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

ACTA2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1585a

Specification

ACTA2 Antibody - Product Information

Application	**WB, IHC, FC, ICC, E**
Primary Accession	P62736
Reactivity	**Human, Mouse, Rat, Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**42kDa KDa**

Description
The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This actin is an alpha actin that is found in skeletal muscle. Defects in this gene cause aortic aneurysm familial thoracic type 6. Multiple alternatively spliced variants, encoding the same protein, have been identified.

Immunogen
Synthesized peptide of human ACTA2.

Formulation
Ascitic fluid containing 0.03% sodium azide.

ACTA2 Antibody - Additional Information

Gene ID 59

Other Names
Actin, aortic smooth muscle, Alpha-actin-2, Cell growth-inhibiting gene 46 protein, ACTA2, ACTSA, ACTVS

Dilution
WB~~1/500 - 1/2000
IHC~~1/500 - 1/2000
FC~~1/200 - 1/400
ICC~~N/A
E~~1/10000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ACTA2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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ACTA2 Antibody - Protein Information

Name ACTA2

Synonyms ACTSA, ACTVS

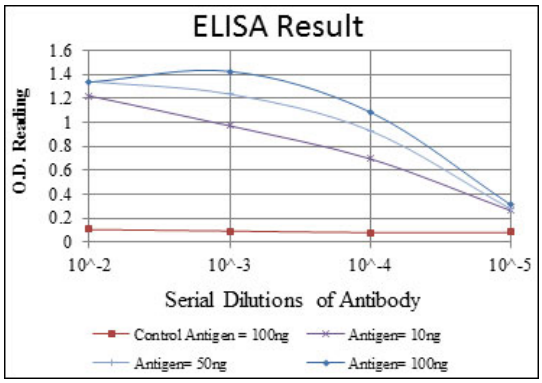
Function
Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

Cellular Location
Cytoplasm, cytoskeleton.

ACTA2 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



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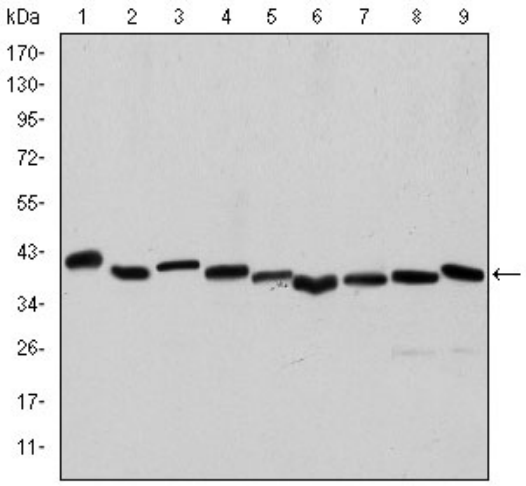

Figure 1: Western blot analysis using ACTA2 mouse mAb against Hela (1), A431 (2), Jurkat (3), K562 (4), HEK293 (5), HepG2 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

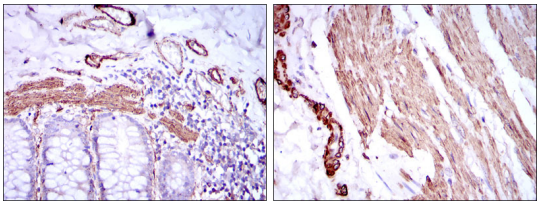

Figure 2: Immunohistochemical analysis of paraffin-embedded human duodenum tissues (left) and human esophagus tissues (right) using ACTA2 mouse mAb with DAB staining.

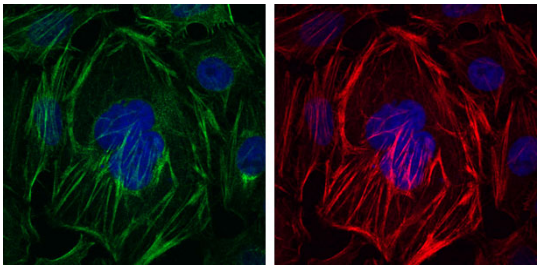

Figure 3: Immunofluorescence analysis of HepG2 cells using ACTA2 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

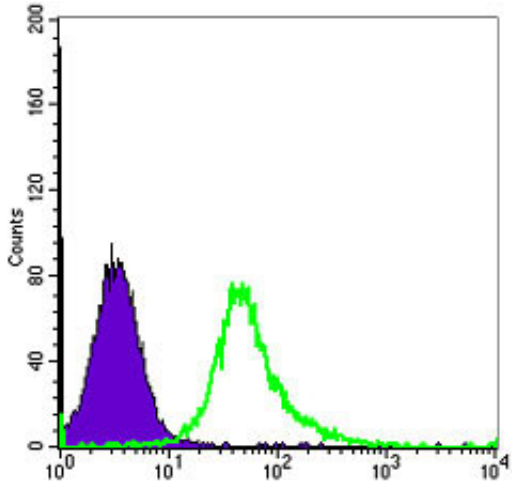

Figure 4: Flow cytometric analysis of Hela cells using ACTA2 mouse mAb (green) and negative control (purple).

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ACTA2 Antibody - References

1. J Hum Genet. 2009 Nov;54(11):687-8. 2. Hum Mutat. 2009 Oct;30(10):1406-11.