For Research Use Only

Alpha Actinin Polyclonal antibody

Catalog Number: 11313-2-AP

Featured Product

27 Publications



Basic Information

Catalog Number: GenBank Accession Number:

11313-2-AP BC015766
Size: GeneID (NCBI):

150ul, Concentration: 600 µg/ml by 87

Nanodrop; Full Name:
Source: actinin, alpha 1
Rabbit Calculated MW:
Isotype: 103 kDa
IgG Observed MW:
Immunogen Catalog Number: 100-105 kDa

AG1859

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 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.

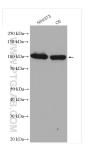
Storage Buffer

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

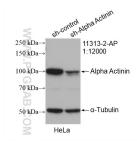
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

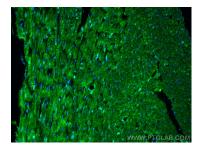
Selected Validation Data



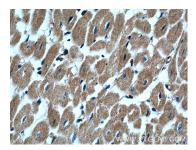
Various lysates were subjected to SDS PAGE followed by western blot with 11313-2-AP (Alpha Actinin antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



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.



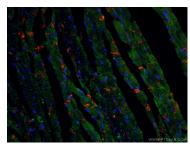
Immunofluorescent analysis of (4% PFA) fixed rat heart tissue using Alpha Actinin antibody (11313-2-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



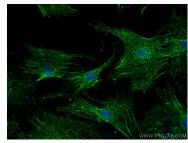
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 11313-2-AP (alpha Actinin antibody at dilution of 1:200 (under 40x lens).



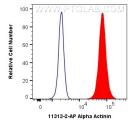
Immunohistochemical analysis of paraffinembedded human heart tissue slide using 11313-2-AP (alpha Actinin antibody at dilution of 1:200 (under 10x lens).



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 1gG(H+L). The section was co-stained with 66219-1-1g (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).