

Product datasheet for **TA344352**

alpha Actinin (ACTN1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	IHC, WB
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-ACTN1 antibody: synthetic peptide directed towards the N terminal of human ACTN1. Synthetic peptide located within the following region: DHYDSQQTNDYMQPEEDWDRDLLLLDPAWEKQQRKTFTAWCNSHLRKAGTQ
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	103 kDa
Gene Name:	actinin alpha 1
Database Link:	NP_001093 Entrez Gene 81634 Rat Entrez Gene 87 Human P12814



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Background:

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. 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. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.

Synonyms:

BDPLT15

Note:

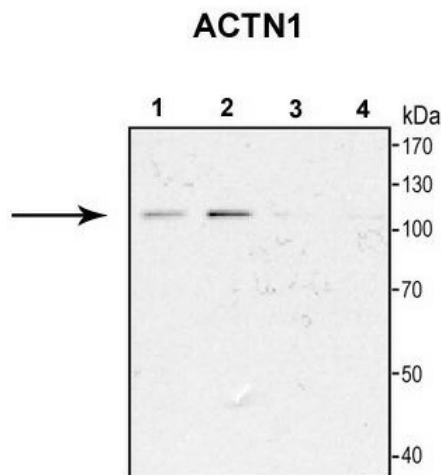
Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Human: 100%; Mouse: 100%; Bovine: 100%; Rabbit: 100%; Guinea pig: 100%; Zebrafish: 85%; Horse: 75%

Protein Families:

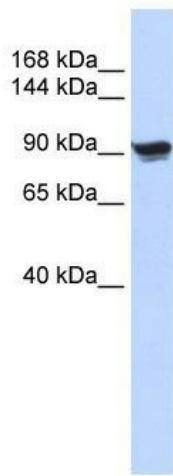
Druggable Genome, ES Cell Differentiation/IPS

Protein Pathways:

Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Systemic lupus erythematosus, Tight junction

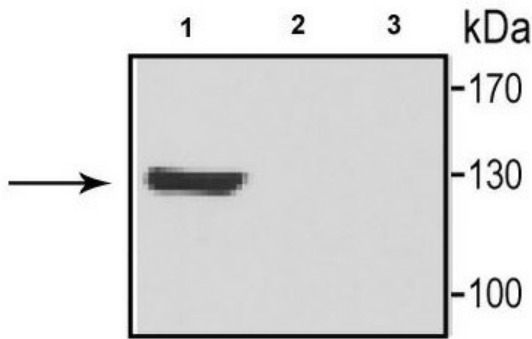
Product images:

ACTN1 antibody - N-terminal region validated by WB using 1.-2.Rat cortical neurons ctr siRNA (30ug); 2. Rat cortical neurons ACTN1 siRNA (30ug) at 1:1000-1:2000.



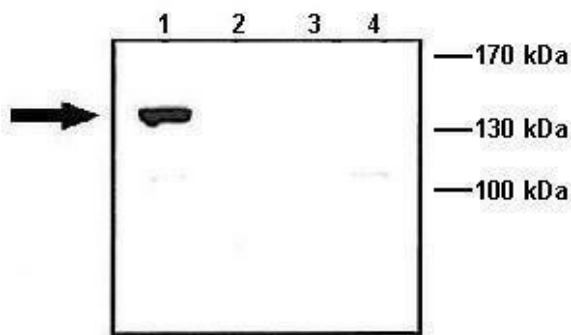
ACTN1

WB Suggested Anti-ACTN1 Antibody Titration:
0.2-1 ug/ml; ELISA Titer: 1:312500; Positive
Control: 293T cell lysate

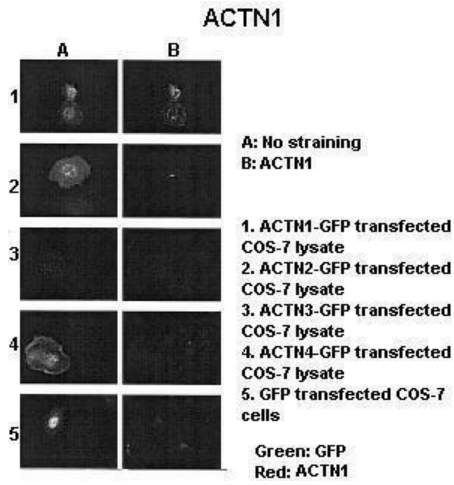


ACTN1

Sample Type: 1.-4. rACTN1-GFP + HEK293 (50ug);
Primary Dilution: 1:1000-1:2000; Secondary
Antibody: HRP conjugated goat anti-rabbit;
Secondary Dilution: 1:20,000; Image Submitted
By: Magdalena Kalinowska; Albert Einstein
College of Medicine??????



Lanes: Lane 1: 10 ug ACTN1-GFP transfected COS-
7 lysate; Lane 2: 10 ug ACTN2-GFP transfected
COS-7 lysate; Lane 3: 10 ug ACTN3-GFP
transfected COS-7 lysate; Lane 4: 10 ug ACTN4-
GFP transfected COS-7 lysate; Primary Antibody
Dilution: 1:1000; Secondary Antibod



Sample Type : ACTNX-GFP transfected COS-7 cells
 Primary Antibody Dilution : 1:1000
 Secondary Antibody : Anti-rabbit-Alexa-Fluor 568
 Secondary Antibody Dilution : 1:100
 Color/Signal Descriptions : Green: GFP Red: ACTN1
 Gene Name : ACTN1
 Submitted by : Johannes W