

Datasheet for ABIN6940980  
**anti-ACTN2 antibody (AA 557-692)**

## 6 Images

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## Overview

Quantity:	100 µg
Target:	ACTN2
Binding Specificity:	AA 557-692
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ACTN2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Staining Methods (StM)

## Product Details

Immunogen:	A recombinant fragment (aa557-692) of human ACTN2 protein (exact sequence is proprietary)
Clone:	ACTN2-3293
Isotype:	IgG1 kappa
Purification:	Purified by Protein A/G

## Target Details

Target:	ACTN2
Alternative Name:	ACTN2 ( <a href="#">ACTN2 Products</a> )
Background:	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

## Target Details

an actin-binding protein with multiple roles in different cell types. In non-muscle 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.

Molecular Weight: 103kDa

Gene ID: 88

UniProt: [P35609](#)

Pathways: [Cell-Cell Junction Organization](#), [Skeletal Muscle Fiber Development](#), [Negative Regulation of Transporter Activity](#)

## Application Details

Application Notes: Positive Control: Skeletal or Cardiac Muscle.  
Known Application: Western Blot (1-2 µg/mL), Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 minutes at RT), (Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

## Handling

Concentration: 200 µg/mL

Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

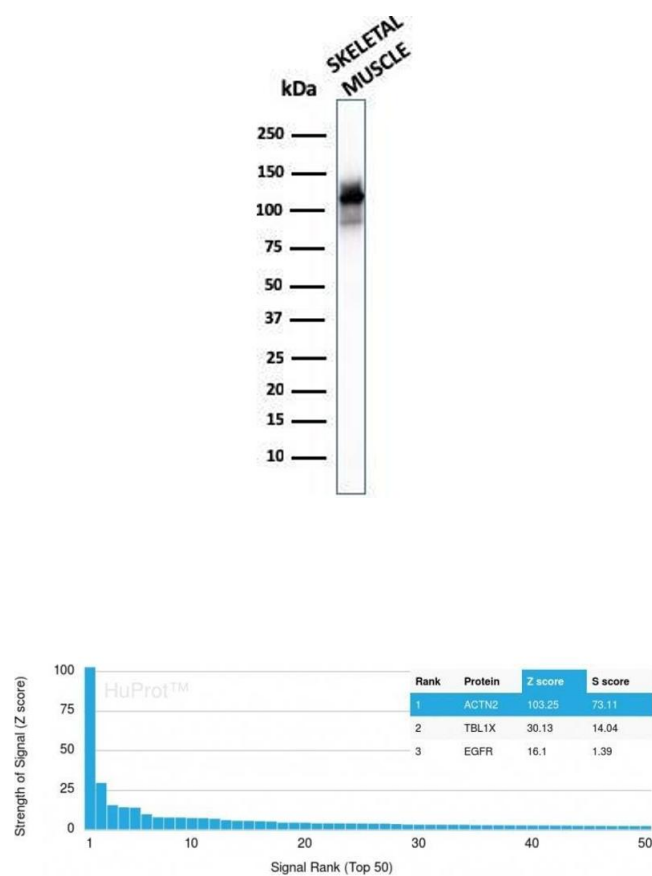
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -80 °C

Storage Comment: Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Expiry Date: 24 months

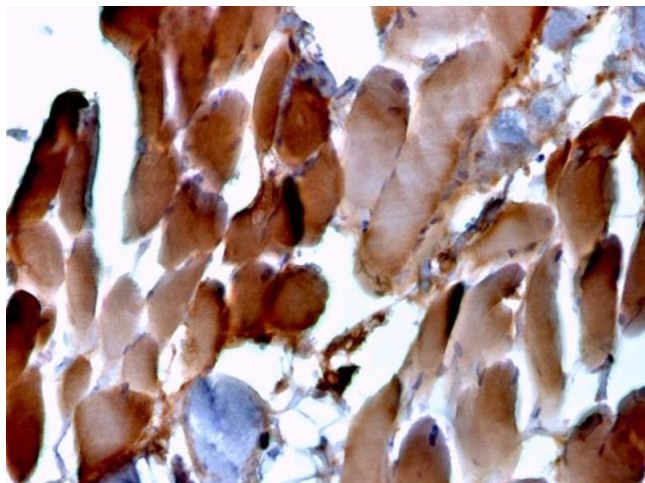


Western Blotting

**Image 1.** Western Blot of human skeletal muscle tissue lysates using Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3293).

Protein Array

**Image 2.** Analysis of Protein Array containing more than 19,000 full-length human proteins using Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3293). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SDs) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



#### Immunohistochemistry

**Image 3.** Formalin-fixed, paraffin-embedded human cardiac muscle stained with Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3293).

Please check the [product details page](#) for more images. Overall 6 images are available for ABIN6940980.