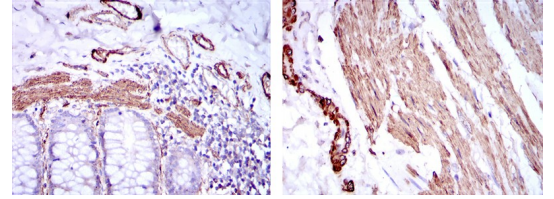


AM06647SU-N**Monoclonal Antibody to ACTA2 / aortic smooth muscle Actin - Ascites**

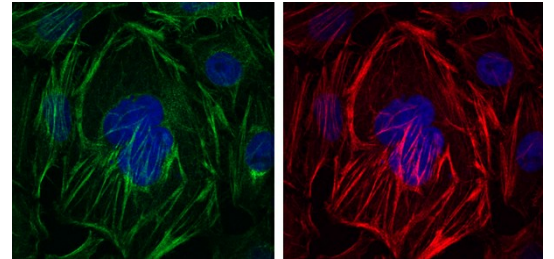
Alternate names:	ACTSA, ACTVS, Alpha-actin-2, Cell growth-inhibiting gene 46 protein
Quantity:	0.1 ml
Background:	The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma 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.
Uniprot ID:	P62736
NCBI:	NP_001135417.1
GeneID:	59
Host / Isotype:	Mouse / IgG1
Clone:	4A4
Immunogen:	Synthesized peptide of human ACTA2.
Format:	State: Ascitic fluid containing 0.03% sodium azide.
Applications:	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. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	42 kDa
Specificity:	This antibody reacts to ACTA2.
Species Reactivity:	Tested: Human, Mouse, Rat and Monkey.
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. Shelf life: one year from despatch.
General Readings:	1. J Hum Genet. 2009 Nov;54(11):687-8. 2. Hum Mutat. 2009 Oct;30(10):1406-11.

Pictures:

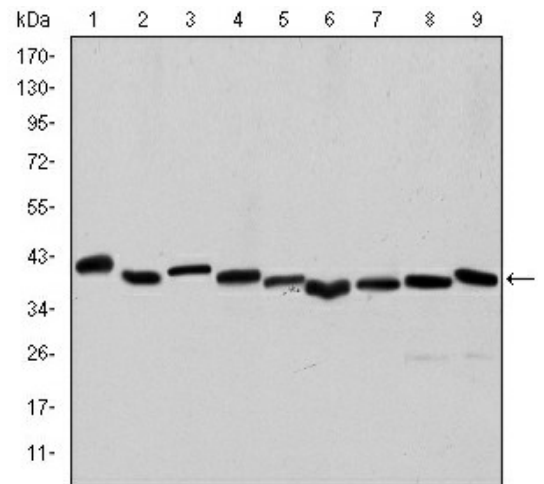
Immunohistochemical analysis of paraffin-embedded human duodenum tissues (left) and human esophagus tissues (right) using ACTA2 mouse mAb with DAB staining.



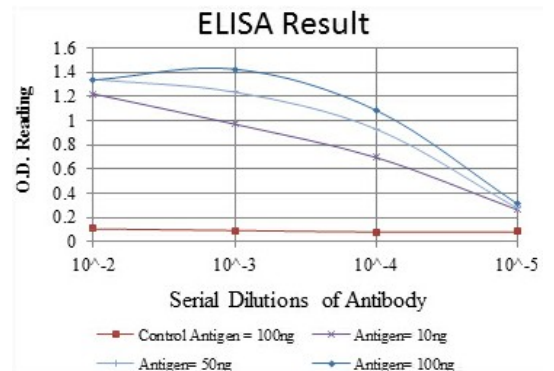
Immunofluorescence analysis of HepG2 cells using ACTA2 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



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)



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.

