

Product datasheet for AM06647SU-N

OriGene Technologies, Inc.

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alpha smooth muscle Actin (ACTA2) Mouse Monoclonal Antibody [Clone ID: 4A4]

Product data:

Product Type: Primary Antibodies

Clone Name: 4A4

Applications: ELISA, FC, IF, IHC, WB

Recommended Dilution: Western Blot: 1/500 - 1/2000.

Immunohistochemistry on paraffin sections 1/200 - 1/1000.

Immunofluorescence: 1/200 - 1/1000.

Flow cytometry: 1/200 - 1/400.

ELISA: 1/10000.

Reactivity: Human, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Synthesized peptide of human ACTA2.

Specificity: This antibody reacts to ACTA2.

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% sodium azide.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 42 kDa

Gene Name: actin, alpha 2, smooth muscle, aorta

Database Link: Entrez Gene 59 Human

P62736



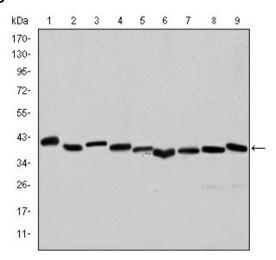


Background:

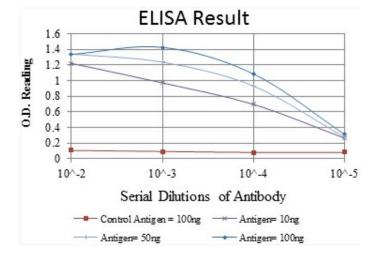
The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, 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.

Synonyms: ACTSA, ACTVS, Alpha-actin-2

Product images:

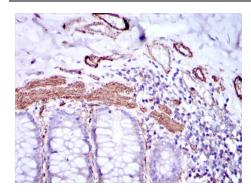


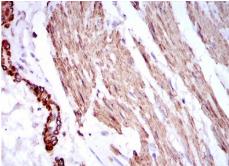
Western blot analysis using ACTA2 mouse mAb against Hela (1), A431 (2), Jurkat (3), K562 (4), HEK293 (5), HepG2 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.



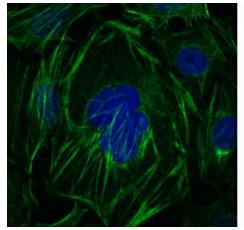
Red: Control Antigen (100ng) Purple: Antigen (10ng) Green: Antigen (50ng) Blue: Antigen (100ng)

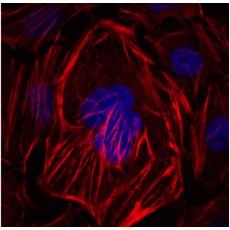




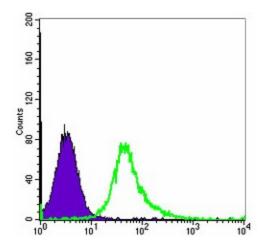


Immunohistochemical analysis of paraffinembedded human duodenum tissues (left) and human esophagus tissues (right) using ACTA2 mouse mAb with DAB staining.





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.



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.