

Cofilin (D59) Antibody

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk, B	19 kDa	Rabbit**

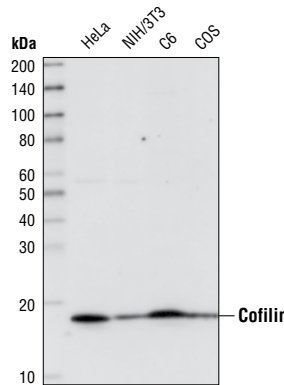
Background: Cofilin and ADF (actin-depolymerization factor) are members of a family of essential conserved small actin-binding proteins that play pivotal roles in cytokinesis, endocytosis, embryonic development, stress response and tissue regeneration (1). In response to stimuli, cofilin promotes the 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 (D59) Antibody detects endogenous levels of total cofilin protein.

Source/Purification: Polyclonal antibodies are produced by immunizing rabbits with a synthetic peptide (KLH-coupled) corresponding to residues surrounding Asp59 of human cofilin. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Carlier, M. et al. (1999) *J. Biol. Chem.* 274, 33827-33830.
- (2) Condeelis, J. (2001) *Trends Cell Biol.* 11, 288-293.
- (3) Arber, S. et al. (1998) *Nature* 393, 805-809.
- (4) Yang, N. et al. (1998) *Nature* 393, 809-812.
- (5) Toshima, J. et al. (2001) *J. Biol. Chem.* 276, 31449-31458.
- (6) Nebl, G. et al. (1996) *J. Biol. Chem.* 271, 26276-26280.



Western blot analysis of extracts from HeLa, NIH/3T3, C6 and COS cells, using Cofilin (D59) Antibody.

Entrez-Gene ID #1072
Swiss-Prot Acc. #P23528

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.

*Species cross-reactivity is determined by western blot.

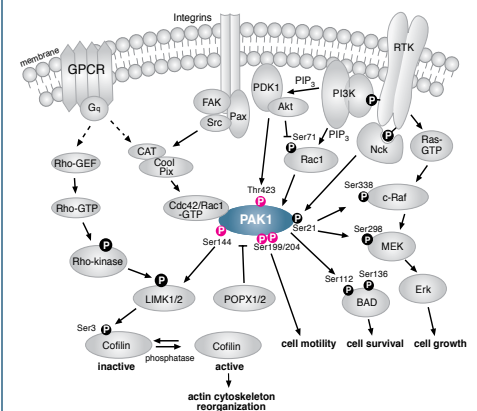
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.



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

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

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.