

For Research Use Only

# Alpha Actinin Monoclonal antibody

Catalog Number: 66895-1-Ig **7 Publications**



## Basic Information

<b>Catalog Number:</b> 66895-1-Ig	<b>GenBank Accession Number:</b> BC015766	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1500 ug/ml by 87 Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> P12814	<b>CloneNo.:</b> 1E2E1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P12814	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:500-1:2000 IF/ICC: 1:200-1:800 FC (Intra): 0.40 ug per 10 <sup>6</sup> cells in a 100 µl suspension
<b>Isotype:</b> IgG2b	<b>Full Name:</b> actinin, alpha 1	
<b>Immunogen Catalog Number:</b> AG28383	<b>Calculated MW:</b> 103 kDa	
	<b>Observed MW:</b> 100-105 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b> <b>WB :</b> HeLa cells, RAW 264.7 cells, HEK-293 cells, pig brain tissue, HepG2 cells, Jurkat cells, HSC-T6 cells, rabbit brain tissue <b>IHC :</b> mouse heart tissue, <b>IF/ICC :</b> C2C12 cells, <b>FC (Intra) :</b> A431 cells,
<b>Cited Applications:</b> WB, IF	
<b>Species Specificity:</b> human, mouse, rat, pig, rabbit	
<b>Cited Species:</b> human, mouse, rat, mosquito	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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
Jialu Qiao	34826589	Cell Signal	WB
Zequn Zheng	35873575	Front Pharmacol	IF
Jiayu Ren	39158709	Cell Mol Life Sci	IF

## Storage

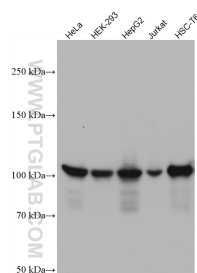
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

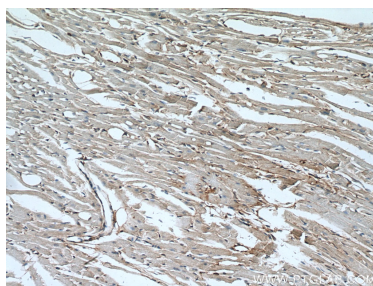
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

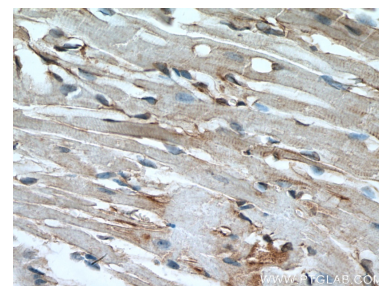
## Selected Validation Data



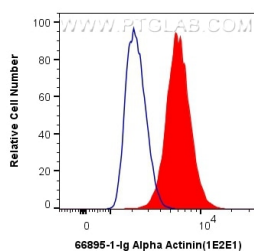
Various lysates were subjected to SDS PAGE followed by western blot with 66895-1-Ig (α-Actinin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



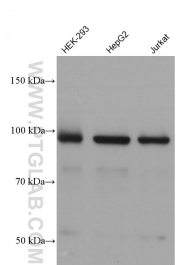
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66895-1-Ig (α-Actinin antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



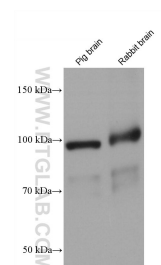
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66895-1-Ig (α-Actinin antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



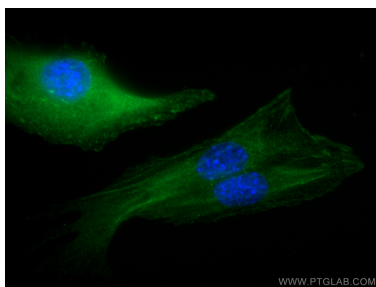
1X10<sup>6</sup> A431 cells were intracellularly stained with 0.4 ug Anti-Human Alpha Actinin (66895-1-Ig, Clone:1E2E1) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2b Isotype Control (MPC-11) (65128-1-Ig, Clone: MPC-11) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 66895-1-Ig (Alpha Actinin antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 66895-1-Ig (Alpha Actinin antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed C2C12 cells using Alpha Actinin antibody (66895-1-Ig, Clone: 1E2E1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).