

# ACTA2 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant ACTA2. Catalog # AT1030a

## **Product Information**

Application	WB, IF, E
Primary Accession	<u>P62736</u>
Other Accession	<u>BC017554</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	4A8-2H3
Calculated MW	42009

#### **Additional Information**

Gene ID	59
Other Names	Actin, aortic smooth muscle, Alpha-actin-2, Cell growth-inhibiting gene 46 protein, ACTA2, ACTSA, ACTVS
Target/Specificity	ACTA2 (AAH17554.1, 1 a.a. ~ 377 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ACTA2 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

## 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.

## References

1.Isolation and Characterization of a Primary Proximal Tubular Epithelial Cell Model from Human Kidney by CD10/CD13 Double Labeling.Van der Hauwaert C, Savary G, Gnemmi V, Glowacki F, Pottier N, Bouillez A, Maboudou P, Zini L, Leroy X, Cauffiez C, Perrais M, Aubert SPLoS One. 2013 Jun 14;8(6):e66750. doi: 10.1371/journal.pone.0066750. Print 2013.2.miR-199a-5p Is Upregulated during Fibrogenic Response to Tissue Injury and Mediates TGFbeta-Induced Lung Fibroblast Activation by Targeting Caveolin-1.Lino Cardenas CL, Henaoui IS, Courcot E, Roderburg C, Cauffiez C, Aubert S, Copin MC, Wallaert B, Glowacki F, Dewaeles E, Milosevic J, Maurizio J, Tedrow J, Marcet B, Lo-Guidice JM, Kaminski N, Barbry P, Luedde T, Perrais M, Mari B, Pottier NPLoS Genet. 2013 Feb;9(2):e1003291. doi: 10.1371/journal.pgen.1003291. Epub 2013 Feb 14.

#### Images







Recombinant ProteinConcentration(ng/ml)

on HeLa cell. [antibody concentration 1 ~ 10 ug/ml]

Immunofluorescence of monoclonal antibody to ACTA2

Detection limit for recombinant GST tagged ACTA2 is approximately 1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.