

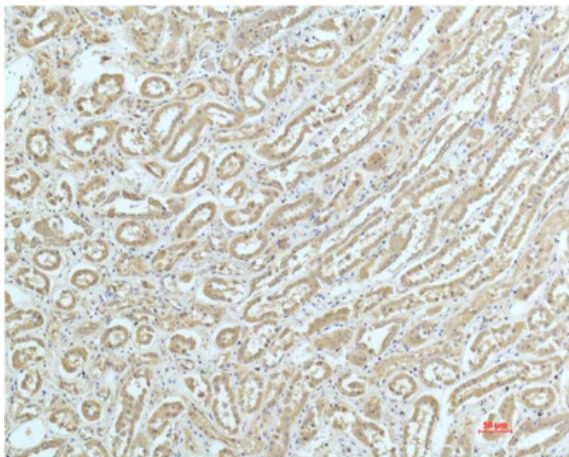
**a-actinin Monoclonal Antibody(4A12)**

<b>Catalog No :</b>	YM3612
<b>Reactivity :</b>	Human;Rat;Mouse
<b>Applications :</b>	WB;IHC;IF
<b>Target :</b>	Actinin- $\alpha$ 1
<b>Fields :</b>	>>Focal adhesion;>>Adherens junction;>>Tight junction;>>Leukocyte transendothelial migration;>>Regulation of actin cytoskeleton;>>Shigellosis;>>Amoebiasis;>>Viral carcinogenesis;>>Systemic lupus erythematosus
<b>Gene Name :</b>	ACTN1
<b>Protein Name :</b>	ACTN1
<b>Human Gene Id :</b>	87
<b>Human Swiss Prot No :</b>	P12814
<b>Mouse Swiss Prot No :</b>	Q7TPR4
<b>Rat Swiss Prot No :</b>	Q9Z1P2
<b>Immunogen :</b>	Recombinant Protein of a-actinin of ACTN1
<b>Specificity :</b>	a-actinin Monoclonal Antibody(4A12) detects endogenous levels of ACTN1
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	IHC 1:200-400, IF ICC 1:200-400, WB 1:500-2000
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.

<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	103kD
<b>Cell Pathway :</b>	Focal adhesion;Adherens Junction;Adherens Junction;Leukocyte transendothelial migration;Regulates Actin and Cytoskeleton;Systemic lupus erythematosus;Arrhythmogenic right ventricular cardiomyopathy (A
<b>Background :</b>	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],
<b>Function :</b>	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.,
<b>Subcellular Location :</b>	Cytoplasm, cytoskeleton . Cytoplasm, myofibril, sarcomere, Z line . Cell membrane . Cell junction . Cell projection, ruffle . Colocalizes with MYOZ2 and PPP3CA at the Z-line of heart and skeletal muscle. Colocalizes with PSD in membrane ruffles and central reticular structures. .
<b>Expression :</b>	Colon,Epithelium,Hepatocyte,Neuroblastoma,Placenta,Platelet,Skin,Tumor of tongue,
<b>Tag :</b>	orthogonal
<b>Sort :</b>	1559
<b>No4 :</b>	1
<b>Host :</b>	Mouse

**Modifications :** Unmodified

## Products Images



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