

Datasheet for ABIN2776830
anti-ACTN2 antibody (C-Term)[Go to Product page](#)

4 Images

Overview

Quantity:	100 µL
Target:	ACTN2
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat, Cow, Rabbit, Guinea Pig, Dog, Horse, Zebrafish (Danio rerio)
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ACTN2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the C terminal region of human ACTN2
Sequence:	VIASFRILAS DKPYILAEEL RRELPPDQAQ YCIKRMPAYS GPGSVPGALD
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 100%, Rat: 100%, Zebrafish: 86%
Characteristics:	This is a rabbit polyclonal antibody against ACTN2. It was validated on Western Blot and immunohistochemistry.
Purification:	Protein A purified

Target Details

Target:	ACTN2
---------	-------

Target Details

Alternative Name:	ACTN2 (ACTN2 Products)
Background:	<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. Transcript variants resulting from the use of multiple poly_A sites have been observed.</p> <p>Alias Symbols: CMD1AA</p> <p>Protein Interaction Partner: ACTN2, FAM154A, BRMS1L, MICALL2, MYOZ2, PDLIM3, SP100, SNAI1, MOS, RTP5, SYNPO2, SUMO1, IGSF8, ERBB2IP, CAPN1, ZNF446, RPL35, UBC, NOS3, ACTN1, ACTN4, FBXL22, COIL, SUMO3, ATXN2, KCNA5, LDB3, KCNN2, PSMA3, ITGB3BP, SNW1, MED14, NR1I2, KAT2B, NRIP1, ATXN7,</p> <p>Protein Size: 894</p>
Molecular Weight:	98 kDa
Gene ID:	88
NCBI Accession:	NM_001103 , NP_001094
UniProt:	P35609
Pathways:	Cell-Cell Junction Organization , Skeletal Muscle Fiber Development , Negative Regulation of Transporter Activity

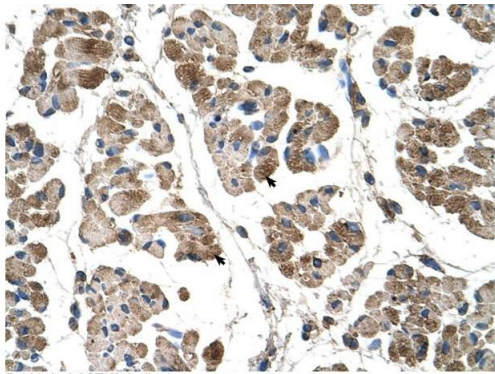
Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 894 AA

Application Details

Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Images



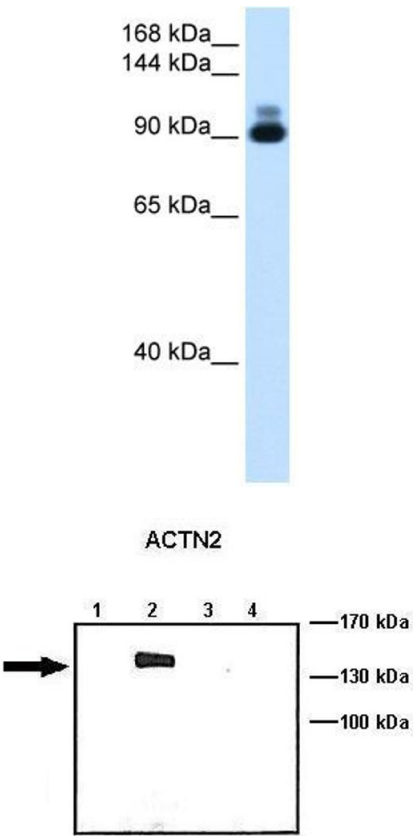
Rabbit Anti-ACTN2 Antibody
Catalog Number: ARP41463
Lot Number: QC12270
Paraffin Embedded Tissue: Human Muscle
Cells with Positive label: Skeletal muscle cells (Indicated with Arrows)
Antibody Concentration: 4.0-8.0 µg/ml
Magnification: 400X

Immunohistochemistry

Image 1. Rabbit Anti-ACTN2 Antibody Paraffin Embedded

Tissue: Human Muscle Cellular Data: Skeletal muscle cells

Antibody Concentration: 4.0-8.0 ug/ml Magnification: 400X



See Immunoblot 2 Data and Customer Feedback for more Information

Western Blotting

Image 2. WB Suggested Anti-ACTN2 Antibody Titration:
1.25ug/ml Positive Control: Human heart

Western Blotting

Image 3. Lanes: Lane1: 10 ug ACTN1-GFP transfected COS-7 lysate Lane2: 10 ug ACTN2-GFP transfected COS-7 lysate Lane3: 10 ug ACTN3-GFP transfected COS-7 lysate Lane4: 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

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN2776830.