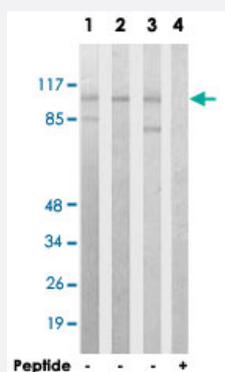


ACTN2/ACTN3 polyclonal antibody

Catalog # PAB17362 Size 100 ug

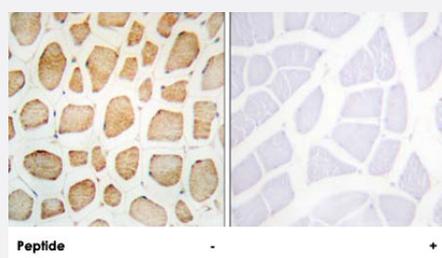
Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from HeLa cells (Lane 1), HepG2 cells (Lane 2) and HUVEC cells (Lane 3 and lane 4), using ACTN2/ACTN3 polyclonal antibody (Cat # PAB17362).

Peptide "+" means "with peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue using ACTN2/ACTN3 polyclonal antibody (Cat # PAB17362).

Peptide "+" means "with peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACTN2/ACTN3.
Immunogen	A synthetic peptide corresponding to N-terminus of human ACTN2/ACTN3.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody detects endogenous levels of total ACTN2/ACTN3 protein.
Form	Liquid

Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) Immunofluorescence (1:500-1:1000) ELISA (1:20000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (150mM NaCl, 0.02% sodium azide, 50% glycerol)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from HeLa cells (Lane 1), HepG2 cells (Lane 2) and HUVEC cells (Lane 3 and lane 4), using ACTN2/ACTN3 polyclonal antibody (Cat # PAB17362).

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- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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Gene Info — ACTN2

Entrez GeneID	88
Protein Accession#	P35609 (Gene ID : 88);Q08043 (Gene ID : 89)
Gene Name	ACTN2
Gene Alias	CMD1AA
Gene Description	actinin, alpha 2
Omim ID	102573
Gene Ontology	Hyperlink

Gene Summary

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. [provided by RefSeq]

Other Designations

F-actin cross-linking protein|OTTHUMP00000037963|alpha-actinin skeletal muscle

Gene Info — ACTN3

Entrez GeneID

[89](#)

Protein Accession#

[P35609 \(Gene ID : 88\);Q08043 \(Gene ID : 89\)](#)

Gene Name

ACTN3

Gene Alias

MGC117002, MGC117005

Gene Description

actinin, alpha 3

Omim ID

[102574](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

Alpha-actinin is an actin-binding protein with multiple roles in different cell types. This gene expression is limited to skeletal muscle. It is localized to the Z-disc and analogous dense bodies, where it helps to anchor the myofibrillar actin filaments [provided by RefSeq]

Other Designations

-

Publication Reference

- [Fine mapping and genomic structure of ACTN2, the human gene coding for the sarcomeric isoform of alpha-actinin-2, expressed in skeletal and cardiac muscle.](#)

Tiso N, Majetti M, Stanchi F, Rampazzo A, Zimbello R, Nava A, Danieli GA.

Biochemical and Biophysical Research Communications 1999 Nov; 265(1):256.

- [ZASP: a new Z-band alternatively spliced PDZ-motif protein.](#)

Faulkner G, Pallavicini A, Formentin E, Comelli A, Ievolella C, Trevisan S, Bortoletto G, Scannapieco P, Salamon M, Mouly V, Valle G, Lanfranchi G.

The Journal of Cell Biology 1999 Jul; 146(2):465.

- [Cloning and characterization of two human skeletal muscle alpha-actinin genes located on chromosomes 1 and 11.](#)

Beggs AH, Byers TJ, Knoll JH, Boyce FM, Bruns GA, Kunkel LM.

The Journal of Biological Chemistry 1992 May; 267(13):9281.

Pathway

- [Adherens junction](#)
- [Adherens junction](#)
- [Arrhythmogenic right ventricular cardiomyopathy \(ARVC\)](#)
- [Arrhythmogenic right ventricular cardiomyopathy \(ARVC\)](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Leukocyte transendothelial migration](#)
- [Leukocyte transendothelial migration](#)
- [Regulation of actin cytoskeleton](#)
- [Regulation of actin cytoskeleton](#)
- [Systemic lupus erythematosus](#)
- [Systemic lupus erythematosus](#)
- [Tight junction](#)
- [Tight junction](#)

Disease

- [Alzheimer disease](#)

- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glycogen Storage Disease Type V](#)
- [Mental Disorders](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Rhabdomyolysis](#)
- [Sarcopenia](#)
- [Task Performance and Analysis](#)
- [Tobacco Use Disorder](#)