

**Product Name: a-actinin(4A12)Mouse Monoclonal Antibody**  
**Catalog #: AMM06376**

---



## Summary

|                        |                                          |
|------------------------|------------------------------------------|
| <b>Production Name</b> | a-actinin(4A12)Mouse Monoclonal Antibody |
| <b>Description</b>     | Mouse monoclonal Antibody                |
| <b>Host</b>            | Mouse                                    |
| <b>Application</b>     | WB,IHC,ICC/IF                            |
| <b>Reactivity</b>      | Human,Rat,Mouse                          |

## Performance

|                     |                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------|
| <b>Conjugation</b>  | Unconjugated                                                                                      |
| <b>Modification</b> | Unmodified                                                                                        |
| <b>Isotype</b>      | IgG                                                                                               |
| <b>Clonality</b>    | Monoclonal                                                                                        |
| <b>Form</b>         | Liquid                                                                                            |
| <b>Storage</b>      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.          |
| <b>Buffer</b>       | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| <b>Purification</b> | Affinity purification                                                                             |

## Immunogen

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| <b>Gene Name</b>         | ACTN1                                            |
| <b>Alternative Names</b> | ACTN1                                            |
| <b>Gene ID</b>           | 87.0                                             |
| <b>SwissProt ID</b>      | P12814.Recombinant Protein of a-actinin of ACTN1 |

## Application

|                         |                                                    |
|-------------------------|----------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:500-1:2000,IHC 1:100-1:500,ICC/IF 1:100-1:500 |
| <b>Molecular Weight</b> | 103kDa                                             |

**Product Name: a-actinin(4A12)Mouse Monoclonal Antibody**  
**Catalog #: AMM06376**



---

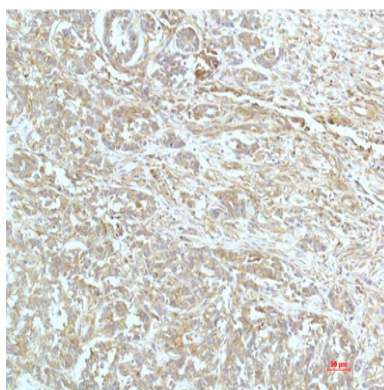
## Background

Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. This gene encodes a nonmuscle, cytoskeletal, alpha actinin isoform and maps to the same site as the structurally similar erythroid beta spectrin gene. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],function:F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.,similarity:Belongs to the alpha-actinin family.,similarity:Contains 1 actin-binding domain.,similarity:Contains 2 CH (calponin-homology) domains.,similarity:Contains 2 EF-hand domains.,similarity:Contains 4 spectrin repeats.,subcellular location:Colocalizes with MYOZ2 and PPP3CA at the Z-line of heart and skeletal muscle.,subunit:Homodimer; antiparallel. Interacts with DDN, MYOZ2, PDLIM2, TTID and LPP.,

## Research Area

Focal adhesion;Adherens\_Junction;Adherens\_Junction;Leukocyte transendothelial migration;Regulates Actin and Cytoskeleton;Systemic lupus erythematosus;Arrhythmogenic right ventricular cardiomyopathy (ARVC);

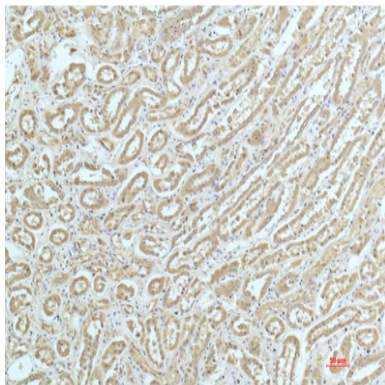
## Image Data



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma Tissue using a-actinin Mouse mAb diluted at 1:200.

**Product Name: a-actinin(4A12)Mouse Monoclonal Antibody**  
**Catalog #: AMM06376**

---



Immunohistochemical analysis of paraffin-embedded Human Kidney Tissue using a-actinin Mouse mAb diluted at 1:200.

**Note**

For research use only.