

Cat. No:	ABP-0178
Conjugate:	Unconjugated
Size:	100 ug
Clone:	Poly
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Human,Mouse,Rat
Applications:	Western Blotting 1:1000 Immunohistochemistry: 1:50-1:100 Immunofluorescence: 1:100-1:200
Molecular Weight:	19 kDa

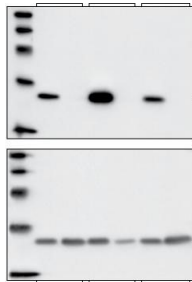
Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phospho-peptide (KLH-coupled) corresponding to residues surrounding Ser3 of human cofilin. Antibodies are purified by protein A and peptide affinity chromatography

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). Phospho-Cofilin (Ser3) Antibody detects endogenous levels of cofilin only when phosphorylated at Ser3. The antibody may cross-react with phosphorylated cofilin 2, the muscle isoform.

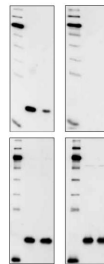
Form: liquid

Buffer: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol.

Storage: Store at -20°C. Do not aliquot the antibody.



Western blot analysis of extracts from asynchronous or mitotic C6, CHO and COS cells using Phospho-Cofilin (Ser3) Antibody (upper) or Cofilin Antibody (lower).



Western blot analysis of extracts from HeLa cells, untreated or H₂O₂-treated using Phospho-Cofilin (Ser3) Antibody (A and B) or Cofilin Antibody (C and D). Membranes (B and D) were treated with alkaline phosphatase (CIP) to demonstrate the phospho-specificity the

antibody

References

(1) Carrier, 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.

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