

## Sarcomeric Actinin Alpha 2 / ACTN2 Antibody

Mouse Monoclonal Antibody [Clone ACTN2/3292]

Catalog No	Format	Size
88-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
88-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
88-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

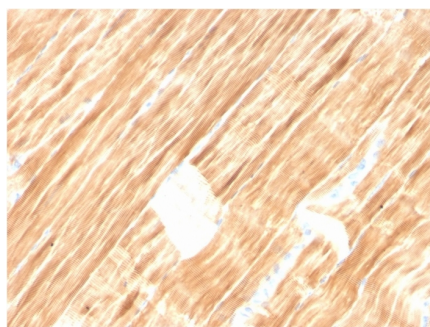
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

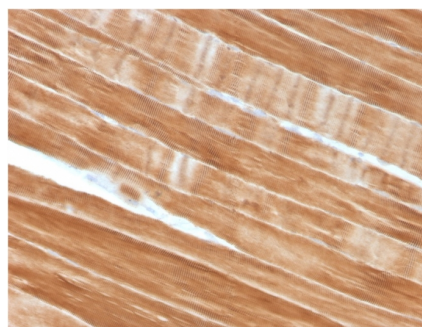
<b>Clone</b>	ACTN2/3292
<b>Gene Name</b>	ACTN2
<b>Immunogen</b>	A recombinant fragment (aa557-692) of human ACTN2 protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b / Kappa
<b>Mol. Weight of Antigen</b>	103kDa
<b>Cellular Localization</b>	Cytoplasm, Myofibril, Sarcomere, Z line
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Skeletal or Cardiac Muscle.

\*Optimal dilution for a specific application should be determined.

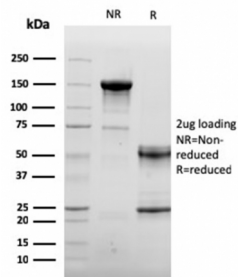
### Product Images for Sarcomeric Actinin Alpha 2 / ACTN2 Antibody



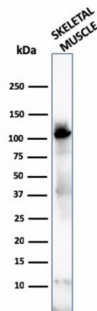
Formalin-fixed, paraffin-embedded human Skeletal Muscle stained with Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3292).



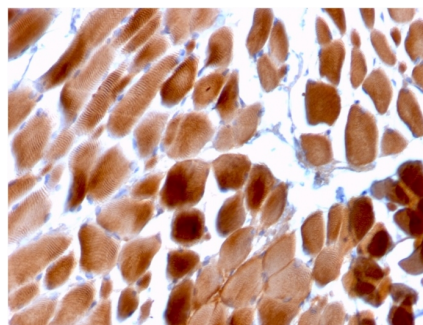
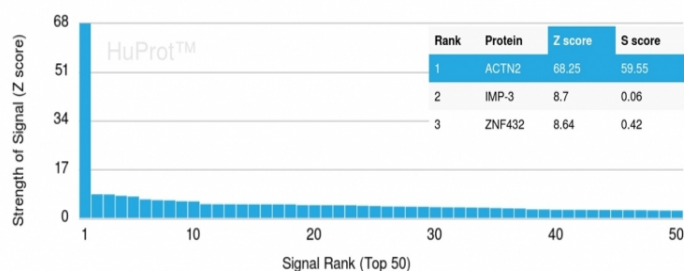
Formalin-fixed, paraffin-embedded human Skeletal Muscle stained with Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3292).



SDS-PAGE Analysis Purified ACTN2 Mouse Monoclonal Antibody (ACTN2/3292). Confirmation of Purity and Integrity of Antibody



Western Blot of human skeletal muscle tissue lysates using Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3292).



Formalin-fixed, paraffin-embedded human Cardiac Muscle stained with Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3292).

Analysis of Protein Array containing more than 19,000 full-length human proteins using Sarcomeric Actinin Alpha 2 Mouse Monoclonal Antibody (ACTN2/3292). 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 (SD's) 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 SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be 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.

### Specificity & Comments

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.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

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.

### Research Areas

Cardiovascular, Signal Transduction