

Product Name: α -SMA Rabbit Polyclonal Antibody**Catalog #: APRab20335**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.05% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	42kDa

Antigen Information

Gene Name	ACTA2
Alternative Names	ACTA2; ACTSA; ACTVS; GIG46; Actin; aortic smooth muscle; Alpha-actin-2; Cell growth-inhibiting gene 46 protein
Gene ID	59.0
SwissProt ID	P62736
Immunogen	Synthesized peptide derived from the N-terminal region of human α -SMA. AA range: 84-134

Background

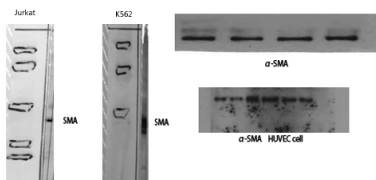
The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in

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],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.,

Research Area

Vascular smooth muscle contraction;

Image Data



Western Blot analysis of various cells using α -SMA Polyclonal Antibody diluted at 1 : 500. Secondary antibody was diluted at 1:20000