

## Product datasheet for **TA346070**

### ACTN2 Rabbit Polyclonal Antibody

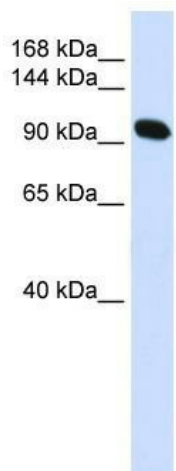
#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	IHC, WB, IF
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-ACTN2 antibody: synthetic peptide directed towards the N terminal of human ACTN2. Synthetic peptide located within the following region: NQIEPGVQYNYVYDEDEYMIQEEWDRDLLLDPAWEKQQRKTFTAWCNSH
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:	104 kDa
Gene Name:	actinin alpha 2
Database Link:	<a href="#">NP_001094</a> <a href="#">Entrez Gene 88 Human</a> <a href="#">P35609</a>

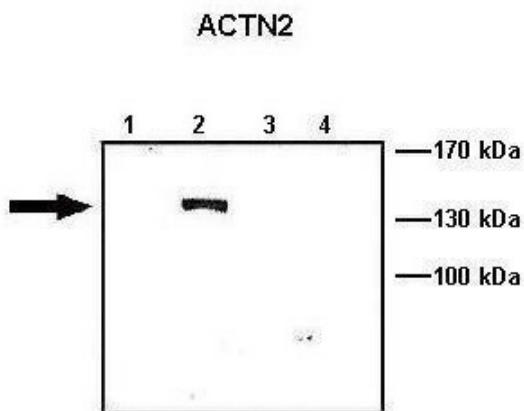


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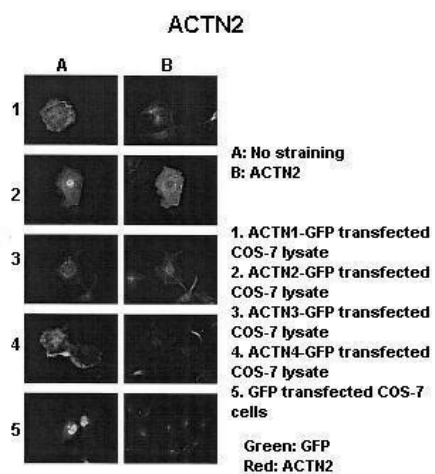
<b>Background:</b>	<p>The alpha-actinins are a multigene family of four actin-binding proteins related to dystrophin. The two skeletal muscle isoforms of alpha-actinin (ACTN2 and ACTN3) are major structural components of the Z-line involved in anchoring the actin-containing thin filaments. In humans, ACTN2 is expressed in all muscle fibres, while ACTN3 expression is restricted to a subset of type 2 fibres. Murine Actn2 and Actn3 are differentially expressed, spatially and temporally, during embryonic development and, in contrast to humans, alpha-actinin-2 expression does not completely overlap alpha-actinin-3 in postnatal skeletal muscle, suggesting independent function. 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 muscle-specific, alpha actinin isoform that is expressed in both skeletal and cardiac muscles. 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. PRIMARYREFSEQ_SPAN PRIMARY_IDENTIFIER PRIMARY_SPAN COMP 1-39 DC378038.1 17-55 40-2961 BC051770.1 1-2922 2962-3458 CB153006.1 65-561 3459-3637 AL359185.25 28531-28709 3638-4210 M86406.1 3609-4181 4211-4528 AL359185.25 29283-29600</p>
<b>Synonyms:</b>	CMD1AA
<b>Note:</b>	Immunogen Sequence Homology: Pig: 100%; Rat: 100%; Human: 100%; Mouse: 100%; Rabbit: 100%; Guinea pig: 100%; Dog: 93%; Horse: 86%; Bovine: 86%
<b>Protein Pathways:</b>	Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Systemic lupus erythematosus, Tight junction

**Product images:**


WB Suggested Anti-ACTN2 Antibody Titration:  
0.2-1 ug/ml; ELISA Titer: 1: 312500; Positive  
Control: Human Muscle



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 Antibody: Anti-rabbit HRP; Secondary Antibody Dilution: 1: 5000; Gene Name: ACTN2; Submitted by: Johannes W. Hell, University of California;



Embedded Tissue: Human Adult Heart