

Goat Anti-Cofilin 2 (muscle) Antibody
Peptide-affinity purified goat antibody
Catalog # AF1259a

Specification

Goat Anti-Cofilin 2 (muscle) Antibody - Product Information

Application	WB
Primary Accession	O9Y281
Other Accession	NP_619579 , 1073
Reactivity	Human, Mouse, Rat
Predicted	Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	18737

Goat Anti-Cofilin 2 (muscle) Antibody - Additional Information

Gene ID 1073

Other Names

Cofilin-2, Cofilin, muscle isoform, CFL2

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-Cofilin 2 (muscle) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Cofilin 2 (muscle) Antibody - 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](http://www.uniprot.org/citations/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

Goat Anti-Cofilin 2 (muscle) Antibody - Protocols

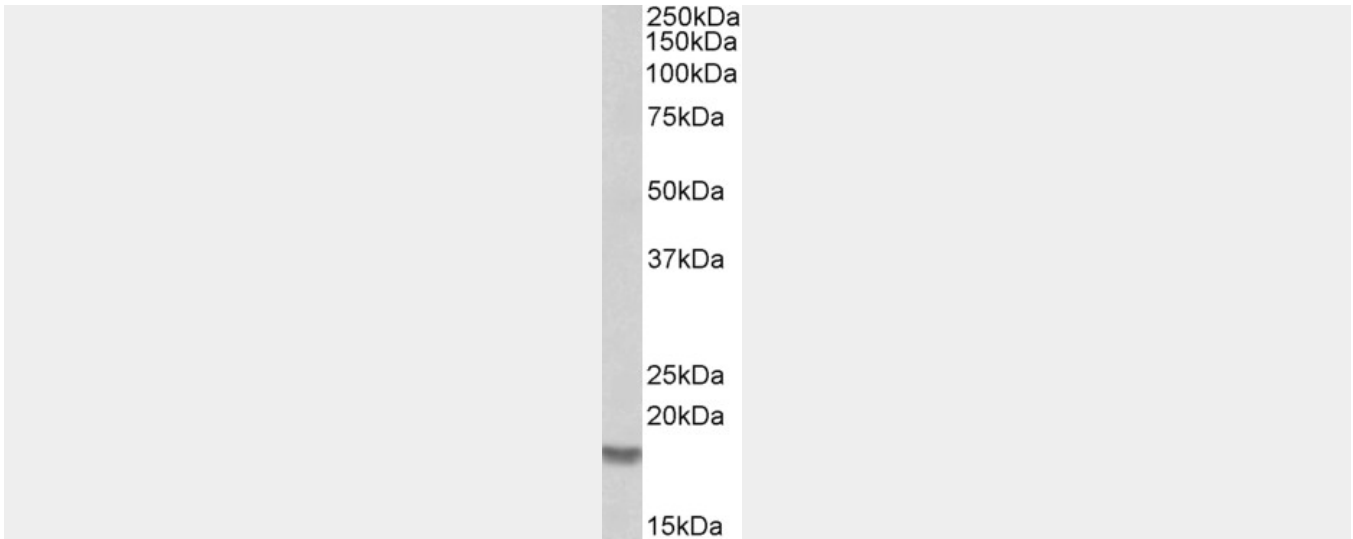
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

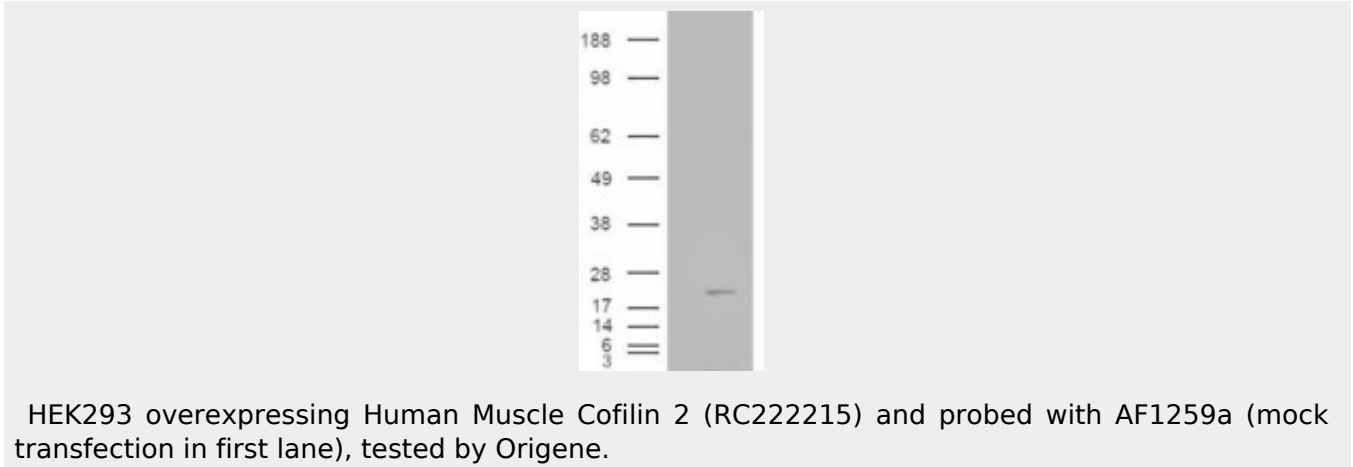
Goat Anti-Cofilin 2 (muscle) Antibody - Images



AF1259a (0.003 $\mu\text{g/ml}$) staining of Human Skeletal Muscle lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1259a (0.001 µg/ml) staining of Rat Skeletal Muscle lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



HEK293 overexpressing Human Muscle Cofilin 2 (RC222215) and probed with AF1259a (mock transfection in first lane), tested by Origene.

Goat Anti-Cofilin 2 (muscle) Antibody - 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.

Goat Anti-Cofilin 2 (muscle) Antibody - 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.