

#5175 Store at -20C

Cofilin (D3F9) XP® Rabbit mAb



Cell Signaling
TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, W-S, IF-IC	H M R Mk Dg	Endogenous	19	Rabbit IgG	#P23528	1072

Product Usage Information

Application

Western Blotting
Simple Western™
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:10 - 1:50
1:200 - 1:800

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.

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.

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. Nebel, 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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **W-S:** Simple Western™ **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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