**BACKGROUND**

Cofilin is ubiquitously expressed in eukaryotic cells where it binds to Actin, thereby regulating the rapid cycling of Actin assembly and disassembly essential for cellular viability. Cofilin is a low molecular weight protein that binds to filamentous F-Actin by bridging two longitudinally associated Actin subunits changing the F-Actin filament twist. This process is allowed by the dephosphorylation of Cofilin Ser 3 by factors such as opsonized zymosan. Lim kinase 1, a serine kinase, phosphorylates Cofilin and renders it unable to bind and depolymerize F-Actin.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CFL1 (human) mapping to 11q13.1; Cfl1 (mouse) mapping to 19 A.

**SOURCE**

Cofilin 1 (H-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Cofilin 1 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32158 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Cofilin 1 (H-12) is recommended for detection of Cofilin 1, non-muscle isoform of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non-cross-reactive with Cofilin 2, muscle isoform.

Cofilin 1 (H-12) is also recommended for detection of Cofilin 1, non-muscle isoform in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Cofilin 1 siRNA (h): sc-35078, Cofilin 1 siRNA (m): sc-35079, Cofilin 1 shRNA Plasmid (h): sc-35078-SH, Cofilin 1 shRNA Plasmid (m): sc-35079-SH, Cofilin 1 shRNA (h) Lentiviral Particles: sc-35078-V and Cofilin 2 shRNA (m) Lentiviral Particles: sc-35079-V.

Molecular Weight of Cofilin 1: 19-21 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

**DATA**

**SELECT PRODUCT CITATIONS**