



α smooth muscle actin (ANT0074R) Rabbit mAb

CatalogNo: ANT8040 **Recombinant** 

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species

- Rabbit
- Human,Mouse,Rat,

Reactivity

- WB,IHC,IF,IP,ELISA

Applications

MW

- 42kD (Calculated)
- 42kD (Observed)

Isotype

- IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1:1000

WB 1:1000-1:5000

IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200,

Storage

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

Basic Information

Clonality Monoclonal

Clone Number ANT0074R

Target Information

Endogenous

Gene name ACTA2
Protein Name Actin aortic smooth muscle

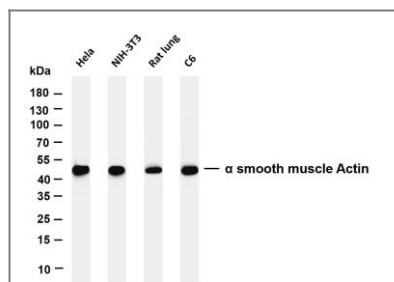
Organism	Gene ID	UniProt ID
Human	59 ;	P62736 ;
Mouse	11475 ;	P62737 ;
Rat	81633 ;	P62738 ;

Cellular Localization Cytoplasm

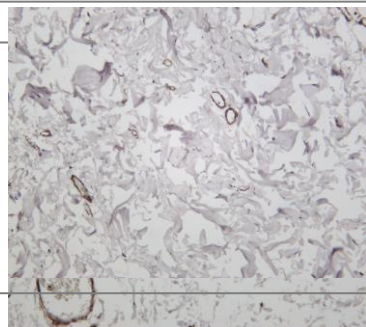
Tissue specificity Pituitary,Uterus,

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 (Factin) in the form of a two-stranded helix. Each actin can bind to 4 others.,

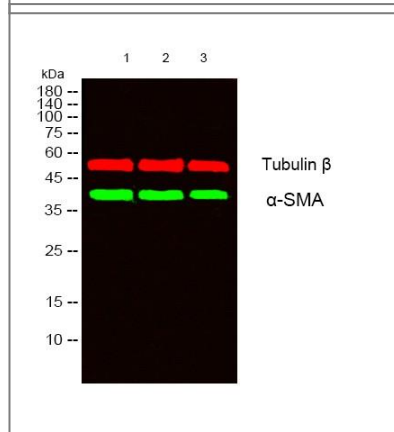
Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti- α smooth muscle Actin (ANT0074R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: NIH-3T3 Lane 3: Rat lung Lane 4: C6
Predicted band size: 42kDa Observed band size: 42kDa



Human colon was stained with anti- α smooth muscle actin (ANT0074R) rabbit antibody
Human stomach was stained with anti- α smooth muscle actin (ANT0074R) rabbit antibody



Western blot analysis of lysates from 1) Jurkat, 2) K562, 3) HuvEC cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920) was diluted at 1:10000, 37° 1 hour. (Red) Tubulin β Monoclonal Antibody(5G3) (cat:YM3030) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody(cat:RS23710) was diluted at 1:10000, 37° 1 hour.

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