

CFL2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14117a

Product Information

Application IHC-P, WB, E Primary Accession Q9Y281

Other Accession <u>05G6V9</u>, <u>P45591</u>, <u>0148F1</u>, <u>NP 619579.1</u>, <u>NP 068733.1</u>

Reactivity Human

Predicted Bovine, Mouse, Pig

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB34119Calculated MW18737Antigen Region25-54

Additional Information

Gene ID 1073

Other Names Cofilin-2, Cofilin, muscle isoform, CFL2

Target/Specificity This CFL2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 25-54 amino acids from the N-terminal

region of human CFL2.

Dilution IHC-P~~1:100~500 WB~~1:1000 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 CFL2 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name CFL2

Function Controls reversibly actin polymerization and depolymerization in a

pH-sensitive manner. Its F-actin depolymerization activity is regulated by association with CSPR3 (PubMed: 19752190). It has the ability to bind G- and

F-actin in a 1:1 ratio of cofilin to actin. It is the major component of intranuclear and cytoplasmic actin rods. Required for muscle maintenance. May play a role during the exchange of alpha-actin forms during the early postnatal remodeling of the sarcomere (By similarity).

Cellular Location Nucleus matrix. Cytoplasm, cytoskeleton. Note=Colocalizes with CSPR3 in the

Z line of sarcomeres.

Tissue Location Isoform CFL2b is expressed predominantly in skeletal muscle and heart.

Isoform CFL2a is expressed in various tissues

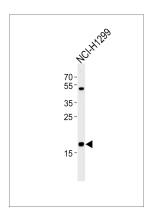
Background

This gene encodes an intracellular protein that is involved in the regulation of actin-filament dynamics. This protein is a major component of intranuclear and cytoplasmic actin rods. It can bind G- and F-actin in a 1:1 ratio of cofilin to actin, and it reversibly controls actin polymerization and depolymerization in a pH-dependent manner. Mutations in this gene cause nemaline myopathy type 7, a form of congenital myopathy. Alternative splicing results in multiple transcript variants.

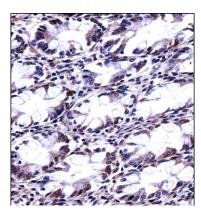
References

Vogel, S., et al. J. Biol. Chem. 285(44):33756-33763(2010) Borensztajn, K., et al. Thromb. Res. 125 (6), E323-E328 (2010): Papalouka, V., et al. Mol. Cell. Biol. 29(22):6046-6058(2009) Wu, Y., et al. Retrovirology 5, 95 (2008): Agrawal, P.B., et al. Am. J. Hum. Genet. 80(1):162-167(2007)

Images



Western blot analysis of lysate from NCI-H1299 cell line, using CFL2 Antibody (N-term)(Cat. #AP14117a). AP14117a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



CFL2 Antibody (N-term) (AP14117a)immunohistochemistry analysis in formalin fixed and paraffin embedded human rectum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CFL2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.