

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/CFL1 (Ser24); 18 kDa phosphoprotein; CFL 1; CFL1; 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, Cow, Guinea Pig,
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:	18kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human CFL1/CFL2 around the phosphorylation site of Ser24:KS(p-S)TP
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:	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.

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: 1072Human

Entrez Gene: 12631Mouse

Entrez Gene: 29271Rat

Omim: 601442Human

SwissProt: P23528Human

SwissProt: P18760Mouse

SwissProt: P45592Rat

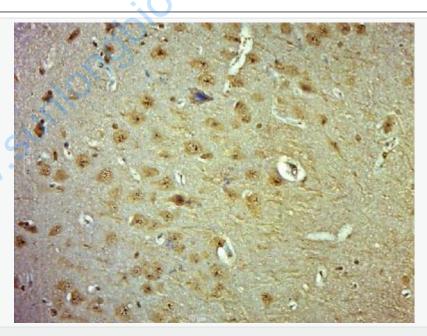
Unigene: 170622Human

Unigene: 329655Mouse

Unigene: 11675Rat

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 (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.

