

For Research Use Only

# Alpha Actinin Polyclonal antibody

Catalog Number: 11313-2-AP

Featured Product

38 Publications



## Basic Information

**Catalog Number:**

11313-2-AP

**Size:**

150ul, Concentration: 600 ug/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG1859

**GenBank Accession Number:**

BC015766

**GeneID (NCBI):**

87

**UNIPROT ID:**

P12814

**Full Name:**

actinin, alpha 1

**Calculated MW:**

103 kDa

**Observed MW:**

100-105 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:2000-1:10000

IHC 1:50-1:500

IF-P 1:200-1:2000

IF/ICC 1:50-1:500

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA

**Cited Applications:**

WB, IHC, IF

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse, rat

**Positive Controls:**

**WB:** NIH/3T3 cells, HeLa cells, mouse spleen tissue, rat heart tissue, C6 cells

**IHC:** human heart tissue, human colon tissue

**IF-P:** rat heart tissue, mouse heart tissue, mouse skeletal muscle tissue

**IF/ICC:** HSkMC cells,

**Note-IHC:** suggested antigen retrieval with **TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Alpha Actinins are highly conserved actin-binding proteins that form antiparallel homodimers with the actin-binding domains on each end of the molecule, allowing crosslinking of actin molecules. There are four alpha actinin isoforms identified: two ubiquitously expressed cytoskeletal isoforms (ACTN1 and ACTN4) and two striated muscle-specific sarcomeric isoforms (ACTN2 and ACTN3). ACTN1 is also alternatively spliced to form smooth muscle or brain specific isoforms. This antibody recognize endogenous ACTN1, while it may cross-react with ACTN2 and ACTN4.

## Notable Publications

Author	Pubmed ID	Journal	Application
Georgios Kremastiotis	34848763	Sci Rep	IF
Yue-Wei Yu	36387933	Mediators Inflamm	WB
Jie Ren	34804049	Front Immunol	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

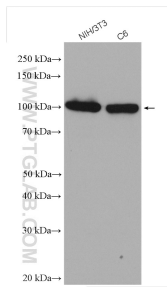
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

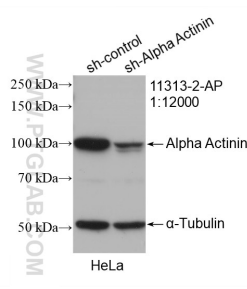
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

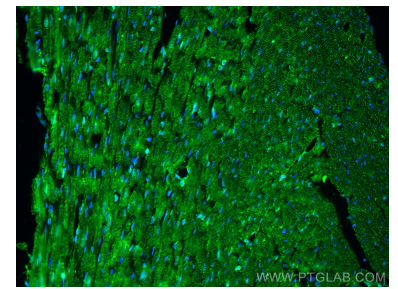
## Selected Validation Data



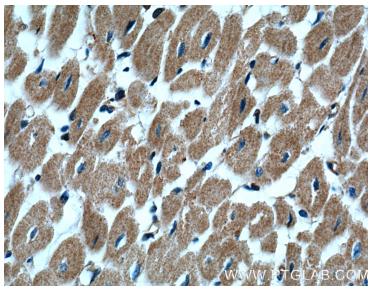
Various lysates were subjected to SDS PAGE followed by western blot with 11313-2-AP (Alpha Actinin antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



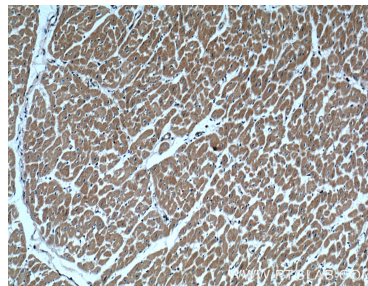
WB result of Alpha Actinin antibody (11313-2-AP; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Alpha Actinin transfected HeLa cells.



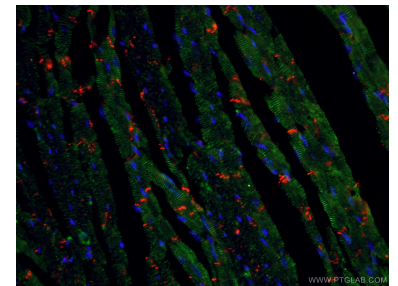
Immunofluorescent analysis of (4% PFA) fixed rat heart tissue using Alpha Actinin antibody (11313-2-AP) at dilution of 1:200 and Coralite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



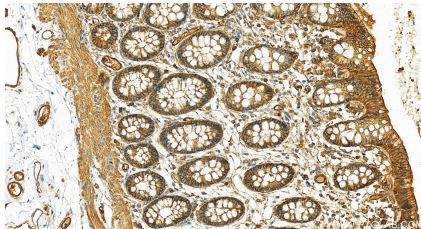
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 11313-2-AP (alpha Actinin antibody) at dilution of 1:200 (under 40x lens).



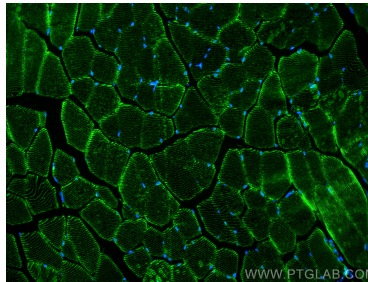
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 11313-2-AP (alpha Actinin antibody) at dilution of 1:200 (under 10x lens).



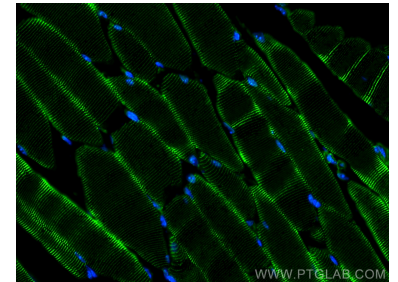
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 11313-2-AP (alpha Actinin antibody) at dilution of 1:50 and Coralite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). The section was co-stained with 66219-1-Ig (N-cadherin) in red.



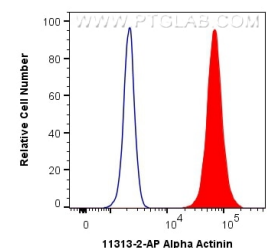
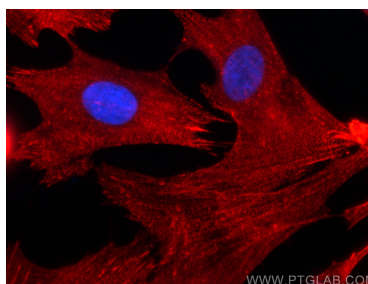
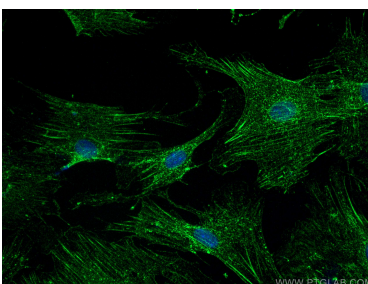
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 11313-2-AP (Alpha Actinin antibody) at dilution of 1:1600 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse skeletal muscle tissue using Alpha Actinin antibody (11313-2-AP) at dilution of 1:200 and Multi-rAb Coralite @ Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse skeletal muscle tissue using Alpha Actinin antibody (11313-2-AP) at dilution of 1:200 and Multi-rAb Coralite @ Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed mouse heart tissue using Alpha Actinin antibody (11313-2-AP) at dilution of 1:500 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunofluorescent analysis of (-20°C Ethanol) fixed HSkMC cells using Alpha Actinin antibody (11313-2-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).

1X10<sup>6</sup> A431 cells were intracellularly stained with 0.4 ug Anti-Human Alpha Actinin (11313-2-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).