



# Rabbit Anti-Human ACTN2 Polyclonal Antibody (CABT-L2036)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Polyclonal Antibody to Actinin Alpha 2 (Knockout Validated)
<b>Specificity</b>	The antibody is a rabbit polyclonal antibody raised against ACTN2. It has been selected for its ability to recognize ACTN2 in immunohistochemical staining and western blotting.
<b>Target</b>	ACTN2
<b>Immunogen</b>	Recombinant fragment corresponding to human ACTN2 (Met1~His254)
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse
<b>Purification</b>	Antigen-specific affinity chromatography followed by Protein A affinity chromatography
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB
<b>Format</b>	Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	200 µg
<b>Buffer</b>	Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.
<b>Preservative</b>	0.05% Proclin-300

<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months.
<b>Ship</b>	4°C with ice bags

## BACKGROUND

<b>Introduction</b>	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. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013]
<b>Keywords</b>	Alpha-actinin skeletal muscle isoform 2;F-actin cross-linking protein

## GENE INFORMATION

<b>Gene Name</b>	ACTN2 actinin, alpha 2 [ Homo sapiens (human) ]
<b>Official Symbol</b>	ACTN2
<b>Synonyms</b>	ACTN2; actinin, alpha 2; CMD1AA; alpha-actinin-2; F-actin cross-linking protein; alpha-actinin skeletal muscle;
<b>Entrez Gene ID</b>	<a href="#">88</a>
<b>Protein Refseq</b>	NP_001094
<b>UniProt ID</b>	<a href="#">P35609</a>
<b>Chromosome Location</b>	1q42-q43
<b>Pathway</b>	Activation of NMDA receptor upon glutamate binding and postsynaptic events; Adherens junction; Amoebiasis; Arrhythmogenic right ventricular cardiomyopathy; Arrhythmogenic right ventricular cardiomyopathy (ARVC); CREB phosphorylation through the activation of CaMKII; CREB phosphorylation through the activation of Ras; Cell-Cell communication;
<b>Function</b>	FATZ binding; LIM domain binding; actin filament binding; calcium ion binding; cytoskeletal protein binding; identical protein binding; integrin binding; ion channel binding; protein binding; protein dimerization activity; structural constituent of muscle; thyroid hormone receptor

coactivator activity; titin Z domain binding; titin binding;

---