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ACTA2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1585a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P62736
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	4A4
Isotype	IgG1
Calculated MW	42009
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.

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.

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.

References

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

Images

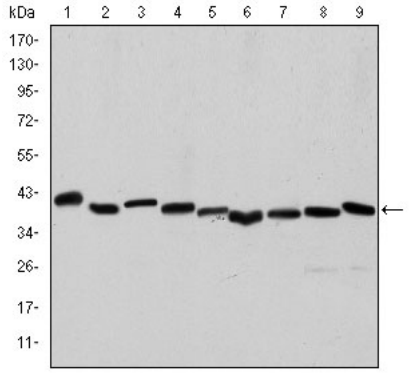

Figure 1: Western blot analysis using ACTA2 mouse mAb against Hela (1), A431 (2), Jurkat (3), K562 (4), HEK293 (5), HepG2 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

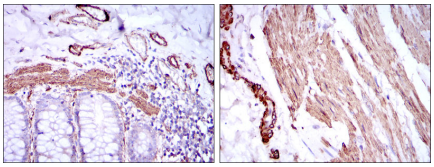

Figure 2: Immunohistochemical analysis of paraffin-embedded human duodenum tissues (left) and human esophagus tissues (right) using ACTA2 mouse mAb with DAB staining.

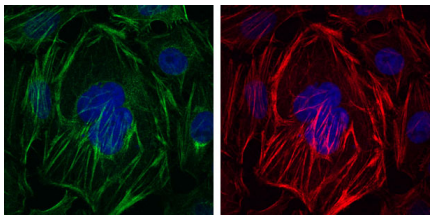

Figure 3: Immunofluorescence analysis of HepG2 cells using ACTA2 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

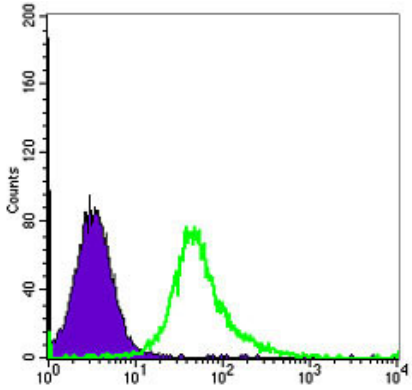

Figure 4: Flow cytometric analysis of Hela cells using ACTA2 mouse mAb (green) and negative control (purple).