

Basic Information

Product Name	Anti-Alpha Actinin/ACTN2 Antibody	
Gene Name	ACTN2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human ACTN2 recombinant protein (Position: E567-E696).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	103 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

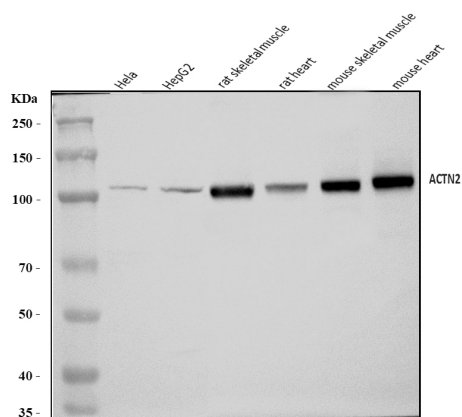
Background Information

Alpha-actinin 2 is a protein which in humans is encoded by the ACTN2 gene. 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 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. 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.

Reference

Anti-Alpha Actinin/ACTN2 Antibody被引用在2文献中。

Selected Validation Data



Western blot analysis of Alpha Actinin/ACTN2 using anti-Alpha Actinin/ACTN2 antibody (A03673-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HELA whole cell lysates,

Lane 2: HEPG2 whole cell lysates,

Lane 3: rat skeletal muscle tissue lysates,

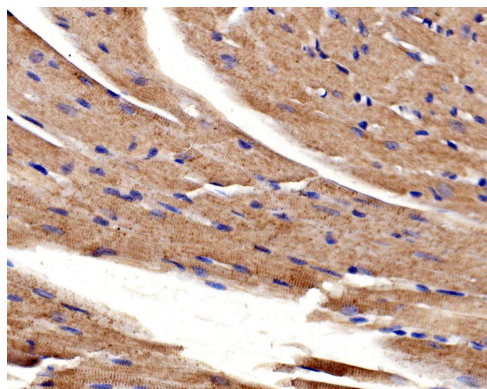
Lane 4: rat heart tissue lysates,

Lane 5: mouse skeletal muscle tissue lysates,

Lane 6: mouse heart tissue lysates.

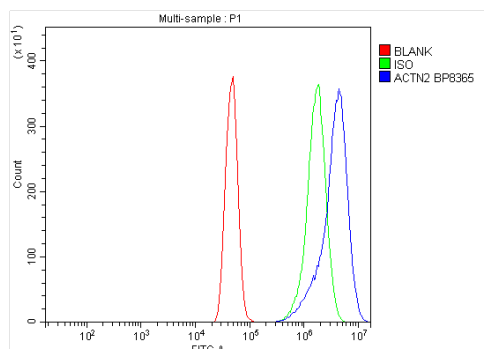
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Alpha Actinin/ACTN2 antigen affinity purified polyclonal antibody (A03673-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Alpha Actinin/ACTN2 at approximately 103 kDa. The expected band size for Alpha Actinin/ACTN2 is at 104 kDa.



IHC analysis of Alpha Actinin/ACTN2 using anti-Alpha Actinin/ACTN2 antibody (A03673-1).

Alpha Actinin/ACTN2 was detected in a paraffin-embedded section of mouse cardiac tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Alpha Actinin/ACTN2 Antibody (A03673-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of A431 cells using anti-Alpha Actinin/ACTN2 antibody (A03673-1).

Overlay histogram showing A431 cells stained with A03673-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Alpha Actinin/ACTN2 Antibody (A03673-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.