

Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody
Catalog # ABO14304**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 1:1000-1:10000
IHC 1:500-1:1000
ICC/IF 1:100-1:500
FC 1:20

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.

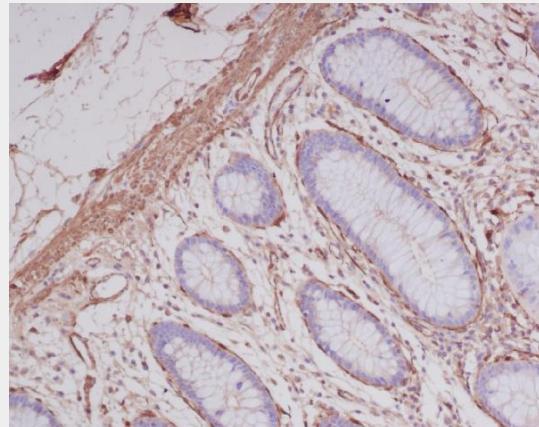
Cellular Location

Cytoplasm, cytoskeleton.

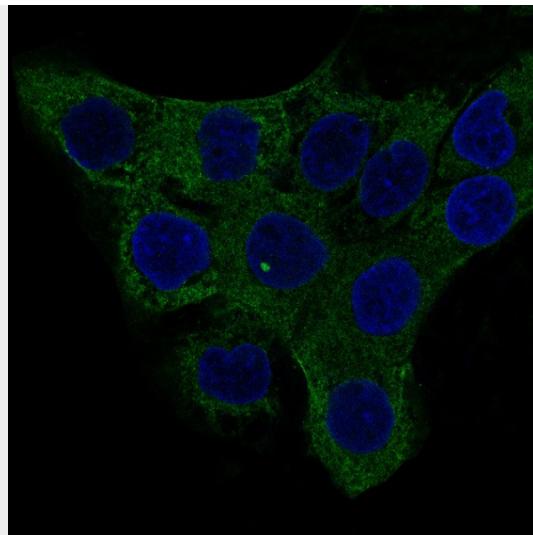
Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody - Protocols

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 colon, using alpha smooth muscle Actin Antibody.



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

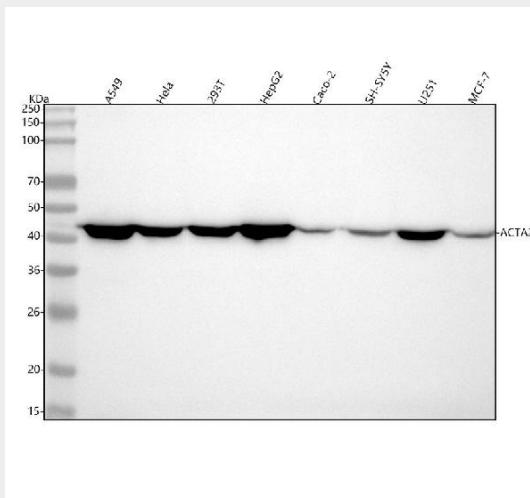


Figure 1. Western blot analysis of ACTA2 using anti-ACTA2 antibody (M01072-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

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.

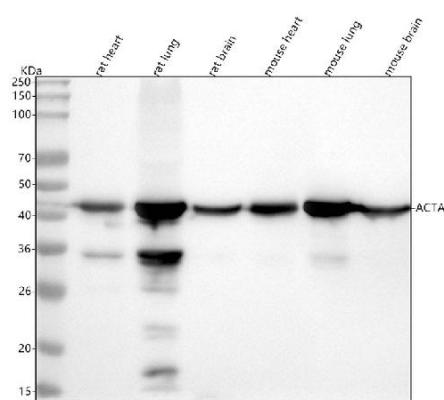


Figure 2. Western blot analysis of ACTA2 using anti-ACTA2 antibody (M01072-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

- 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.