody, Unconjugated (SL2759R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat stomach tissue); 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 (SL2759R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-cofilin Polyclonal Antibody, Unconjugated(SL2759R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line): Rabbit Anti-cofilin antibody (SL2759R)

Dilution: $1\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: $1\mu\text{g} / \text{test}$.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.