

**Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody**  
**Catalog # ABO14307****Specification**

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**Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">P62736</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 59

**Other Names**

Actin, aortic smooth muscle, 3.6.4.-, Alpha-actin-2, Cell growth-inhibiting gene 46 protein, Actin, aortic smooth muscle, intermediate form, ACTA2, ACTSA, ACTVS

**Calculated MW**

42009 MW KDa

**Application Details**

WB 1:1000-1:5000<br>IHC 1:100-1:500<br>ICC/IF 1:100-1:500<br>FC 1:30

**Subcellular Localization**

Cytoplasm, cytoskeleton.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human alpha smooth muscle Actin

**Purification**

Affinity-chromatography

**Storage**

**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.**

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

**Name** ACTA2

**Synonyms** ACTSA, ACTVS

### Function

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

### Cellular Location

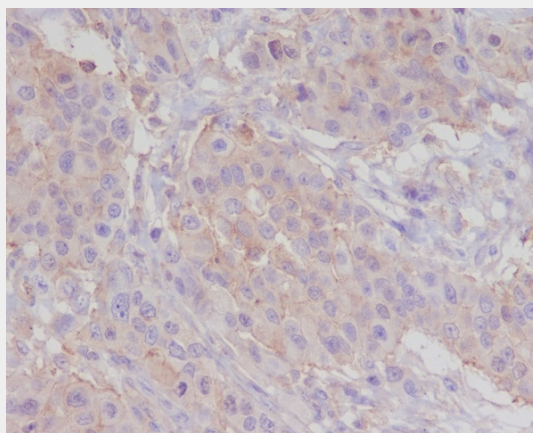
Cytoplasm, cytoskeleton.

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

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using alpha smooth muscle Actin Antibody(M01072-3)

ACTA2 was detected in paraffin-embedded tissue section. 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 1ug/ml rabbit anti-ACTA2 Antibody (M01072-3)overnight at 4°C. Biotinylated goat anti-rabbit 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 # SA1022) with DAB as the chromogen.

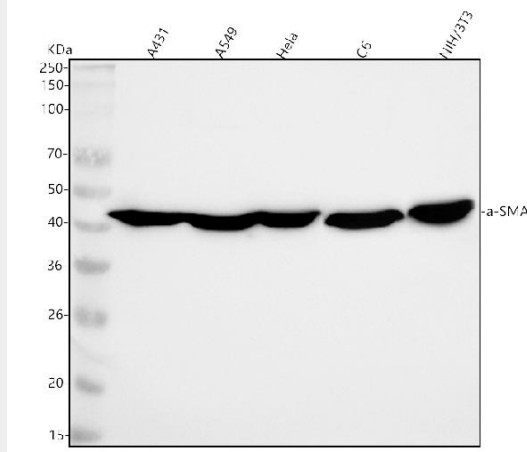


Figure 1. Western blot analysis of alpha-SMA using anti-alpha-SMA antibody (M01072-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysates,

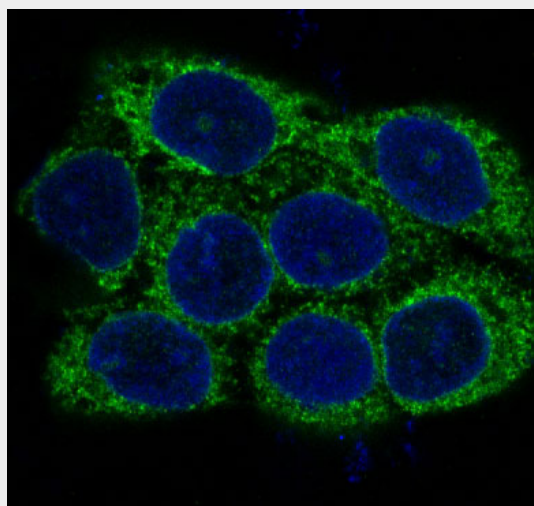
Lane 2: human A549 whole cell lysates,

Lane 3: human Hela whole cell lysates.

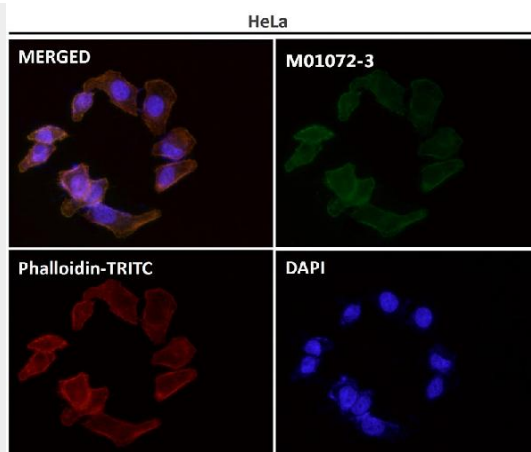
Lane 4: rat C6 whole cell lysates.

Lane 5: mouse NIH/3T3 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-alpha-SMA antigen affinity purified monoclonal antibody (Catalog # M01072-3) 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 1:1000 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 alpha-SMA at approximately 42 kDa. The expected band size for alpha-SMA is at 42 kDa.



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



Immunofluorescent analysis using the Antibody at 1:150 dilution.