

### Phospho-Cofilin(Ser3) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3751a

## **Specification**

# Phospho-Cofilin(Ser3) Antibody - Product Information

Application DB,E **Primary Accession** P23528 Other Accession NP 005498.1 Reactivity Human Rabbit Host Clonality **Polyclonal** Isotype Rabbit Ig Calculated MW 18502

Phospho-Cofilin(Ser3) Antibody - Additional Information

#### **Gene ID 1072**

#### **Other Names**

Cofilin-1, 18 kDa phosphoprotein, p18, Cofilin, non-muscle isoform, CFL1, CFL

### **Target/Specificity**

This Cofilin Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Ser3 of human Cofilin.

#### **Dilution**

DB~~1:500

#### **Format**

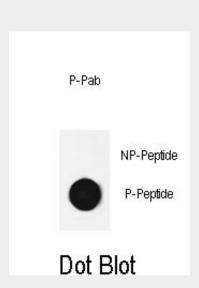
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Phospho-Cofilin(Ser3) Antibody is for research use only and not for use in



Dot blot analysis of anti-Phospho-Cofilin (Ser3) antibody Phospho-specific Pab (Cat. #AP3751a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

# Phospho-Cofilin(Ser3) Antibody - Background

Cofilin is a widely distributed intracellular actin-modulating protein that binds and depolymerizes filamentous F-actin and inhibits the polymerization of monomeric G-actin in a pH-dependent manner. It is involved in the translocation of actin-cofilin complex from cytoplasm to nucleus.

# Phospho-Cofilin(Ser3) Antibody - References

Klemke, M., et al. EMBO J. 29(17):2915-2929(2010) Castro, M.A., et al. Cancer 116(15):3645-3655(2010) Garg, P., et al. J. Biol. Chem.





diagnostic or therapeutic procedures.

Phospho-Cofilin(Ser3) Antibody - Protein Information

Name CFL1

Synonyms CFL

#### **Function**

Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity (PubMed: <a href="http://www.uniprot.org/citations/1181 2157" target=" blank">11812157</a>). In conjunction with the subcortical maternal complex (SCMC), plays an essential role for zygotes to progress beyond the first embryonic cell divisions via regulation of actin dynamics (PubMed: <a href="http://w ww.uniprot.org/citations/15580268" target=" blank">15580268</a>). Required for the centralization of the mitotic spindle and symmetric division of zygotes (By similarity). Plays a role in the regulation of cell morphology and cytoskeletal organization in epithelial cells (PubMed:<a href="http://www.uniprot.org/citations/2183" 4987" target=" blank">21834987</a>). Required for the up-regulation of atypical chemokine receptor ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation (PubMed:<a href="http://www. uniprot.org/citations/23633677" target=" blank">23633677</a>). Required for neural tube morphogenesis and neural crest cell migration (By similarity).

#### **Cellular Location**

Nucleus matrix. Cytoplasm, cytoskeleton. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium {ECO:0000250|UniProtKB:P18760}. Note=Colocalizes with the actin cytoskeleton in membrane ruffles and lamellipodia. Detected at the cleavage furrow and contractile ring during cytokinesis. Almost completely in nucleus in cells exposed to heat shock or 10% dimethyl sulfoxide

# **Tissue Location**

Widely distributed in various tissues.

285(29):22676-22688(2010) Martins-de-Souza, D., et al. J Psychiatr Res (2010) In press : Zhang, Y., et al. J. Int. Med. Res. 38(3):1042-1048(2010)



# Phospho-Cofilin(Ser3) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Phospho-Cofilin(Ser3) Antibody - Citations

• Konjac ceramide (kCer) regulates keratinocyte migration by Sema3A-like repulsion mechanism.