# **Product Datasheet**

# cofilin(Phospho-Ser3) Antibody

Catalog No: #11139

Package Size: #11139-1 50ul #11139-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

# Description

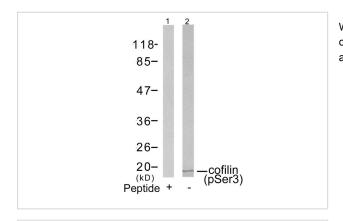
Product Name	cofilin(Phospho-Ser3) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.
	Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho
	specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of cofilin only when phosphorylated at serine 3.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 3 (M-A-S(p)-G-V) derived from Human cofilin.
Conjugates	Unconjugated
Target Name	cofilin
Modification	Phospho
Other Names	CFL; CFL1;
Accession No.	Swiss-Prot: P23528NCBI Protein: NP_005498.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02%
	sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

# **Application Details**

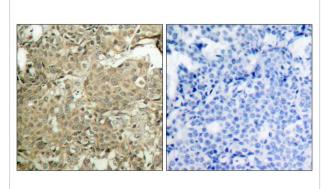
Predicted MW: 19kd
Western blotting: 1:500~1:1000
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

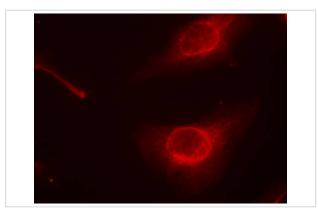
# **Images**



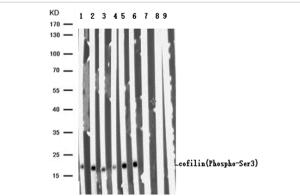
Western blot analysis of extracts from COLO205 cells using cofilin(Phospho-Ser3) Antibody #11139(Lane 2) and the same antibody preincubated with blocking peptide(Lane1).



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using cofilin(Phospho-Ser3) Antibody #11139(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed Hela cells using cofilin(Phospho-Ser3) Antibody #11139.



Lane 1: HelaB treated with H2O2;

Lane 2: Mouse brain tissue;

Lane 3: Rat brain tissue;

Lane 4: N-peptide blocked HelaB treated with H2O2;

Lane 5 : N-peptide blocked Mouse brain tissue;

Lane 6: N-peptide blocked Rat brain tissue;

Lane 7: P-peptide blocked HelaB treated with H2O2;

Lane 8 : P-peptide blocked Mouse brain tissue;

Lane 9: P-peptide blocked Rat brain tissue;

Lysates/proteins at 40 µg per lane.

Predicted band size :B 19 kDa

Observed band size :B 19 kDa

# Background

Controls reversibly actin polymerization and depolymerization in a pH-sensitive manner. It has the ability to bind G- and F-actin in a 1:1 ratio of cofilin to actin. It is the major component of intranuclear and cytoplasmic actin rods.

Kobayashi M, et al. (2006) EMBO J 25(4): 713-26.

Wang Y, et al. (2005) Biol Chem 280(13): 12683-9.

Smith-Beckerman DM, et al. (2005) Mol Cell Proteomics: 156-68.

# **Published Papers**

Guillaume Huet1, Eeva Kaisa Rajakyla, Tiina Viita1 el at., Actin-regulated feedback loop based on Phactr4, PP1 and cofilin maintains the actin monomer pool., Journal of Cell Science, 126:497η— C507(2012)

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Hui Guo, Yi Lv, Tao Tian el at., Downregulation of p57 accelerates the growth and invasion of hepatocellular carcinoma., Carcinogenesis, vol.32 no.12 pp.1897η— C1904(2011)

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Lijun Zhang, Jun Luo, Ping Wan el at., Regulation of cofilin phosphorylation and asymmetry in collective cell migration during morphogenesis., Development., 138:455-464(2011)

#### PMID:21205790

el at., Downregulation of p57 Accelerates the Growth and Invasion of Hepatocellular Carcinoma.In Carcinogenesis on 2011 Dec by Hui Guo , Yi Lv,et al..PMID: 22002319, , (2011)

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21205790, , (2011)

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el at., Actin-regulated feedback loop based on Phactr4, PP1 and cofilin maintains the actin monomer pool. In J Cell Sci on 2013 Jan 15 by Tiina Viita, Kari-Pekka Skarp,et al..PMID: 23203801, , (2013)

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el at., The role of cytoplasmic p57 in invasion of hepatocellular carcinoma. In BMC Gastroenterol. On 2015 Aug 15 by Hui Guo, Yi Li et al..PMID:26271467, (2015)

#### PMID:

#### 26271467

el at., Genome-wide RNAi Screen for Nuclear Actin Reveals a Network of Cofilin Regulators .In J Cell Sci on 2015 Jul 1 by Joseph Dopie, Eeva K Rajakyln <sup>2</sup> et al..PMID: 26021350, , (2015)

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el at., The NAV2 homolog Sickie regulates F-actin-mediated axonal growth inθ• ½Drosophilaθ• ½mushroom body neurons via the non-canonical Rac-Cofilin pathway.In Development on 2014 Dec by Takashi Abe, Daisuke Yamazaki et al..PMID:25411210, , (2014)

## PMID:25411210

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, , (2016)

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PMID:36122768

Note: This product is for in vitro research use only and is not intended for use in humans or animals.