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#3318

## Cofilin (D59) Antibody

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H M R Mk B	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 19	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P23528	<b>Entrez-Gene Id:</b> 1072
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

Cofilin (D59) Antibody detects endogenous levels of total cofilin protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp59 of human cofilin. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Cofilin and actin-depolymerization factor (ADF) are members of a family of essential conserved small actin-binding proteins that play pivotal roles in cytokinesis, endocytosis, embryonic development, stress response, and tissue regeneration (1). In response to stimuli, cofilin promotes the regeneration of actin filaments by severing preexisting filaments (2). The severing activity of cofilin is inhibited by LIMK or TESK phosphorylation at Ser3 of cofilin (3-5). Phosphorylation at Ser3 also regulates cofilin translocation from the nucleus to the cytoplasm (6).

### Background References

1. Carlier, M.F. et al. (1999) *J Biol Chem* 274, 33827-30.
2. Condeelis, J. (2001) *Trends Cell Biol* 11, 288-93.
3. Arber, S. et al. (1998) *Nature* 393, 805-9.
4. Yang, N. et al. (1998) *Nature* 393, 809-12.
5. Toshima, J. et al. (2001) *J Biol Chem* 276, 31449-58.
6. Nebl, G. et al. (1996) *J Biol Chem* 271, 26276-80.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey **B:** Bovine

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