

α -SMA (1E12) Mouse mAb

CatalogNo: BGT-ANT-39639

Key Features

Host Species

- Mouse

Reactivity

- Human, Mouse, Rat

Applications

- WB, IHC

MW

- 42kD (Observed)

Recommended Dilution Ratios

WB 1:5000-50000

IHC 1:1000-2000

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number 1E12

Immunogen Information

Immunogen Synthetic Peptide of α -SMA

Specificity The antibody detects endogenous α -SMA protein.

Target Information

Gene name ACTA2

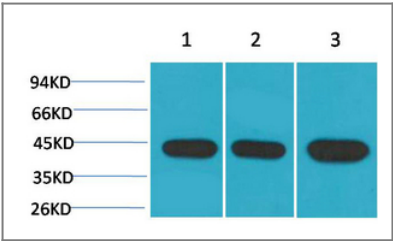
Protein Name	Actin, aortic smooth muscle		
	Organism	Gene ID	UniProt ID
	Human	59;	P62736;
	Mouse		P62737;
	Rat		P62738;

Cellular Localization Cytoplasm, cytoskeleton.

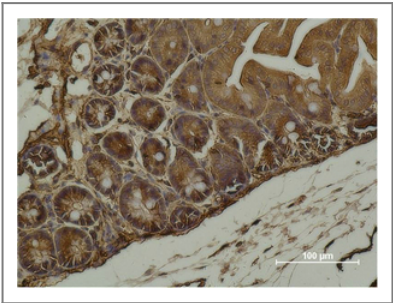
Tissue specificity Pituitary,Uterus,

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 actins coexist in most cell types as components of the cytoskeleton and as mediators of internal cell motility.,similarity:Belongs to the actin family.,subunit:Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to 4 others.,

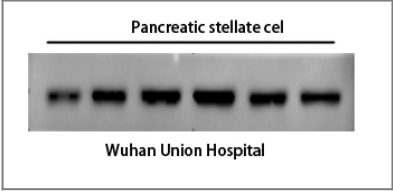
Validation Data



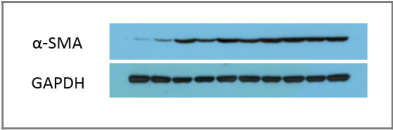
Western blot analysis of 1) Hela, 2) 3T3, 3) Rat Brain using α -SMA Monoclonal Antibody.



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



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