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## Summary

<b>Production Name</b>	Actinin- $\alpha$ 2/3 Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IF,IHC,WB,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	ACTN2/ACTN3
<b>Alternative Names</b>	ACTN2; Alpha-actinin-2; Alpha-actinin skeletal muscle isoform 2; F-actin cross-linking protein; ACTN3; Alpha-actinin-3; Alpha-actinin skeletal muscle isoform 3; F-actin cross-linking protein
<b>Gene ID</b>	88/89
<b>SwissProt ID</b>	P35609/Q08043.The antiserum was produced against synthesized peptide derived from human Actinin alpha-2/3. AA range:31-80

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
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**Molecular Weight**      103kD

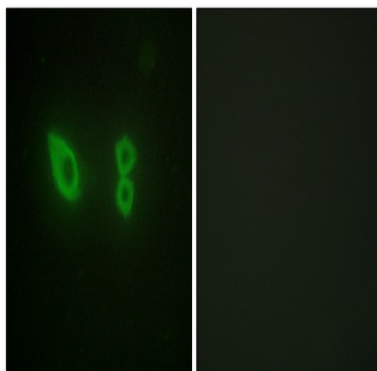
## Background

Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. This gene encodes a muscle-specific, alpha actinin isoform that is expressed in both skeletal and cardiac muscles. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013],disease:Defects in ACTN2 are the cause of cardiomyopathy dilated type 1AA (CMD1AA) [MIM:612158]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.,function:F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.,similarity:Belongs to the alpha-actinin family.,similarity:Contains 1 actin-binding domain.,similarity:Contains 2 CH (calponin-homology) domains.,similarity:Contains 2 EF-hand domains.,similarity:Contains 4 spectrin repeats.,subcellular location:Colocalizes with MYOZ1 and FLNC at the Z-lines of skeletal muscle.,subunit:Homodimer; antiparallel. Also forms heterodimers with ACTN3. Interacts with ADAM12, MYOZ1, MYOZ2 and MYOZ3. Interacts via its C-terminal region with the LDB3 PDZ domain. Interacts with XIRP2.,tissue specificity:Expressed in both skeletal and cardiac muscle.,

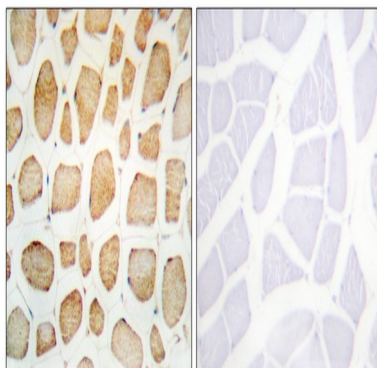
## Research Area

Focal adhesion;Adherens\_Junction;Adherens\_Junction;Leukocyte transendothelial migration;Regulates Actin and Cytoskeleton;Systemic lupus erythematosus;Arrhythmogenic right ventricular cardiomyopathy (ARVC);

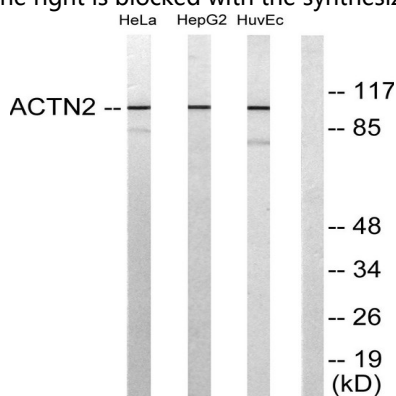
## Image Data



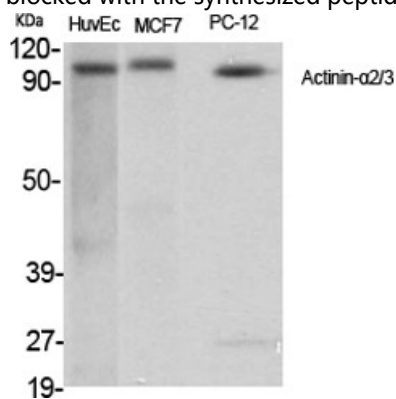
Immunofluorescence analysis of HeLa cells, using Actinin alpha-2/3 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue, using Actinin alpha-2/3 Antibody. The picture on the right is blocked with the synthesized peptide.

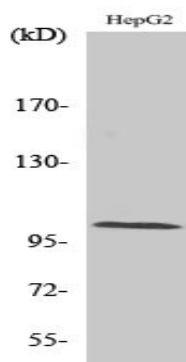


Western blot analysis of lysates from HepG2, HeLa, and HUVEC cells, using Actinin alpha-2/3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Actinin- $\alpha$ 2/3 Polyclonal Antibody

Product Name: Actinin- $\alpha$ 2/3 Rabbit Polyclonal Antibody  
Catalog #: APRab06548



Western Blot analysis of HepG2 cells using Actinin- $\alpha$ 2/3 Polyclonal Antibody

### Note

For research use only.