

α-SMA Monoclonal Antibody(1E12)

Catalog No :	YM3364
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC
Target :	Actin, smooth muscle (SMA)
Fields :	>>Vascular smooth muscle contraction;>>Apelin signaling pathway;>>Relaxin signaling pathway
Gene Name :	ACTA2
Protein Name :	Actin, aortic smooth muscle
Human Gene Id :	59
Human Swiss Prot No :	P62736
Mouse Swiss Prot No :	P62737
Rat Swiss Prot No :	P62738
Immunogen :	Synthetic Peptide of α-SMA
Specificity :	The antibody detects endogenous α-SMA protein.
Formulation :	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source :	Monoclonal, Mouse
Dilution :	WB 1:5000-50000 IHC 1:1000-2000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 42kD

Cell Pathway : Vascular smooth muscle contraction;

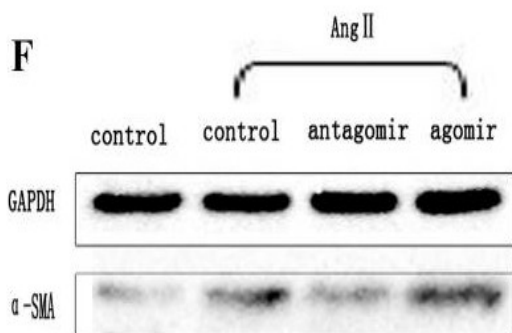
Background : The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile 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. [provided by RefSeq, Nov 2008],

Function : disease:Defects in ACTA2 are the cause of aortic aneurysm familial thoracic type 6 (AAT6) [MIM:611788]. AATs are characterized by permanent dilation of the thoracic aorta usually due to degenerative changes in the aortic wall. They are primarily associated with a characteristic histologic appearance known as 'medial necrosis' or 'Erdheim cystic medial necrosis' in which there is degeneration and fragmentation of elastic fibers, loss of smooth muscle cells, and an accumulation of basophilic ground substance.,function:Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.,miscellaneous:In vertebrates 3 main groups of actin isoforms, alpha, beta and gamma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actin

Subcellular Location : Cytoplasm, cytoskeleton.

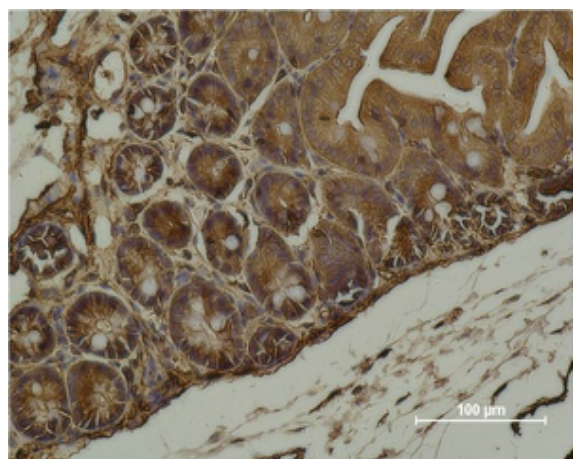
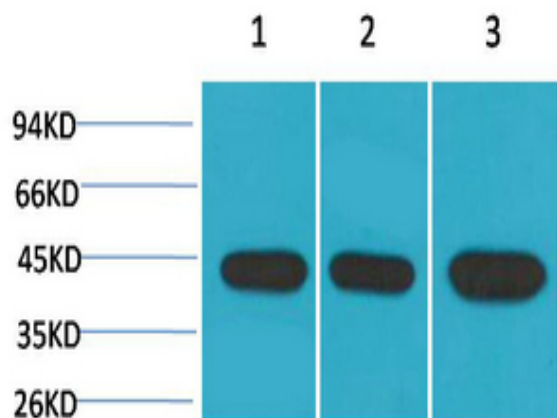
Expression : Pituitary,Uterus,

Products Images



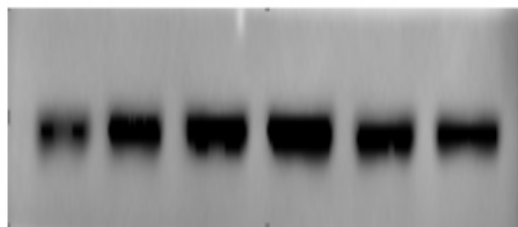
Wei, Yuzhen, et al. "Inhibition of microRNA-155 ameliorates cardiac fibrosis in the process of angiotensin II-induced cardiac remodeling." *Molecular medicine reports* 16.5 (2017): 7287-7296.

Western blot analysis of 1) Hela, 2) 3T3, 3) Rat Brain using α -SMA Monoclonal Antibody.



Immunohistochemical analysis of paraffin-embedded Mouse Cecal Tissue using α -SMA Monoclonal Antibody.

Pancreatic stellate cel

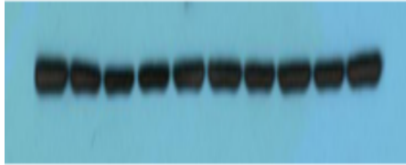


The picture was kindly provided by our customer

Wuhan Union Hospital

α -SMA

GAPDH



The picture was kindly provided by our customer. Primary antibody was diluted at 1:5000. Loading control antibody was diluted at 1:20000