Anti-Cofilin Antibody [PSH0-38]

HA721340

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Monkey
Applications:	WB, FC
Molecular Wt:	Predicted band size: 19 kDa
Clone number:	PSH0-38

Description: Cofilin 1 (non-muscle; n-cofilin), also known as CFL1, is a human gene, part of the ADF/cofilin family. 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. One group reports that reelin signaling leads to serine3-phosphorylation of cofilin-1, and this interaction may play a role in the reelin-related regulation of neuronal migration. Cofilin 1 has been shown to interact with HSPH1 and LIMK1.

Immunogen: Synthetic peptide within human Cofilin aa 117-166 / 166.

Positive control: HeLa cell lysate, HEK-293 cell lysate, MCF7 cell lysate, MDA-MB-468 cell lysate, K-562 cell lysate, SH-SY5Y cell lysate, HUVEC cell lysate, Jurkat cell lysate, COS-1 cell lysate, VERO cell lysate, NIH/3T3 cell lysate, PC-12 cell lysate, Neuro-2a cell lysate, HeLa, NIH/3T3.

Subcellular location: Nucleus matrix, Cytoplasm, Cytoskeleton, Cell projection.

Database links: SwissProt: P23528 Human | P18760 Mouse | P45592 Rat

Recommended Dilutions:

WB	1:1,000
FC	1:200-1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

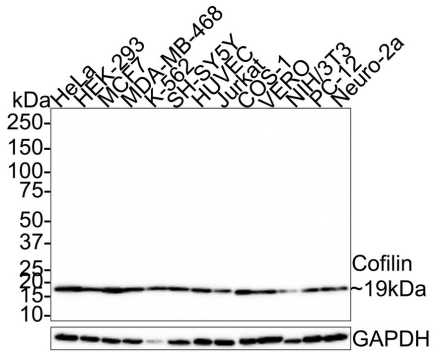

Fig1: Western blot analysis of Cofilin on different lysates with Rabbit anti-Cofilin antibody (HA721340) at 1/1,000 dilution.

Lane 1: HeLa cell lysate (30 µg/Lane)
Lane 2: HEK-293 cell lysate (30 µg/Lane)
Lane 3: MCF7 cell lysate (30 µg/Lane)
Lane 4: MDA-MB-468 cell lysate (24 µg/Lane)
Lane 5: K-562 cell lysate (16 µg/Lane)
Lane 6: SH-SY5Y cell lysate (22 µg/Lane)
Lane 7: HUVEC cell lysate (30 µg/Lane)
Lane 8: Jurkat cell lysate (30 µg/Lane)
Lane 9: COS-1 cell lysate (30 µg/Lane)
Lane 10: VERO cell lysate (30 µg/Lane)
Lane 11: NIH/3T3 cell lysate (22 µg/Lane)
Lane 12: PC-12 cell lysate (30 µg/Lane)
Lane 13: Neuro-2a cell lysate (19 µg/Lane)

Predicted band size: 19 kDa
Observed band size: 19 kDa

Exposure time: 22 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721340) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

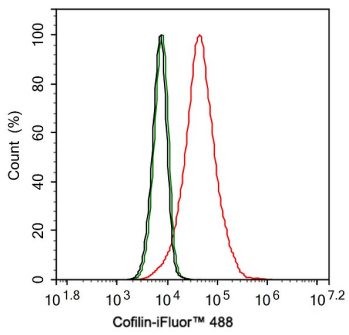

Fig2: Flow cytometric analysis of HeLa cells labeling Cofilin.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA721340, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

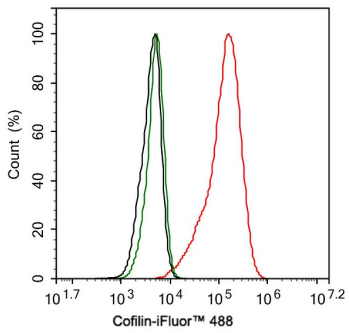

Fig3: Flow cytometric analysis of NIH/3T3 cells labeling Cofilin.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA721340, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Namme JN et al. Cofilin Signaling in the CNS Physiology and Neurodegeneration. Int J Mol Sci. 2021 Oct
2. Bamburg JR et al. Cofilin and Actin Dynamics: Multiple Modes of Regulation and Their Impacts in Neuronal Development and Degeneration. Cells. 2021 Oct