Cofilin 1 (5): sc-53934

**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 like opsonized zymosan. LIM kinase 1 (LIMK-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 (5) is a mouse monoclonal antibody raised against full length Cofilin 1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG sub kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cofilin 1 (5) is available conjugated to either Alexa Fluor® 546 (sc-53934 AF546) or Alexa Fluor® 594 (sc-53934 AF594), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53934 AF680) or Alexa Fluor® 790 (sc-53934 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Cofilin 1 (5) is recommended for detection of Cofilin 1 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).

Suitable for use as control antibody for Cofilin 1 siRNA (h): sc-35078, Cofilin 1 siRNA (m2): sc-270324, Cofilin 1 shRNA Plasmid (h): sc-35078-SH, Cofilin 1 shRNA Plasmid (m2): sc-270324-SH, Cofilin 1 shRNA (h) Lentiviral Particles: sc-35078-V and Cofilin 1 shRNA (m2) Lentiviral Particles: sc-270324-V.

Molecular Weight of Cofilin 1: 19-21 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, MCF7 whole cell lysate: sc-2206 or NIH/3T3 whole cell lysate: sc-2210.

**STORAGE**

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

**DATA**

Cofilin 1 (5): sc-53934. Western blot analysis of Cofilin 1 expression in NIH/3T3 (A), MCF7 (B), HEK293 (C), Caco-2 (D), Raji (E) and A-431 (F) whole cell lysates.

Cofilin 1 (5): sc-53934. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic and membrane staining of glandular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic staining of glandular cells and lymphoid cells (B).

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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