
alpha smooth muscle Actin Rabbit pAb

Catalog Number: bs-10196R

Target Protein: alpha smooth muscle Actin

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:2000-10000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (1µg/Test)

Reactivity: Human, Mouse, Rat (predicted:Rabbit)

Predicted MW: 42 kDa

Entrez Gene: 59

Swiss Prot: P62736

Source: KLH conjugated synthetic peptide derived from human Actin alpha: 165-260/377.

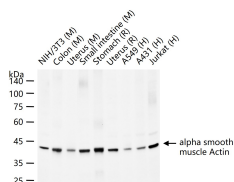
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

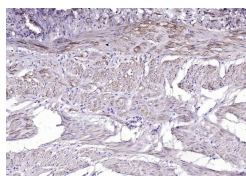
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: All eukaryotic cells express Actin, which often constitutes as much as 50% of total cellular protein. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. While lower eukaryotes, such as yeast, have only one Actin gene, higher eukaryotes have several isoforms encoded by a family of genes. At least six types of Actin are present in mammalian tissues and fall into three classes. alpha-Actin expression is limited to various types of muscle, whereas beta- and gamma-Actin are the principle constituents of filaments in other tissues. Members of the small GTPase family regulate the organization of the Actin cytoskeleton. Rho controls the assembly of Actin stress fibers and focal adhesion. Rac regulates Actin filament accumulation at the plasma membrane. Cdc42 stimulates formation of filopodia.

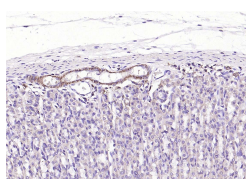
VALIDATION IMAGES



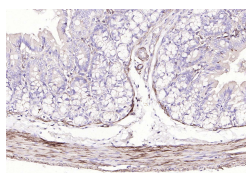
25 ug total protein per lane of various lysates (see on figure) probed with alpha smooth muscle Actin polyclonal antibody, unconjugated (bs-10196R) at 1:2000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



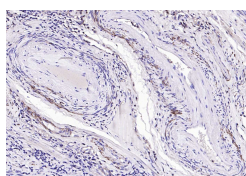
Paraformaldehyde-fixed, paraffin embedded (Human stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (bs-10196R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



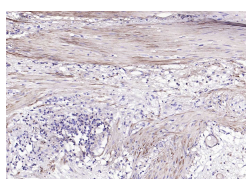
Paraformaldehyde-fixed, paraffin embedded (rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (bs-10196R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (bs-10196R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human cervical carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (bs-10196R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (bs-10196R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

PRODUCT SPECIFIC PUBLICATIONS

[IF=18.9] Yonghong Fan. et al. Construction of tissue-engineered vascular grafts with enhanced patency by integrating heparin, cell-adhesive peptide, and carbon monoxide nanogenerators into acellular blood vessels. BIOACT MATER. 2024 Apr;34:221 IF ; Human . 10.1016/j.bioactmat.2023.12.015

[IF=14.593] Binbin He. et al. 3D printed biomimetic epithelium/stroma bilayer hydrogel implant for corneal regeneration. Bioact Mater. 2022 Jan; IF ; Rabbit . 10.1016/j.bioactmat.2022.01.034

[IF=15.1] Linlin Tao. et al. Synergistic strategy based on mild phototherapy and deep tumor hypoxia reversal comprehensively remodels the tumor microenvironment for improved immunotherapy. CHEM ENG J. 2023 Sep;472:145092 IF ; Mouse . 10.1016/j.cej.2023.145092

[IF=12.4] Li Gao. et al. STING/ACSL4 axis-dependent ferroptosis and inflammation promote hypertension-associated chronic kidney disease. MOL THER. 2023 Aug 01 IF ; Human . 37533255

[IF=12.479] Pan Zhang. et al. The programmed site-specific delivery of LY3200882 and PD-L1 siRNA boosts immunotherapy for triple-negative breast cancer by remodeling tumor microenvironment. BIOMATERIALS. Biomaterials. 2022 Apr;;121518 IHC ; Mouse . 35462305