

Basic Information

Product Name	Anti-Alpha-SMA/ACTA2 Antibody (Clone#1A4)	
Gene Name	ACTA2	
Source	Mouse	
Isotype	IgG2a	
Species Reactivity	human,mouse,rat	
Tested Application	IF, WB, IHC	
Contents	200ug/ml antibody with PBS , 0.02% NaN3 , 1mg BSA and 50% glycerol.	
Immunogen	N-terminal synthetic decapeptide of alpha-smooth muscle actin.	
concentration	200ug/ml	
Purification	protein G purified.	
Observed MW	42KD	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry in paraffin section (IHC):	1:50-400
	Immunofluorescence (IF):	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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Ueyama et al.(1990) assigned the ACTSA gene to chromosome 10 by Southern blot analysis of DNAs from 18 rodent-human somatic cell hybrids. Regional mapping by in situ hybridization localized the gene to 10q22-q24. Assignment of the vascular smooth muscle actin gene ACTSA to human chromosome. Smooth muscle alpha-actin gene requires two E-boxes for proper expression in vivo and is a target of class I basic helix-loop-helix proteins.

Reference

Anti-Alpha-SMA/ACTA2 Antibody (Clone#1A4)被引用在337文献中。

Selected Validation Data

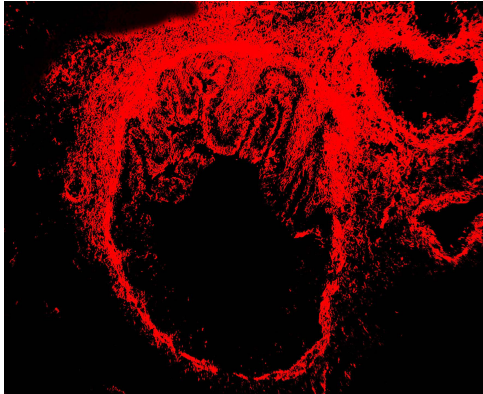


Figure 1. IF analysis using anti- Alpha-Smooth Muscle Actin antibody (BM0002). detected in paraffin-embedded section of rat cardiac muscle tissues. The tissue section were stained using the cy3-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog # BA1031).

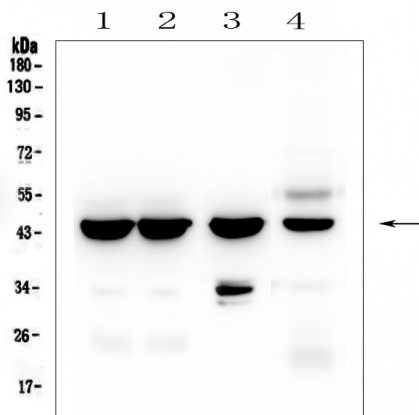


Figure 2. Western blot analysis of Alpha-Smooth Muscle Actin using anti- Alpha-Smooth Muscle Actin antibody (BM0002).

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: human placenta tissue lysates, Lane 2: human placenta tissue lysates, Lane 3: rat stomach tissue lysates, Lane 4: mouse stomach 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-Smooth Muscle Actin antigen affinity purified monoclonal antibody (Catalog # BM0002) at 0.5 μ g/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti- mouse IgG-HRP 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-Smooth Muscle Actin at approximately 42KD. The expected band size for Alpha-Smooth Muscle Actin is at 42KD.

Product datasheet

**Anti-Alpha-SMA/ACTA2 Antibody
(Clone#1A4)**

Catalog Number: BM0002

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antibody and ELISA experts

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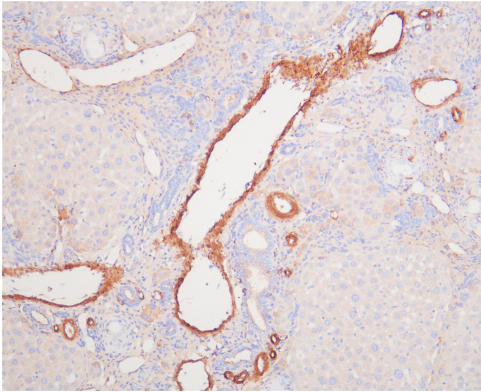


Figure 3. IHC analysis using Anti-a-SMA antibody (BM0002) detected in paraffin-embedded section of mouse liver tissue. Biotinylated goat Anti-mouse IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.