



α-SMA Monoclonal Antibody(1E12)

Catalog No	YP-Ab-02991
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC
Gene Name	ACTA2
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
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1:5000-50000 IHC: 1:1000-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ACTA2;Alpha SMA;a-SMA;smooth muscle actin;Alpha actin 2;Actin;smooth muscle (SMA);aortic smooth muscle;ACTSA;ACTVS;GIG46;Alpha-actin-2;Cell growth-inhibiting gene 46 protein
Observed Band	42kD
Calculated Molecular Weight	42kD
Cell Pathway	Cytoplasm, cytoskeleton.
Tissue Specificity	Pituitary,Uterus,
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

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],

matters needing attention

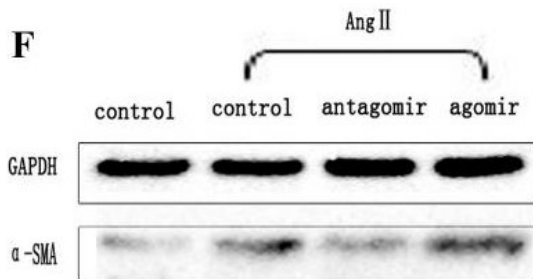
Avoid repeated freezing and thawing!

Usage suggestions

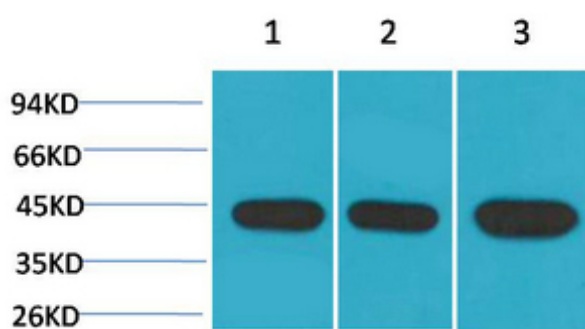
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



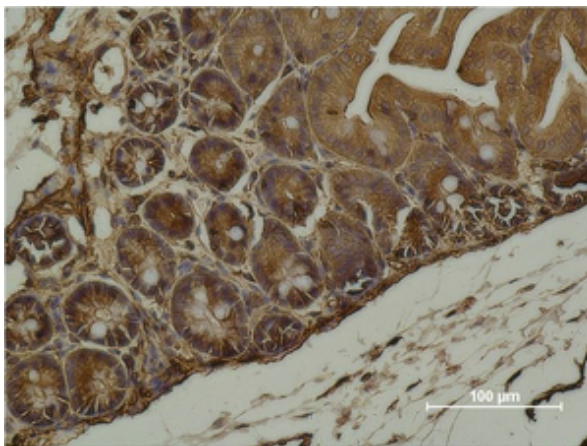
Products Images



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.



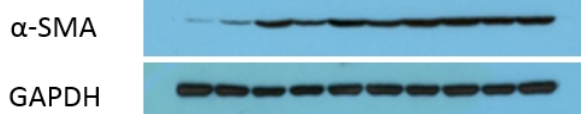
Immunohistochemical analysis of paraffin-embedded Mouse Cecal Tissue using α -SMA Monoclonal Antibody.

Pancreatic stellate cel



Wuhan Union Hospital

The picture was kindly provided by our customer



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