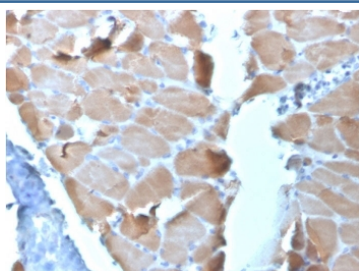


## Actinin Alpha 2 Antibody / Sarcomeric Alpha Actinin / ACTN2 [clone ACTN2/3295] (V8189)

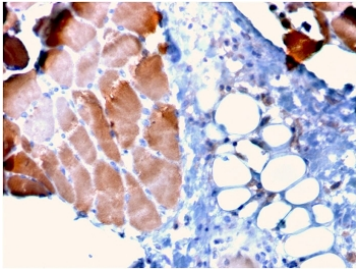
| Catalog No.    | Formulation                                                                | Size   |
|----------------|----------------------------------------------------------------------------|--------|
| V8189-100UG    | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V8189-20UG     | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug  |
| V8189SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free                             | 100 ug |

[Bulk quote request](#)

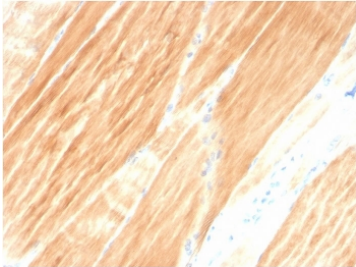
|                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| Availability       | 1-3 business days                                                 |
| Species Reactivity | Human                                                             |
| Format             | Purified                                                          |
| Host               | Mouse                                                             |
| Clonality          | Monoclonal (mouse origin)                                         |
| Isotype            | Mouse IgG2b, kappa                                                |
| Clone Name         | ACTN2/3295                                                        |
| Purity             | Protein G affinity chromatography                                 |
| UniProt            | P35609                                                            |
| Localization       | Cytoplasmic                                                       |
| Applications       | Western Blot : 1-2ug/ml<br>Immunohistochemistry (FFPE) : 1-2ug/ml |
| Limitations        | This Actinin Alpha 2 antibody is available for research use only. |



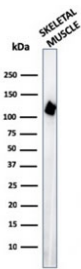
IHC staining of FFPE human cardiac muscle tissue with Actinin Alpha 2 antibody (clone ACTN2/3295). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



IHC staining of FFPE human skeletal muscle tissue with Actinin Alpha 2 antibody (clone ACTN2/3295). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

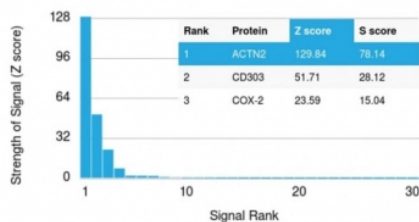


IHC staining of FFPE human skeletal muscle tissue with Actinin Alpha 2 antibody (clone ACTN2/3295). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



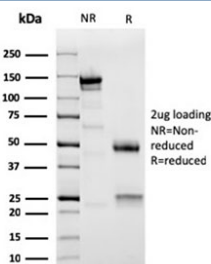
Western blot testing of human skeletal muscle lysate with Actinin Alpha 2 antibody (clone ACTN2/3295). Predicted molecular weight ~103 kDa.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Actinin Alpha 2 antibody (clone ACTN2/3295). These results demonstrate the foremost specificity of the ACTN2/3295 mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Actinin Alpha 2 antibody as confirmation of integrity and purity.

## Description

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 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.

## **Application Notes**

Optimal dilution of the Actinin Alpha 2 antibody should be determined by the researcher.

## **Immunogen**

Amino acids 557-692 from the human protein were used as the immunogen for this Sarcomeric Alpha Actinin antibody.

## **Storage**

Store the Actinin Alpha 2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).