

### Phospho-Cofilin(Ser3) Antibody Blocking peptide Synthetic peptide Catalog # BP3751a

# **Specification**

# Phospho-Cofilin(Ser3) Antibody Blocking peptide - Product Information

Primary Accession

# <u>P23528</u>

# Phospho-Cofilin(Ser3) Antibody Blocking peptide - Additional Information

Gene ID 1072

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# Phospho-Cofilin(Ser3) Antibody Blocking peptide - 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/11812157" 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://www.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/21834987" 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}. Cell projection, growth cone {ECO:0000250|UniProtKB:P18760}. Cell projection, axon {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.

# Phospho-Cofilin(Ser3) Antibody Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

# Phospho-Cofilin(Ser3) Antibody Blocking peptide - Images

# Phospho-Cofilin(Ser3) Antibody Blocking peptide - Background

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

# Phospho-Cofilin(Ser3) Antibody Blocking peptide - 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. 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)