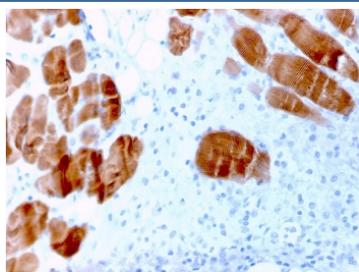


## ACTN2 Antibody / Alpha Actinin 2 / Sarcomeric Alpha Actinin [clone ACTN2/3291] (V7545)

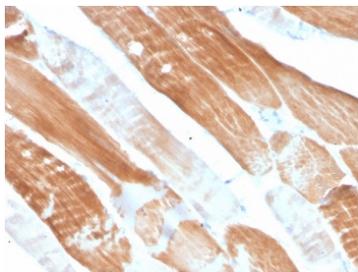
Catalog No.	Formulation	Size
V7545-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7545-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7545SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

### Bulk quote request

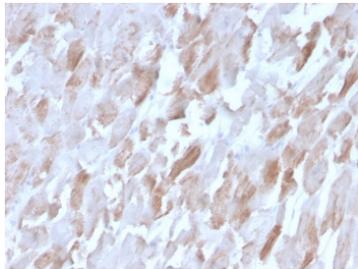
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ACTN2/3291
Purity	Protein G affinity chromatography
UniProt	P35609
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This ACTN2 antibody is available for research use only.



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



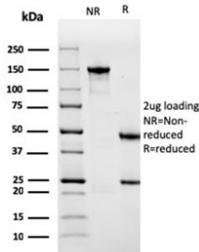
IHC staining of FFPE human cardiac muscle tissue with ACTN2 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

#### Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using ACTN2 antibody (clone ACTN2/3291). These results demonstrate the foremost specificity of the ACTN2/3291 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 ACTN2 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 ACTN2 antibody should be determined by the researcher.

## Immunogen

Amino acids 557-692 from the human protein were used as the immunogen for this ACTN2 antibody.

## Storage

Store the ACTN2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).