

Alpha Actinin Monoclonal antibody

Catalog Number: 66895-1-Ig 4 Publications

Basic Information

Catalog Number:

66895-1-Ig

Size:

1500 µg/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG28383

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:

Protein A purification

CloneNo.:

1E2E1

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:500-1:2000

IF 1:200-1:800

Applications

Tested Applications:

FC, IF/ICC, IHC, WB, ELISA

Cited Applications:

WB, IF

Species Specificity:

Human, rat, mouse

Cited Species:

human, rat, mosquito, mouse

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

Positive Controls:

WB : HeLa cells, RAW 264.7 cells, HEK-293 cells, HepG2 cells, Jurkat cells, HSC-T6 cells

IHC : mouse heart tissue,

IF : C2C12 cells,

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 |
| Sarah Engelbeen | 38010230 | Nucleic Acid Ther | 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

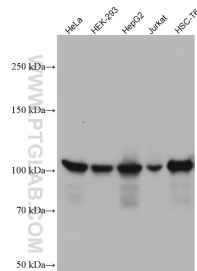
For technical support and original validation data for this product please contact:

T: 4006900926

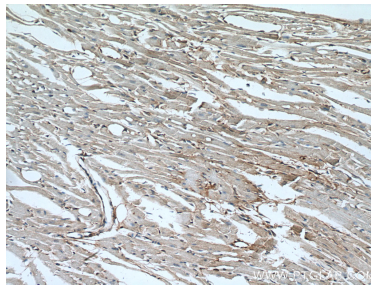
E: Proteintech-CN@ptglab.comW: ptgcn.com

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

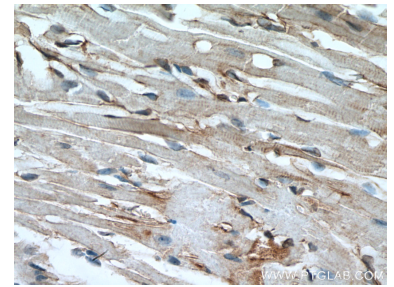
Selected Validation Data



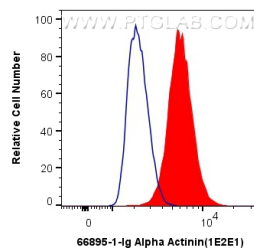
Various lysates were subjected to SDS PAGE followed by western blot with 66895-1-Ig (α-Actinin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



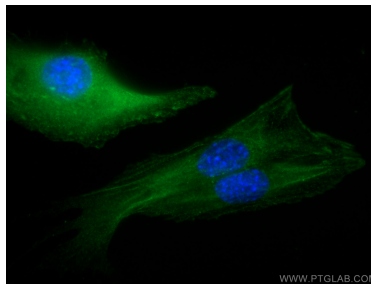
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66895-1-Ig (α-Actinin antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0)).



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 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).



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).