

For Research Use Only

Alpha Actinin Monoclonal antibody

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



Basic Information

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

Applications

Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls: WB : HeLa cells, RAW 264.7 cells, HEK-293 cells, HepG2 cells, Jurkat cells, HSC-T6 cells
Cited Applications: WB, IF	IHC : mouse heart tissue,
Species Specificity: Human, rat, mouse	IF/ICC : C2C12 cells,
Cited Species: human, mouse, rat, mosquito	FC (Intra) : A431 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
Jialu Qiao	34826589	Cell Signal	WB
Zequn Zheng	35873575	Front Pharmacol	IF
Jiayu Ren	39158709	Cell Mol Life Sci	IF

Storage

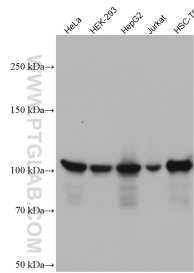
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

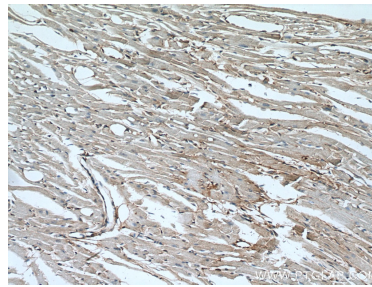
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

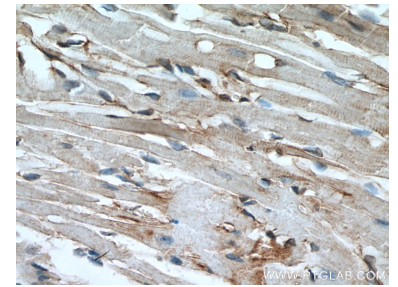
Selected Validation Data



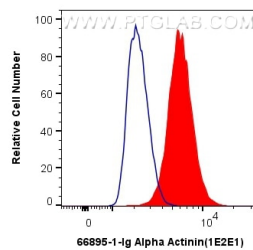
Various lysates were subjected to SDS PAGE followed by western blot with 66895-1-Ig (α-Actinin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



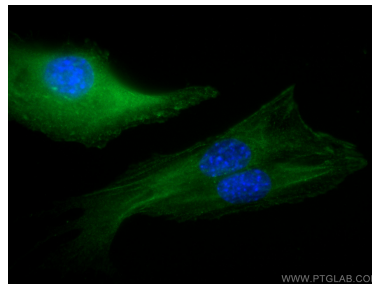
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66895-1-Ig (α-Actinin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1X10⁶ A431 cells were intracellularly stained with 0.4 ug Anti-Human Alpha Actinin (66895-1-Ig, Clone:1E2E1) and CoraLite®488-Conjugated 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).



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 Goat Anti-Mouse IgG(H+L).