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Anti-alpha smooth muscle Actin ACTA2 Rabbit Monoclonal Antibody

Catalog # ABO14307

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.

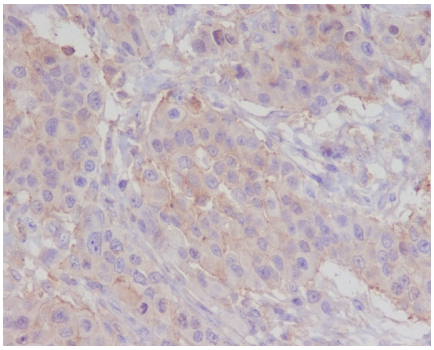
Additional Information

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
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.
Source	Eukaryota
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.
Clone Names	Clone: CAD-1
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.

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.

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.

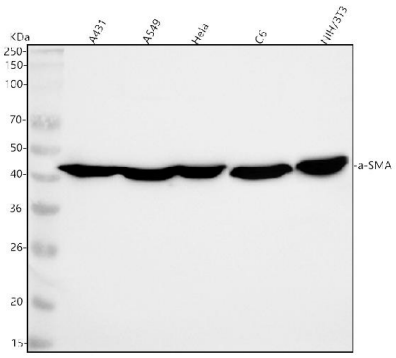
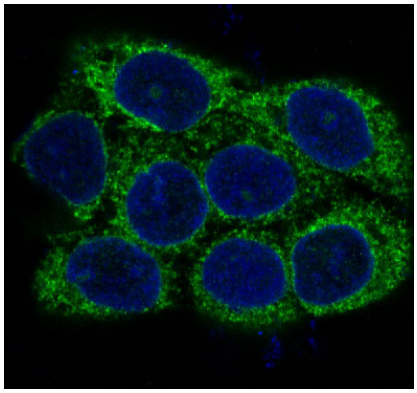
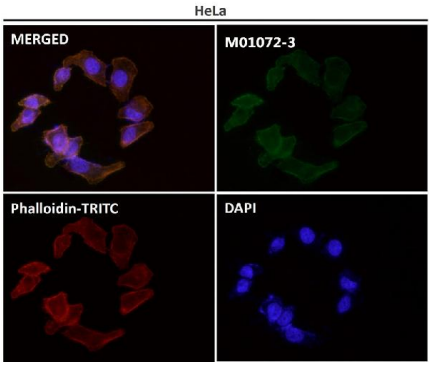


Figure 1. Western blot analysis of alpha-SMA using anti-alpha-SMA antibody (M01072-3).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human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