

Datasheet for ABIN4886420  
**anti-ACTN3 antibody (C-Term)**



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4 Images

## Overview

Quantity:	100 µg
Target:	ACTN3
Binding Specificity:	AA 574-617, C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Alpha-actinin-3(ACTN3) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human ACTN3 (574-617aa EADRERGAIMGIQGEIQKICQTYGLRPCSTNPYITLSPQDINT K), different from the related mouse sequence by five amino acids.
Sequence:	EADRERGAIMGIQGEIQKICQTYGLRPCSTNPYITLSPQDINT
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Alpha-actinin-3(ACTN3) detection. Tested with WB, IHC-P in Human,Mouse,Rat.</p> <p>Gene Name: actinin alpha 3 (gene/pseudogene)</p> <p>Protein Name: Alpha-actinin-3</p>

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: ACTN3

Alternative Name: ACTN3 ([ACTN3 Products](#))

Background: Alpha-actinin-3, also known as alpha-actinin skeletal muscle isoform 3 or F-actin cross-linking protein, is a protein that in humans is encoded by the ACTN3 gene. This gene encodes a member of the alpha-actin binding protein gene family. The encoded protein is primarily expressed in skeletal muscle and functions as a structural component of sarcomeric Z line. This protein is involved in crosslinking actin containing thin filaments. An allelic polymorphism in this gene results in both coding and non-coding variants, the reference genome represents the coding allele. The non-functional allele of this gene is associated with elite athlete status.

Synonyms: Actinin alpha 3 | Alpha-Actinin 3 | Alpha-actinin-3 | ACTN 3 | ACTN3 | Q08043

Gene ID: 89

UniProt: [Q08043](#)

Pathways: [Cell-Cell Junction Organization](#)

## Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat  
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.  
Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

## Handling

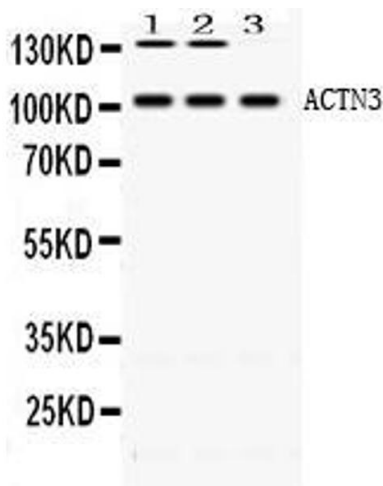
Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Handling

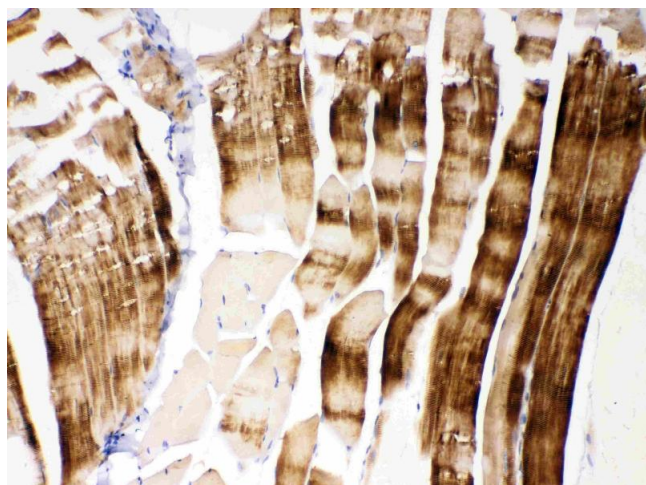
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Images



Western Blotting

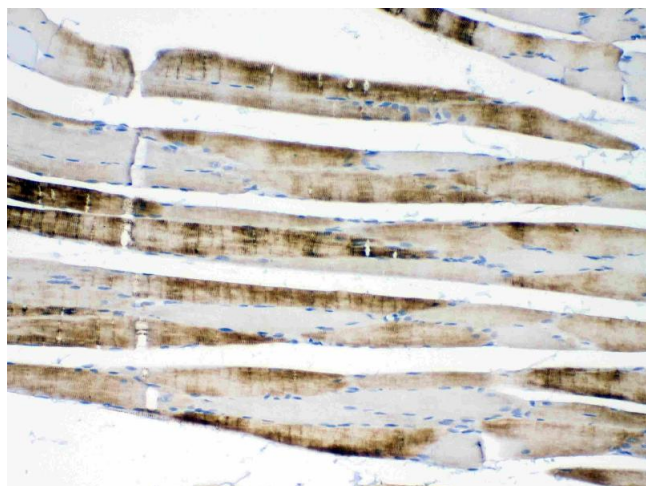
**Image 1.** Western blot analysis of ACTN3/Alpha Actinin 3 using anti- ACTN3/Alpha Actinin 3 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat skeletal muscle tissue lysates, Lane 2: mouse skeletal muscle tissue lysates, Lane 3: HT080 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- ACTN3/Alpha Actinin 3 antigen affinity purified polyclonal antibody (Catalog # ) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was



detected for ACTN3/Alpha Actinin 3 at approximately 103KD. The expected band size for ACTN3/Alpha Actinin 3 is at 103KD.

#### Immunohistochemistry

**Image 2.** IHC analysis of ACTN3/Alpha Actinin 3 using anti-ACTN3/Alpha Actinin 3 antibody . ACTN3/Alpha Actinin 3 was detected in paraffin-embedded section of mouse skeletal muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti- ACTN3/Alpha Actinin 3 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



#### Immunohistochemistry

**Image 3.** IHC analysis of ACTN3/Alpha Actinin 3 using anti-ACTN3/Alpha Actinin 3 antibody . ACTN3/Alpha Actinin 3 was detected in paraffin-embedded section of rat skeletal muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti- ACTN3/Alpha Actinin 3 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN4886420.