

Basic Information

Product Name	Anti-Alpha Actinin/ACTN2 Antibody (Clone#EA-53)	
Gene Name	ACTN2	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG1	
Species Reactivity	human, mouse, rat, rabbit	
Tested Application	WB, IHC	
Contents	200 ug/ml antibody with PBS , 0.02% NaN ₃ , 1mg BSA and 50% glycerol.	
Immunogen	Rabbit skeletal alpha-actinin.	
Concentration	200ug/ml	
Purification	Ascites	
Observed MW	103 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (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.

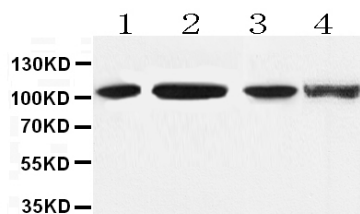
Background Information

Alpha-actinin was initially isolated from rabbit skeletal muscle as a factor that induces the gelation of F-actin and promotes the superprecipitation of actomyosin. Alpha actinins are actin-binding proteins that carry out different purposes in different cell types. In myofibrillar cells, alpha-actinin constitutes a major component of Z-discs in striated muscle and of the functionally analogous dense bodies and dense plaques in smooth muscle. Alpha-actinin(alpha A) shares structural homology with spectrin and dystrophin.

Reference

Anti-Alpha Actinin/ACTN2 Antibody (Clone#EA-53)被引用在8文献中。

Selected Validation Data



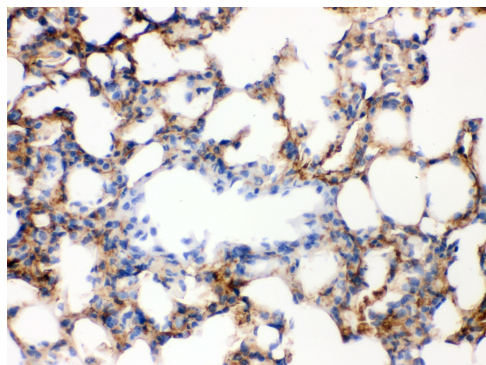
Western blot analysis of Alpha-Actinin using anti- Alpha-Actinin antibody (BM0003). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: mouse heart tissue lysates,

Lane 2: mouse skeletal muscle tissue lysates,

Lane 3: rat heart tissue lysates,

Lane 4: rat skeletal muscle tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti- Alpha-Actinin antigen affinity purified monoclonal antibody (Catalog # BM0003) at 4 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a Biotin Conjugated goat anti-mouse IgG secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Alpha-Actinin at approximately 103KD. The expected band size for Alpha-Actinin is at 103KD.



IHC analysis of Alpha-Actinin using anti- Alpha-Actinin antibody (BM0003). Alpha-Actinin was detected in paraffin-embedded section of mouse lung tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1.5µg/ml mouse anti- Alpha-Actinin Antibody (BM0003) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.