10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody

Catalog # ABO14307

Specification

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

Application	**WB, IHC, IF, ICC, FC**
Primary Accession	P62736
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
IHC 1:100-1:500
ICC/IF 1:100-1:500
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.**

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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.

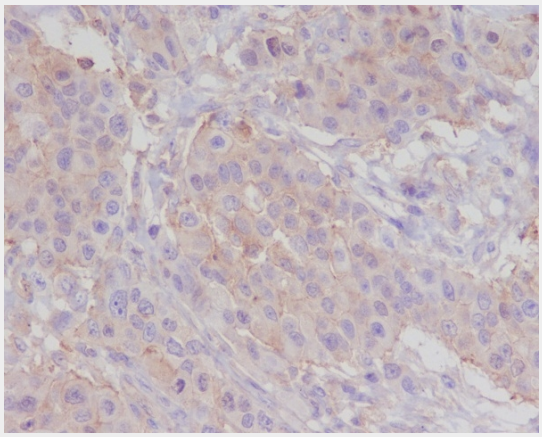
Cellular Location
Cytoplasm, cytoskeleton.

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 Cytomety
- 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

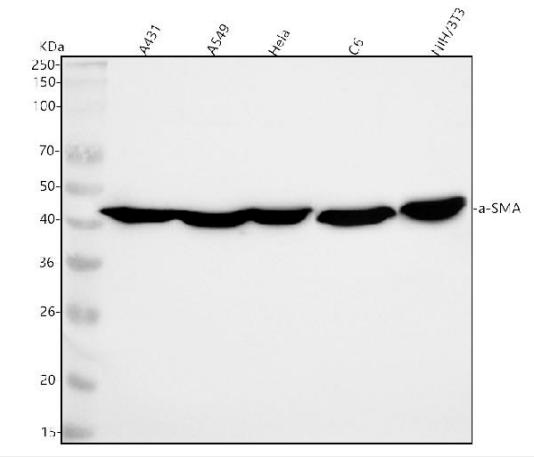
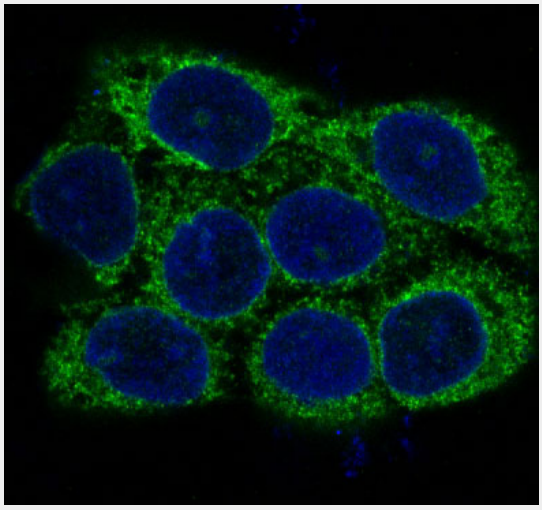
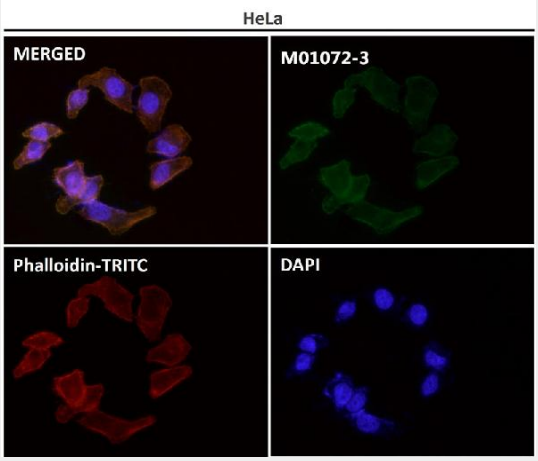


Figure 1. Western blot analysis of alpha-SMA using anti-alpha-SMA antibody (M01072-3).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunofluorescent analysis using the Antibody at 1:150 dilution.