**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 linearly 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 depolymerise F-Actin.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CFL1 (human) mapping to 11q13.1, CFL2 (human) mapping to 14q13.1; Cfl1 (mouse) mapping to 19 A, Cfl2 (mouse) mapping to 12 C1.

**SOURCE**

Cofilin (E-8) is a mouse monoclonal antibody raised against amino acids 1-166 representing full length Cofilin 1 of human origin.

**PRODUCT**

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

Cofilin (E-8) is available conjugated to agarose (sc-376476 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376476 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycocerythrin (sc-376476 PE), fluorescein (sc-376476 FITC), Alexa Fluor® 488 (sc-376476 AF488), Alexa Fluor® 546 (sc-376476 AF546), Alexa Fluor® 594 (sc-376476 AF594) or Alexa Fluor® 647 (sc-376476 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376476 AF680) or Alexa Fluor® 790 (sc-376476 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Cofilin (E-8) is recommended for detection of Cofilin 1 and Cofilin 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Molecular Weight of Cofilin: 19-21 kDa.

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

**STORAGE**

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

**DATA**


**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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