10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CFL1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2905c

Product Information

Application	WB, FC, E
Primary Accession	P23528
Other Accession	Q5XHH8, Q5G6V9, P45591, Q9Y281, P21566, Q148F1, P45592, P10668, P18760, Q4R5C0, Q5E9F7
Reactivity	Human, Mouse
Predicted	Bovine, Monkey, Pig, Rat, Chicken, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23947
Calculated MW	18502
Antigen Region	70-98

Additional Information

Gene ID	1072
Other Names	Cofilin-1, 18 kDa phosphoprotein, p18, Cofilin, non-muscle isoform, CFL1, CFL
Target/Specificity	This CFL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 70-98 amino acids from the Central region of human CFL1.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CFL1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CFL1
Synonyms	CFL

Function	Binds to F-actin and exhibits pH-sensitive F-actin depolymerizing activity (PubMed:11812157). In conjunction with the subcortical maternal complex (SCMC), plays an essential role for zygotes to progress beyond the first embryonic cell divisions via regulation of actin dynamics (PubMed:15580268). Required for the centralization of the mitotic spindle and symmetric division of zygotes (By similarity). Plays a role in the regulation of cell morphology and cytoskeletal organization in epithelial cells (PubMed:21834987). Required for the up-regulation of atypical chemokine receptor ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation (PubMed:23633677). Required for neural tube morphogenesis and neural crest cell migration (By similarity).
Cellular Location	Nucleus matrix. Cytoplasm, cytoskeleton. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium {ECO:0000250|UniProtKB:P18760}. Cell projection, growth cone {ECO:0000250|UniProtKB:P18760}. Cell projection, axon {ECO:0000250|UniProtKB:P18760}. Note=Colocalizes with the actin cytoskeleton in membrane ruffles and lamellipodia. Detected at the cleavage furrow and contractile ring during cytokinesis. Almost completely in nucleus in cells exposed to heat shock or 10% dimethyl sulfoxide
Tissue Location	Widely distributed in various tissues.

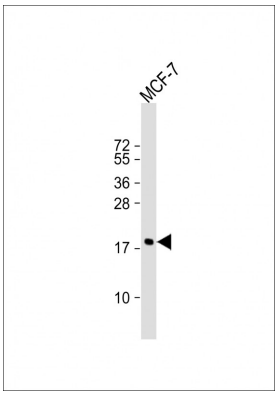
Background

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.

References

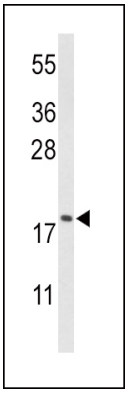
Fazal,F., et.al., J. Biol. Chem. 284 (31), 21047-21056 (2009)

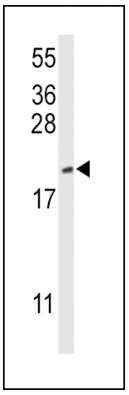
Images



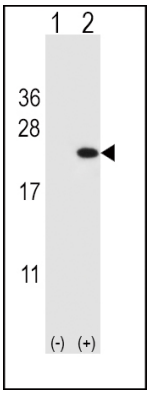
Anti-CFL1 Antibody (Center) at 1:1000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of CFL1 Antibody (Center) (Cat. #AP2905c) in HL-60 cell line lysates (35ug/lane). CFL1 (arrow) was detected using the purified Pab;

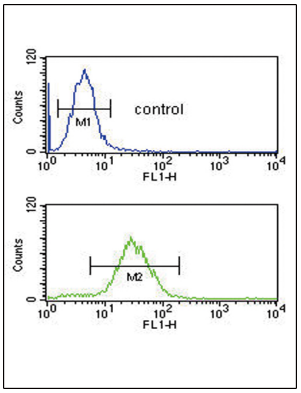




Western blot analysis of CFL1 Antibody (Center) (Cat. #AP2905c) in mouse NIH-3T3 cell line lysates (35ug/lane). CFL1 (arrow) was detected using the purified Pab.



Western blot analysis of CFL1 (arrow) using rabbit polyclonal CFL1 Antibody (Center) (Cat. #AP2905c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CFL1 gene.



CFL1 Antibody (Center) (Cat. #AP2905c) flow cytometric analysis of HL-60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.