Cofilin (D3F9) XP® Rabbit mAb

For Research Use Only. Not for Use In Diagnostic Procedures.

**Applications**

- **Endogenous**
  - W, IF-IC
  - H, M, R, Mx, Dg

**Species Cross-Reactivity**

- **Endogenous**
  - H, M, R, Mx, Dg

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<td>W, IF-IC</td>
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<td>19 kDa</td>
<td>Rabbit IgG**</td>
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**Background:** Cofilin and ADF (actin-depolymerization factor) 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).

**Specificity/Sensitivity:** Cofilin (D3F9) XP® Rabbit mAb detects endogenous levels of total cofilin1 protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to central residues of human cofilin1 protein.

**Recommended Antibody Dilutions:**

- Western blotting: 1:1000
- Immunofluorescence (IF-IC): 1:400

**Recommended Companion Products:**

- For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

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**Background References:**


**Applications**

- W — Western
- IP — Immunoprecipitation
- IHC — Immunohistochemistry
- ChIP — Chromatin Immunoprecipitation
- IF — Immunofluorescence
- F — Flow cytometry
- E-P — ELISA-Peptide

**Species Cross-Reactivity Key:**

- **Endogenous**
  - H — human
  - M — mouse
  - R — rat
  - Mx — monkey
  - Dg — dog
  - Pg — pig
  - Sc — S. cerevisiae
  - Ce — C. elegans
  - Hr — horse
  - All — all species expected

- **Species Cross-Reactivity Key:**
  - S — similar to

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

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**Western blot analysis of extracts from various cell types using Cofilin (D3F9) XP® Rabbit mAb.**

**Confocal immunofluorescent analysis of HeLa cells using Cofilin (D3F9) XP® Rabbit mAb (green). Actin filaments have been labeled with DyLight™ 554 Phalloidin #13054 (red).**

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