

## Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody

Catalog Number: M01072-1

### About ACTA2

Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium.

### Overview

Product Name	Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody catalog # M01072-1. Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Monoclonal EO-1
Formulation	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P62736

### Technical Details

Immunogen	A synthesized peptide derived from human alpha smooth muscle Actin
Isotype	Rabbit IgG
Form	Liquid
Concentration	Actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Affinity-chromatography
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used:

	WB 1:1000-1:10000 IHC 1:500-1:1000 ICC/IF 1:100-1:500 FC 1:20
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## Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody (M01072-1) Images

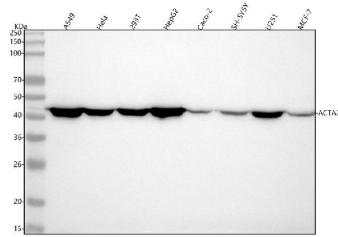


Figure 1. Western blot analysis of ACTA2 using anti-ACTA2 antibody (M01072-1).

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 30 ug of sample under reducing conditions.

Lane 1: human A549 whole cell lysates,  
Lane 2: human Hela whole cell lysates,  
Lane 3: human 293T whole cell lysates,  
Lane 4: human HepG2 whole cell lysates,  
Lane 5: human Caco-2 whole cell lysates,  
Lane 6: human SH-SY5Y whole cell lysates,  
Lane 7: human U251 whole cell lysates,  
Lane 8: human MCF-7 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ACTA2 antigen affinity purified monoclonal antibody (Catalog # M01072-1) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ACTA2 at approximately 42 kDa. The expected band size for ACTA2 is at 42 kDa.

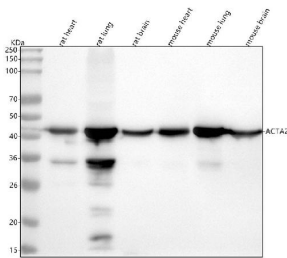


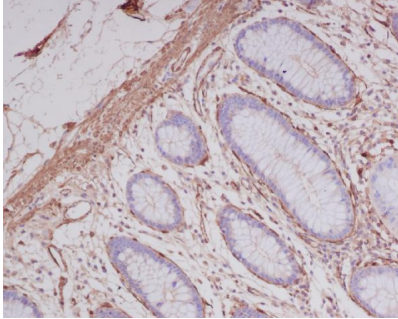
Figure 2. Western blot analysis of ACTA2 using anti-ACTA2 antibody (M01072-1).

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 30 ug of sample under reducing conditions.

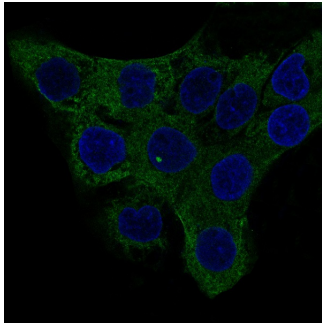
Lane 1: rat heart tissue lysates,  
Lane 2: rat lung tissue lysates,  
Lane 3: rat brain tissue lysates,  
Lane 4: mouse heart tissue lysates,  
Lane 5: mouse lung tissue lysates,  
Lane 6: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ACTA2 antigen affinity purified monoclonal antibody (Catalog # M01072-1) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ACTA2 at approximately 42 kDa. The expected band size for ACTA2 is

at 42 kDa.



Immunohistochemical analysis of paraffin-embedded human colon, using alpha smooth muscle Actin Antibody.



Immunofluorescent analysis of A431 cells, using alpha smooth muscle Actin Antibody .

## 72 Publications Citing This Product

1. PubMed ID: 10.1016/j.mce.2017.11.004, Estrogen receptor beta maintains expression of KLF15 to prevent cardiac myocyte hypertrophy in female rodents
2. PubMed ID: 31893573, Fang L,Wang KK,Zhang PF,Li T,Xiao ZL,Yang M,Yu ZX.Nucleolin promotes Ang II-induced phenotypic transformation of vascular smooth muscle cells by regulating EGF and PDGF-BB.J Cell Mol Med.2020 Jan;24(2) :1917-1933.doi:10.1111/jcmm.14888.Epub 2020 Jan 1.PMID
3. PubMed ID: 32908568, Shen J,Wei W,Wang X,Yang J,Lu L,Lv X,Xue X.Proliferation of Vascular Smooth Muscle Cells under ox-LDL Is Regulated by Alismatis rhizoma Decoction via InhibitingERK1/2 and miR-17-92a Cluster Activation.Evid Based Complement Alternat Med.2020 Aug 22;2020:72

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