

## Summary

Production Name	$\alpha$ -SMA Rabbit Polyclonal Antibody	
Description	Rabbit Polyclonal Antibody	
Host	Rabbit	
Application	WB	
Reactivity	Human,Mouse,Rat	

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.05% New type preservative N.
Purification	Affinity purification

### Immunogen

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.Synthesized peptide derived from the N-terminal region of human $\alpha$ -SMA. AA
	range: 84-134

## Application

Dilution Ratio	WB 1:500-1:2000. ELISA: 1:20000.
Molecular Weight	42kD

# Background

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

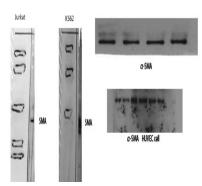


The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, 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 RefSeg, 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  $\alpha$ -SMA Polyclonal Antibody diluted at 1: 500. Secondary antibody was diluted at 1: 20000

#### Note

For research use only.