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CFL2 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant CFL2.
Catalog # AT1507a

Product Information

Application	WB, IHC, IF, E
Primary Accession	Q9Y281
Other Accession	NM_021914
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	6G9
Calculated MW	18737

Additional Information

Gene ID	1073
Other Names	Cofilin-2, Cofilin, muscle isoform, CFL2
Target/Specificity	CFL2 (NP_068733, 57 a.a. ~ 166 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CFL2 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

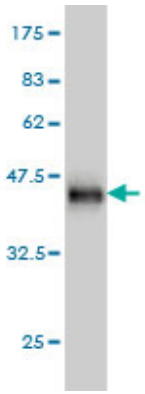
This gene encodes an intracellular protein that is involved in the regulation of actin-filament dynamics. This protein is a major component of intranuclear and cytoplasmic actin rods. It can bind G- and F-actin in a 1:1 ratio of cofilin to actin, and it reversibly controls actin polymerization and depolymerization 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

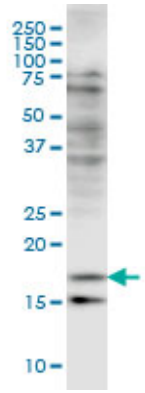
Muscle LIM protein interacts with cofilin 2 and regulates F-actin dynamics in cardiac and skeletal muscle. Papalouka V, et al. Mol Cell Biol, 2009 Nov. PMID 19752190.Cofilin activation in peripheral CD4 T cells of

HIV-1 infected patients: a pilot study. Wu Y, et al. Retrovirology, 2008 Oct 17. PMID 18928553.Nemaline myopathy with minicores caused by mutation of the CFL2 gene encoding the skeletal muscle actin-binding protein, cofilin-2. Agrawal PB, et al. Am J Hum Genet, 2007 Jan. PMID 17160903.Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.Cofilin cross-bridges adjacent actin protomers and replaces part of the longitudinal F-actin interface. Kudryashov DS, et al. J Mol Biol, 2006 May 5. PMID 16530787.

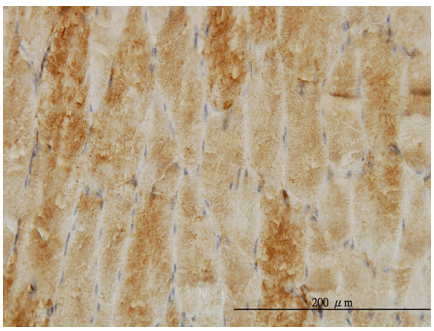
Images



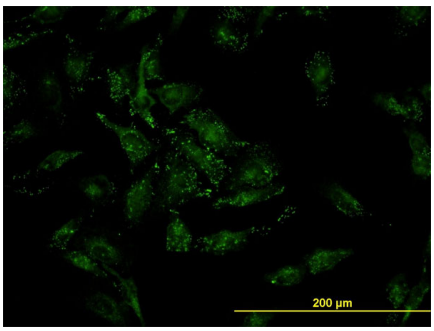
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



CFL2 monoclonal antibody (M03), clone 6G9 Western Blot analysis of CFL2 expression in HeLa ((Cat # AT1507a)

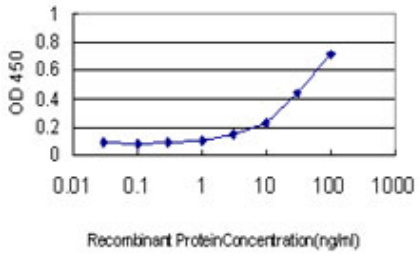


Immunoperoxidase of monoclonal antibody to CFL2 on formalin-fixed paraffin-embedded human skeletal muscle. [antibody concentration 8 ug/ml]



Immunofluorescence of monoclonal antibody to CFL2 on HeLa cell. [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged CFL2 is approximately 1ng/ml as a capture antibody.



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