For Research Use Only

Alpha Actinin Polyclonal antibody

Catalog Number: 11313-2-AP

Featured Product

27 Publications



Basic Information

Catalog Number: 11313-2-AP

GenBank Accession Number:

BC015766

GeneID (NCBI): Size:

 $600 \mu g/ml$

Source: Full Name: Rabbit actinin, alpha 1 Calculated MW: Isotype: 103 kDa

Observed MW: Immunogen Catalog Number:

AG1859 100-105 kDa **Purification Method:**

Antigen affinity purification

Recommended Dilutions: WB 1:2000-1:10000 IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

FC, IF, IHC, WB, ELISA

Cited Applications: IF. IHC. WB

Species Specificity:

human, mouse, rat

Cited Species: human, rat, 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: NIH/3T3 cells, HeLa cells, mouse spleen tissue, rat

heart tissue. C6 cells

IHC: human heart tissue,

IF: rat heart tissue, mouse heart tissue

Background Information

Alpha Actinins are highly conserved actin-binding proteins that form antiparallel homodimers with the actinbinding 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 musclespecific 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

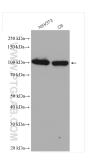
Storage:

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

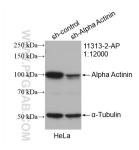
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

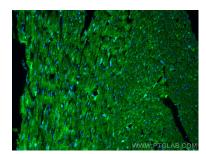
Selected Validation Data



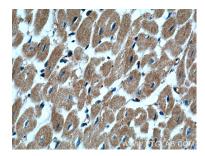
Various lysates were subjected to SDS PAGE followed by western blot with 11313-2-AP (Alpha Actinin antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



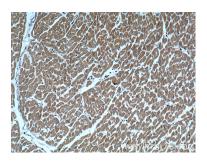
WB result of Alpha Actinin antibody (11313-2-AP; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Alpha Actinin transfected Hela cells.



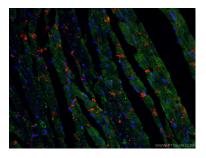
Immunofluorescent analysis of (4% PFA) fixed rat heart tissue using Alpha Actinin antibody (11313-2-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



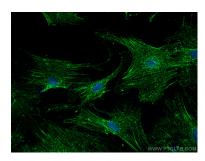
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 11313-2-AP (alpha Actinin antibody at dilution of 1:200 (under 40x lens).



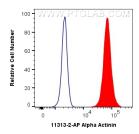
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 11313-2-AP (alpha Actinin antibody at dilution of 1:200 (under 10x lens).



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.



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).



1X10^6 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).