

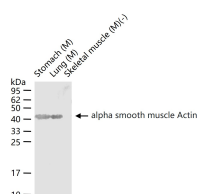
bs-0189R**[Primary Antibody]****alpha smooth muscle Actin Rabbit pAb****Bioss**
ANTIBODIES

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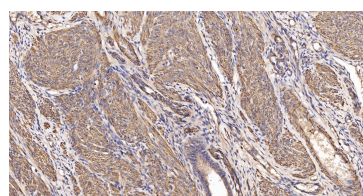
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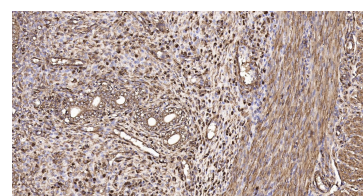
400-901-9800

DATASHEET**Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 59**SWISS:** P62736**Target:** alpha smooth muscle Actin**Immunogen:** KLH conjugated synthetic peptide derived from human Actin alpha: 301-375/375.**Purification:** affinity purified by Protein A**Concentration:** 1mg/ml**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.**Applications:** **WB** (1:1000-5000)**IHC-P** (1:100-500)**IHC-F** (1:100-500)**IF** (1:100-500)**Flow-Cyt** (1:100-200)**Reactivity:** Human, Mouse, Rat
(predicted: Rabbit)**Predicted MW.:** 42 kDa**Observed MW.:** 42 kDa**Subcellular Location:** Cytoplasm**VALIDATION IMAGES**

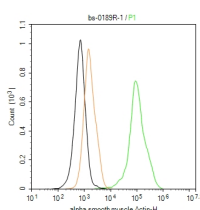
Sample: Stomach (Mouse) Lysate at 40 ug Lung (Mouse) Lysate at 40 ug Skeletal muscle (-) (Mouse) Lysate at 40 ug Primary: Anti-alpha smooth muscle Actin (bs-0189R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 42 kD Observed band size: 42 kD



Paraformaldehyde-fixed, paraffin embedded Human Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with alpha smooth muscle Actin Polyclonal Antibody, Unconjugated (bs-0189R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Rat Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with alpha smooth muscle Actin Polyclonal Antibody, Unconjugated (bs-0189R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



The NIH/3T3 treated with 5 ng/mL TGF-β1 for 72h (M) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, the cells then were

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incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.). Cells stained with Primary Antibody for 30 min at room temperature, followed by secondary antibody incubation for 40 min at room temperature. Primary Antibody (green):Rabbit Anti-alpha smooth muscle Actin antibody (bs-0189R,1:100); Isotype Control (orange): Rabbit IgG (bs-0295P). Blank control (black): PBS. Acquisition of 20,000 events was performed.

— SELECTED CITATIONS —

- **[IF=26.6]** Lei Yao. et al. NAD⁺ biosynthesis and mitochondrial repair in acute kidney injury via ultrasound-responsive thylakoid-integrating liposomes. NAT BIOMED ENG. 2025 Jun;;1-18 IF, WB ;Mouse. 40461655
- **[IF=15.1]** Shan Zhong. et al. Electrical and immune stimulation-based hydrogels synergistically realize scarless wound healing via amplifying endogenous electrophysiological function and promoting Macrophage Phenotype-Switching. CHEM ENG J. 2024 Jul;491:152048 IHC ;Rat,Rabbit. 10.1016/j.cej.2024.152048
- **[IF=10.7]** Jiayi Li. et al. Chronic arsenic exposure-provoked biotoxicity involved in liver-microbiota-gut axis disruption in chickens based on multi-omics technologies. J ADV RES. 2024 Jan;; WB ;Chicken. 38237767
- **[IF=10.6]** Gong Xinxian. et al. Ferrocene-derived magnetic fiber-particles from diesel exhaust: enhanced pulmonary toxicity via Bach1-SAT1-polyamine depletion. J NANOBIOENGINEERING. 2025 Dec;23(1):1-21 WB ;Human. 40301891
- **[IF=10.171]** Wan Zhou. et al. Retinol binding protein 4 promotes the phenotypic transformation of vascular smooth muscle cells under high glucose condition via modulating RhoA/ROCK1 pathway. TRANSL RES. 2023 Mar;; WB ;Rat. 37003483