

Product Name: Actinin- α 1/2/3/4 Rabbit Polyclonal Antibody
Catalog #: APRab06547

Summary

Production Name	Actinin- α 1/2/3/4 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC
Reactivity	Human,Mouse,Rat

Performance

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

Immunogen

Gene Name	ACTN1/2/3/4 ACTN1; Alpha-actinin-1; Alpha-actinin cytoskeletal isoform; F-actin cross-linking protein; Non-muscle alpha-actinin-1; ACTN2; Alpha-actinin-2; Alpha-actinin skeletal muscle isoform 2; F-actin cross-linking protein; ACTN3; Alpha-actinin-3; A
Alternative Names	
Gene ID	87/88/89/81
SwissProt ID	P12814/P35609/Q08043/O43707.The antiserum was produced against synthesized peptide derived from human ACTN1/2/3/4. AA range:21-70

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000..
Molecular Weight	75kD

Product Name: Actinin- α 1/2/3/4 Rabbit Polyclonal Antibody
Catalog #: APRab06547



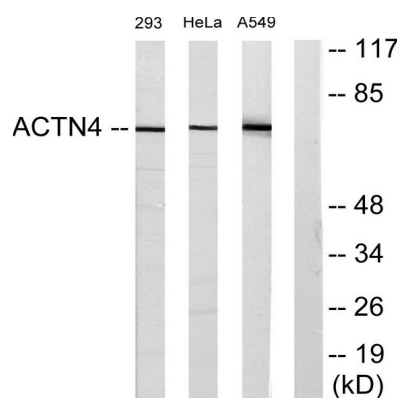
Background

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

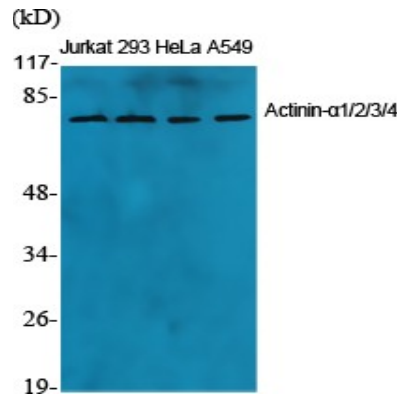
Focal adhesion;Adherens_Junction;Adherens_Junction;Leukocyte transendothelial migration;Regulates Actin and Cytoskeleton;Systemic lupus erythematosus;Arrhythmogenic right ventricular cardiomyopathy (ARVC);

Image Data

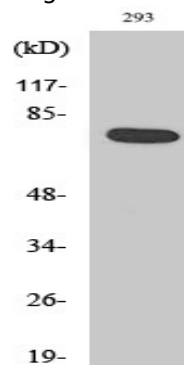


Western blot analysis of lysates from 293, HeLa, and A549 cells, using ACTN1/2/3/4 Antibody. The lane on the right is blocked with the synthesized peptide.

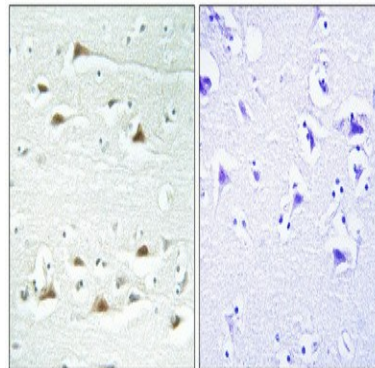
Product Name: Actinin- α 1/2/3/4 Rabbit Polyclonal Antibody
Catalog #: APRab06547



Western Blot analysis of various cells using Actinin- α 1/2/3/4 Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of A549 cells using Actinin- α 1/2/3/4 Polyclonal Antibody diluted at 1: 1000



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4 $^{\circ}$,overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

Note

For research use only.