

Rabbit alpha-SMA Polyclonal Antibody | anti-ACTA2 antibody

alpha-SMA Antibody

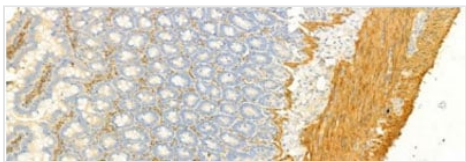
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA30933	Rabbit	Human, Mouse, Rat, Bovine	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, Immunoprecipitation, ELISA

PRODUCT SYNONYMS

alpha-SMA; Polyclonal Antibody; alpha-SMA Antibody; a actin; AAT6; ACTA_HUMAN; ACTA2; Actin alpha 2 smooth muscle aorta; Actin aortic smooth muscle; Actin; aortic smooth muscle; ACTSA; ACTVS; Alpha 2 actin; Alpha actin 2; Alpha cardiac actin; Alpha-actin-2; Cell growth inhibiting gene 46 protein; Cell growth-inhibiting gene 46 protein; GIG46; Growth inhibiting gene 46; MYMY5; anti-ACTA2 antibody

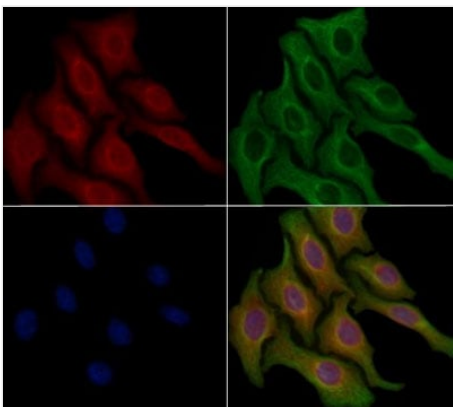
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine
Clonality	Polyclonal
Isotype	IgG
Specificity	alpha-SMA antibody detects endogenous levels of alpha-SMA.
Purity/Purification	Peptide affinity purification
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	377
Applicable Applications for anti-ACTA2 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), IP (Immunoprecipitation), ELISA
Application Notes	WB: 1:500-1:1000 IHC: 1:50-1:500 IF: 1:200 IP: 1:100 ICC 1:200 EIA: 1:20000-1:40000 The optimal dilutions should be determined by the end user.
Immunogen	A synthesized peptide derived from human alpha-SMA, corresponding to a region within N-terminal amino acids.
Preparation and Storage	Store at -20 degree C. Stable for 15 months from date of receipt.



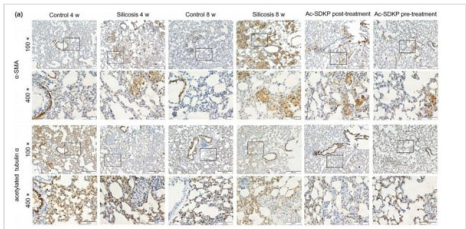
IHC (Immunohistochemistry)

AF1032 at 1/100 staining Rat colon tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



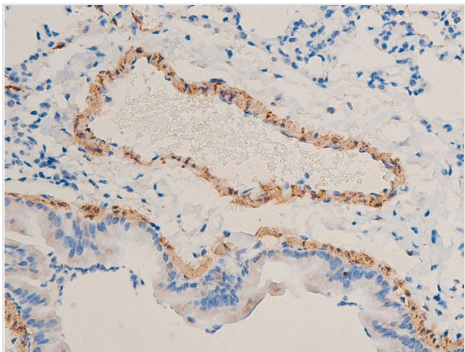
IF (Immunofluorescence)

AF1032 staining Hela cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AF1032) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI (blue).



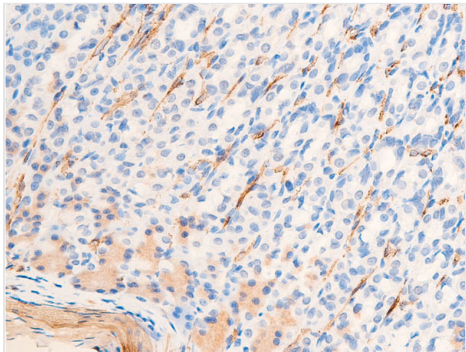
IHC (Immunohistochemistry)

The expression of alpha-SMA and alpha-Ac-Tub in lung tissue measured by immunohistochemistry



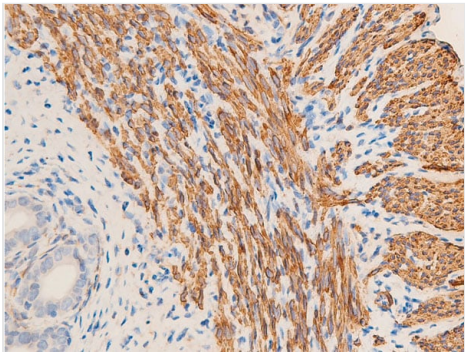
IHC (Immunohistochemistry)

AAA30933 at 1/100 staining rat lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IHC (Immunohistochemistry)

AAA30933 at 1/100 staining rat gastric tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IHC (Immunohistochemistry)

AAA30933 at 1/100 staining rat uterine tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-ACTA2 antibody	Description: 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.
References	Qiu H, Wu H, Ma J, Cao H, Huang L, Qiu W, Peng Y, Ding C; Journal: Naunyn Schmiedebergs Arch Pharmacol. DL-3-n-Butylphthalide reduces atrial fibrillation susceptibility by inhibiting atrial structural remodeling in rats with heart failure. Zhao S, Gao Y, Xia X, Che Y, Wang Y, Liu H, Sun Y, Ren W, Han W, Yang J, Lei L; Journal: Microb Pathog. TGF-beta1 promotes Staphylococcus aureus adhesion to and invasion into bovine mammary fibroblasts via the ERK pathway. Xiaojun W, Yan L, Hong X, Xianghong Z, Shifeng L, Dingjie X, Xuemin G, Lijuan Z, Bonan Z, Zhongqiu W, Ruimin W, Brann D, Fang Y; Journal: Sci Rep. Acetylated a-Tubulin Regulated by N-Acetyl-Seryl-Aspartyl-Lysyl-Proline(Ac-SDKP) Exerts the Anti-fibrotic Effect in Rat Lung Fibrosis Induced by Silica. Li XH, Xiao T, Yang JH, Qin Y, Gao JJ, Liu HJ, Zhou HG; Journal: Respir Res. Parthenolide attenuated bleomycin-induced pulmonary fibrosis via the NF-kB/Snail signaling pathway. Liu D, Pan J, Zhao D, Liu F; Journal: Am J Transl Res. MicroRNA-223 inhibits deposition of the extracellular matrix by airway smooth muscle cells through targeting IGF-1R in the PI3K/Akt pathway.

NCBI AND UNIPROT INFORMATION

NCBI GI #	213688375
NCBI GeneID	59
NCBI Accession #	NP_001135417.1
NCBI GenBank Nucleotide #	NM_001141945.2
UniProt Accession #	P62736; P03996; P04108; Q6FI19; B2R8A4
Molecular Weight	Observed: 45 kD Predicted: 43 kDa
NCBI Official Full Name	actin, aortic smooth muscle
NCBI Official Synonym Full Names	actin, alpha 2, smooth muscle, aorta
NCBI Official Symbol	ACTA2
NCBI Official Synonym Symbols	ACTSA
NCBI Protein Information	actin, aortic smooth muscle
UniProt Protein Name	Actin, aortic smooth muscle
UniProt Gene Name	ACTA2
UniProt Synonym Gene Names	ACTSA; ACTVS

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/alpha-sma-antibody-western-blot-immunohistochemistry-immunofluorescence-immunocytochemistry-immunoprecipitation-elisa/30933>