

Rabbit Anti-phospho-Cofilin (Ser24)antibody

SL10252R

Product Name	phospho-Cofilin (Ser24)
Chinese Name	磷酸化丝切蛋白抗体
Alias	Cofilin-1; Cofilin/CFL1 (Ser24); 18 kDa phosphoprotein; CFL 1; CFL; CFL1; Cofilin 1; Cofilin 1 non muscle; Cofilin non muscle isoform; p18; COF1_HUMAN.
Product Type	Phosphorylated anti
Research Area	Tumour Cell biology Signal transduction Apoptosis transcriptional regulatory factor
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat (predicted:Human,Mouse,Chicken,Dog,Cow,GuineaPig) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	18kDa
Cellular localization	The nucleus cytoplasmic The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated Synthesised phosphopeptide derived from human Cofilin around the phosphorylation site of Ser24: KS(p-S)TP
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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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.

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.

**Product
Detail**

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.

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

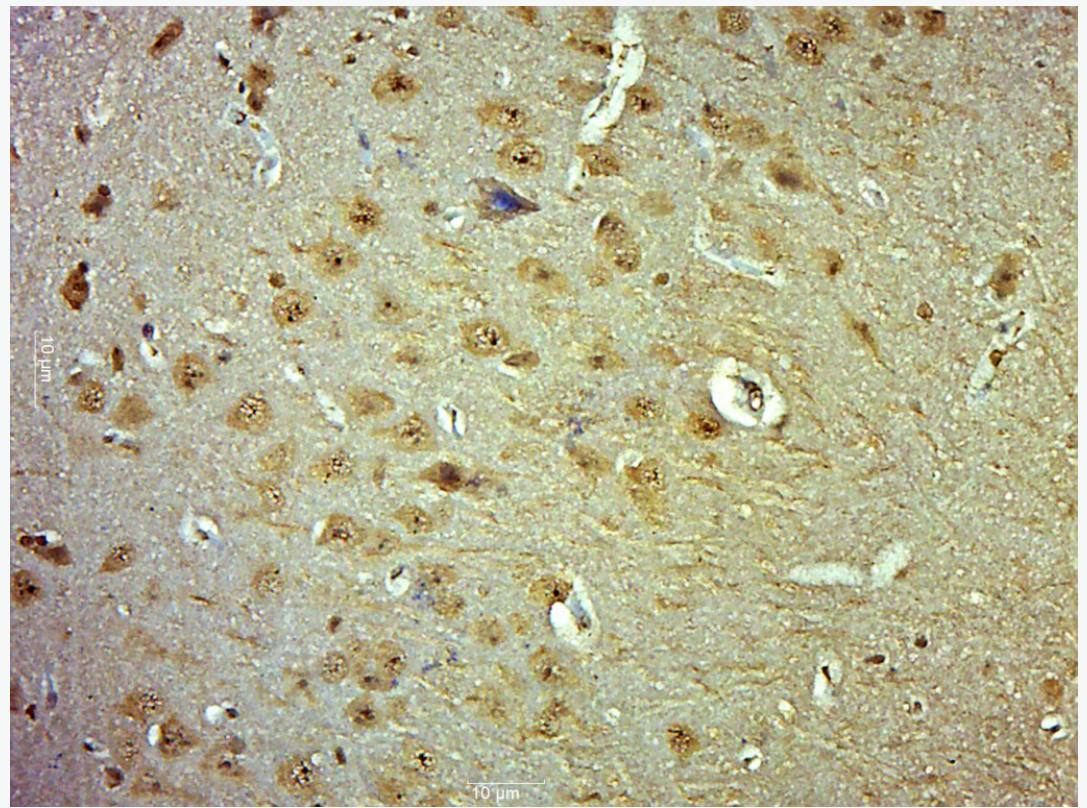
[SwissProt: P45592](#) Rat

[Unigene: 170622](#) Human

[Unigene: 329655](#) Mouse

[Unigene: 11675](#) Rat

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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 (phospho-Cofilin (Ser24)) Polyclonal Antibody, Unconjugated (SL10252R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.