

**Product Name: ACTA2 Mouse Monoclonal Antibody****Catalog #: AMM81010**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,ICC,ELISA,FC
<b>Reactivity</b>	Human,Mouse,Rat,Monkey
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Mouse IgG1
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	PBS containing 0.03% sodium azide.
<b>Purification</b>	Affinity Purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
<b>Molecular Weight</b>	42kDa

**Antigen Information**

<b>Gene Name</b>	ACTA2
<b>Alternative Names</b>	AAT6; ACTSA; $\alpha$ -Smooth Muscle Actin;Alpha-actin-2;Alpha actin 2
<b>Gene ID</b>	59.0
<b>SwissProt ID</b>	P62736
<b>Immunogen</b>	Synthesized peptide of human ACTA2.

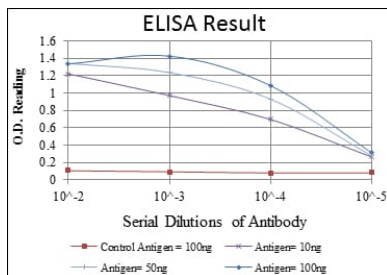
**Background**

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

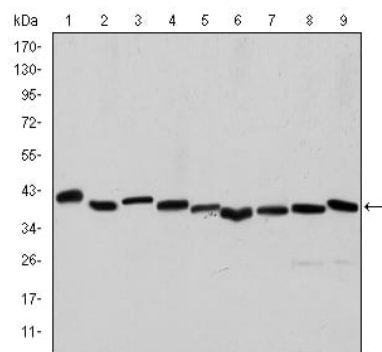
actin is an alpha actin that is found in skeletal muscle. Defects in this gene cause aortic aneurysm familial thoracic type 6. Multiple alternatively spliced variants, encoding the same protein, have been identified.

## Research Area

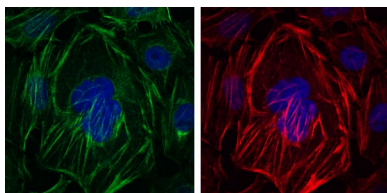
## Image Data



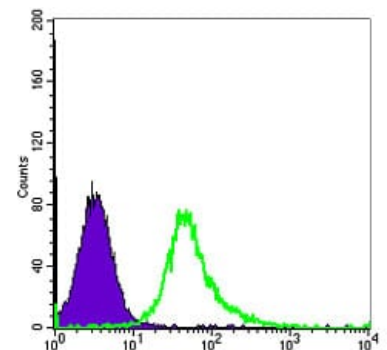
Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng);



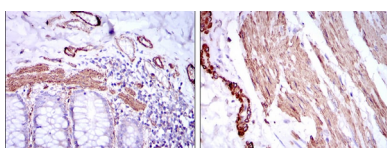
Western blot analysis using ACTA2 mouse mAb against Hela (1), A431 (2), Jurkat (3), K562 (4), HEK293 (5), HepG2 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.



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.



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



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

