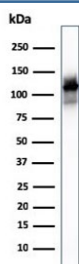


Sarcomeric Alpha Actinin Antibody / ACTN2 [clone ACTN2/3293] (V7539)

| Catalog No. | Formulation | Size |
|----------------|---|--------|
| V7539-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V7539-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V7539SAF-100UG | 1 mg/ml in 1X PBS; sodium azide free | 100 ug |
| V7539IHC-7ML | Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only* | 7 ml |

[Bulk quote request](#)

| | |
|---------------------------|--|
| Availability | 1-3 business days |
| Species Reactivity | Human |
| Format | Purified |
| Host | Mouse |
| Clonality | Monoclonal (mouse origin) |
| Isotype | Mouse IgG1, kappa |
| Clone Name | ACTN2/3293 |
| Purity | Protein G affinity chromatography |
| UniProt | P35609 |
| Localization | Cytoplasmic |
| Applications | Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT |
| Limitations | This Sarcomeric Alpha Actinin antibody is available for research use only. |



Western blot testing of human skeletal muscle lysate with Sarcomeric Alpha Actinin antibody (clone ACTN2/3293). Predicted molecular weight ~103 kDa.



IHC staining of FFPE human cardiac muscle tissue with Sarcomeric Alpha Actinin antibody (clone ACTN2/3293). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

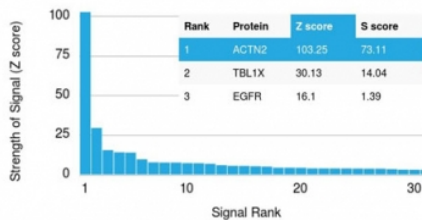


IHC staining of FFPE human skeletal muscle tissue with Sarcomeric Alpha Actinin antibody (clone ACTN2/3293). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



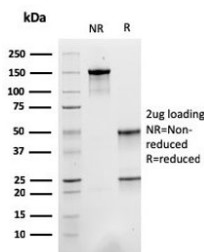
IHC staining of FFPE human skeletal muscle tissue with Sarcomeric Alpha Actinin antibody (clone ACTN2/3293). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Sarcomeric Alpha Actinin antibody (clone ACTN2/3293). These results demonstrate the foremost specificity of the ACTN2/3293 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 Sarcomeric Alpha Actinin antibody (clone ACTN2/3293) 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

The optimal dilution of the Sarcomeric Alpha Actinin antibody for each application should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

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

Storage

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