

Actinin-a1 Polyclonal Antibody

Catalog No: YT0100

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA

Target : Actinin-α1

Fields: >>Focal adhesion;>>Adherens junction;>>Tight junction;>>Leukocyte

transendothelial migration;>>Regulation of actin

cytoskeleton;>>Shigellosis;>>Amoebiasis;>>Viral carcinogenesis;>>Systemic

lupus erythematosus

P12814

Q7TPR4

Gene Name: ACTN1

Protein Name: Alpha-actinin-1

Human Gene Id: 87

Human Swiss Prot

No:

Mouse Gene ld: 109711

Mouse Swiss Prot

No:

Rat Gene Id: 81634

Rat Swiss Prot No: Q9Z1P2

Immunogen: Synthesized peptide derived from Actinin-α1 . at AA range: 1-80

Specificity: Actinin-a1 Polyclonal Antibody detects endogenous levels of Actinin-a1 protein.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.

1/3



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 103kD

Cell Pathway: Focal adhesion; Adherens_Junction; Adherens_Junction; Leukocyte

transendothelial migration; Regulates Actin and Cytoskeleton; Systemic lupus

erythematosus; Arrhythmogenic right ventricular cardiomyopathy (A

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: 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.,

Subcellular Cytoplas Location : membran

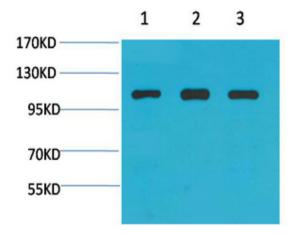
Cytoplasm, cytoskeleton. Cytoplasm, myofibril, sarcomere, Z line. Cell membrane. Cell junction. Cell projection, ruffle. Colocalizes with MYOZ2 and PPP3CA at the Z-line of heart and skeletal muscle. Colocalizes with PSD in

membrane ruffles and central reticular structures. .

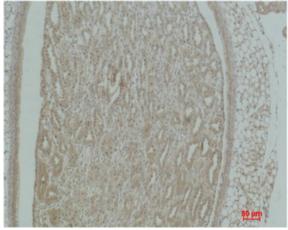
Expression: Colon, Epithelium, Hepatocyte, Neuroblastoma, Placenta, Platelet, Skin, Tumor of

tongue,

Products Images



Western blot analysis of 1) 3T3, 2) PC12, 3) Rat Heart Tissue using Actinin-α1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



 $Immunohistochemical\ analysis\ of\ paraffin-embedded\ Mouse\\ Kidney Tissue\ using\ Actinin- \alpha 1\ Polyclonal\ Antibody.$