

ARG45564 anti-Cofilin antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Cofilin
Tested Reactivity	Hu, Ms, Rat, Mk
Tested Application	FACS, ICC/IF, IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Cofilin
Species	Human
Immunogen	Recombinant protein containing to human Cofilin.
Conjugation	Un-conjugated
Alternate Names	CFL1; cofilin 1 (non-muscle); CFL; 18 kDa phosphoprotein; Cofilin, non-muscle isoform; HEL-S-15; p18; cofilin; Cofilin-1

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	ICC/IF	2 µg/ml
	IHC-Fr	0.5-1 µg/ml
	IHC-P	0.5-1 µg/ml
	WB	0.1-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	19 kDa	

Properties

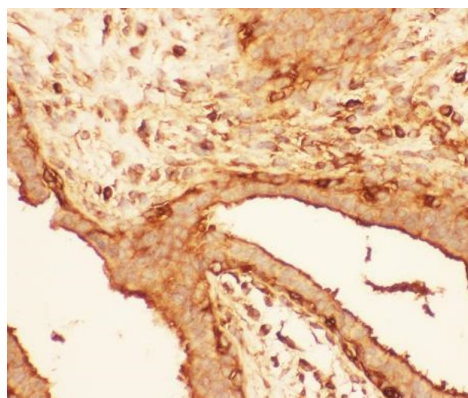
Form	Liquid
Purification	Affinity purified
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

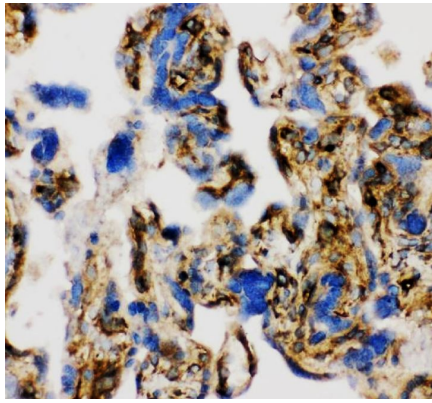
Gene Symbol	CFL1
Gene Full Name	cofilin 1 (non-muscle)
Background	Members of the ADF/cofilin (AC) family are actin-severing proteins that regulate actin remodeling during cellular events such as cell migration, cytokinesis, phagocytosis, endocytosis, axon development, and immune cell activation. In mammals, there are three members of the AC family, muscle-specific cofilin (Cofilin 2), non-muscle cofilin (Cofilin 1), and ADF. In humans, cofilin 1 and ADF have 72% identity, with the major amino acid differences found in the C-terminal region. Regulation of cofilin activity can occur through serine phosphorylation. Activation of cofilin kinases, LIMK1 or LIMK2, leads to phosphorylation of cofilin at serine 3. This phosphorylation disrupts cofilin binding to actin in vitro and in vivo. Multiple phosphatases, PP1, PP2A, PP2B, slingshot, and chronophin can dephosphorylate Ser-3 and activate actin binding. Thus, Ser-3 phosphorylation is a major site for the regulation of cofilin activity.
Function	Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity. Regulates actin cytoskeleton dynamics. Important for normal progress through mitosis and normal cytokinesis. Plays a role in the regulation of cell morphology and cytoskeletal organization. Required for the up-regulation of atypical chemokine receptor ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation. [UniProt]
Calculated Mw	19 kDa
PTM	Inactivated by phosphorylation on Ser-3. Phosphorylated on Ser-3 in resting cells (By similarity). Dephosphorylated by PDXP/chronophin; this restores its activity in promoting actin filament depolymerization. The phosphorylation of Ser-24 may prevent recognition of the nuclear localization signal (By similarity). Phosphorylated via a ARRB1-RAC1-LIMK1-PAK1 cascade upon active ligand stimulation of atypical chemokine receptor ACKR2.. [UniProt]
Cellular Localization	Cell membrane; Cell projection; Cytoplasm; Cytoskeleton; Membrane; Nucleus. [UniProt]

Images



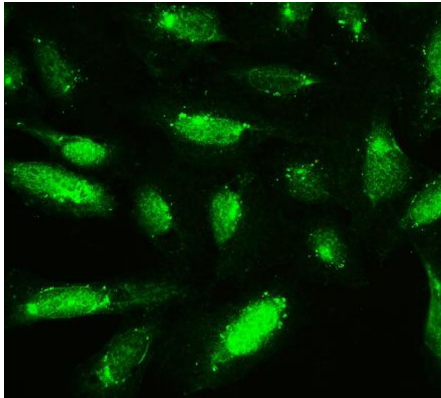
ARG45564 anti-Cofilin antibody IHC-P image

Immunohistochemistry: Human intestinal cancer stained with ARG45564 anti-Cofilin antibody at 1 µg/ml dilution.



ARG45564 anti-Cofilin antibody IHC-Fr image

Immunohistochemistry: Frozen Human placenta stained with ARG45564 anti-Cofilin antibody at 1 $\mu\text{g/ml}$ dilution.



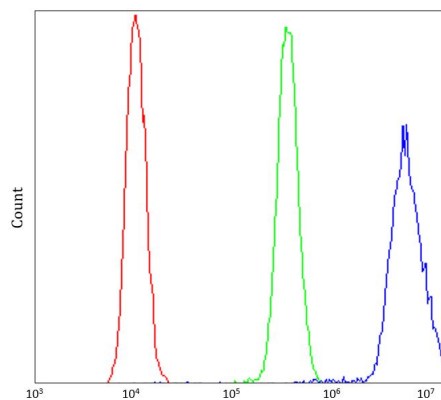
ARG45564 anti-Cofilin antibody ICC/IF image

Immunofluorescence: U2OS stained with ARG45564 anti-Cofilin antibody at 5 $\mu\text{g/ml}$ dilution.



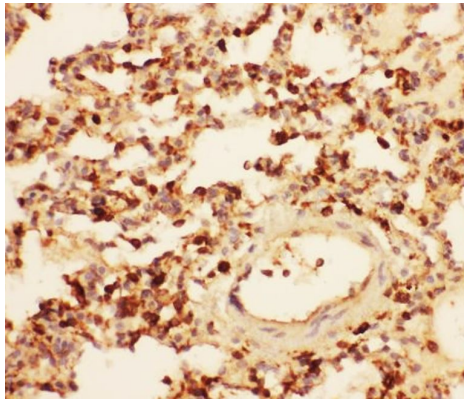
ARG45564 anti-Cofilin antibody WB image

Western blot: HeLa stained with ARG45564 anti-Cofilin antibody at 0.5 $\mu\text{g/ml}$ dilution.



ARG45564 anti-Cofilin antibody FACS image

Flow Cytometry: U2OS stained with ARG45564 anti-Cofilin antibody at 1 $\mu\text{g}/10^6$ cells dilution.



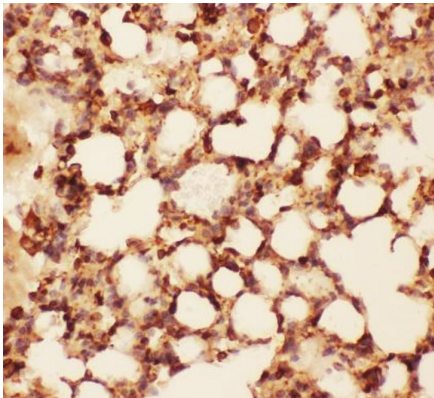
ARG45564 anti-Cofilin antibody IHC-P image

Immunohistochemistry: Rat lung stained with ARG45564 anti-Cofilin antibody at 1 $\mu\text{g}/\text{ml}$ dilution.



ARG45564 anti-Cofilin antibody WB image

Western blot: C6 stained with ARG45564 anti-Cofilin antibody at 0.5 $\mu\text{g}/\text{ml}$ dilution.



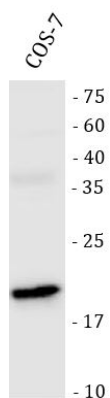
ARG45564 anti-Cofilin antibody IHC-P image

Immunohistochemistry: Mouse lung stained with ARG45564 anti-Cofilin antibody at 1 $\mu\text{g}/\text{ml}$ dilution.



ARG45564 anti-Cofilin antibody WB image

Western blot: Mouse spleen stained with ARG45564 anti-Cofilin antibody at 0.5 $\mu\text{g}/\text{ml}$ dilution.



ARG45564 anti-Cofilin antibody WB image

Western blot: COS-7 stained with ARG45564 anti-Cofilin antibody at 0.5 µg/ml dilution.