10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Sarcomeric alpha Actinin Rabbit mAb

Catalog # AP76054

Product Information

Application	WB, IHC-P, IP
Primary Accession	P35609
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	103854

Additional Information

Gene ID	88
Other Names	ACTN2
Dilution	WB~~1:500-1:1000 IHC-P~~N/A IP~~1:20
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

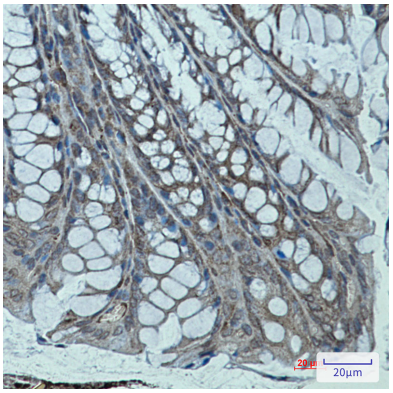
Name	ACTN2
Function	F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.
Cellular Location	Cytoplasm, myofibril, sarcomere, Z line. Note=Colocalizes with MYOZ1 and FLNC at the Z-lines of skeletal muscle
Tissue Location	Expressed in both skeletal and cardiac muscle.

Background

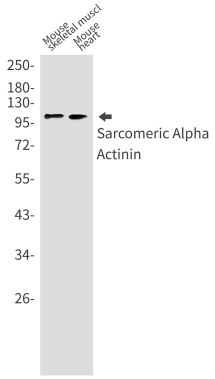
Alpha actinin 2 (ACTN2) belongs to the alpha-actinin family and is expressed in both skeletal and cardiac muscles, and functions to anchor myofibrillar actin thin filaments and titin to Z-discs (PMID: 30701273). ACTN2 is an actin-binding protein with multiple roles in different cell types. In nonmuscle 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. Mutations in ACTN2 are associated with hypertrophic cardiomyopathy, as well as dilated cardiomyopathy and endocardial fibroelastosis (PMID: 20022194, 14567970).

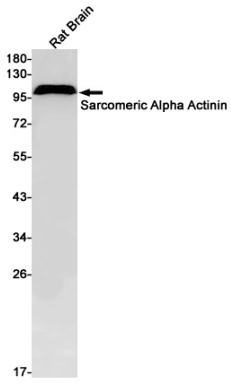
Images



Immunohistochemistry analysis of paraffin-embedded mouse colon using Sarcomeric alpha Actinin antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Western blot analysis of Sarcomeric Alpha Actinin in mouse skeletal muscle, mouse heart lysates using Sarcomeric Alpha Actinin antibody.



Western blot analysis of Sarcomeric Alpha Actinin in rat Brain lysates using Sarcomeric Alpha Actinin antibody

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