

bsm-52392R**[Primary Antibody]**

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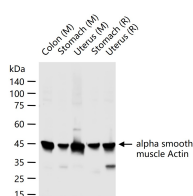
400-901-9800

alpha smooth muscle Actin Recombinant Rabbit mAb

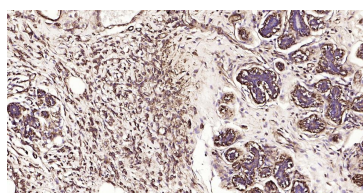
— DATASHEET —

Host: Rabbit	Isotype: IgG	Applications: WB (1:2000-10000) IHC-P (1:200-800) IHC-F (1:200-800) IF (1:200-800) Flow-Cyt (1:100-200) ICC/IF (1:100-200)
Clonality: Recombinant	CloneNo.: 8C3	
GeneID: 59	SWISS: P62736	
Target: alpha smooth muscle Actin		
Immunogen: A synthesized peptide derived from human Actin: 1-30.		
Purification: affinity purified by Protein A		Reactivity: Human, Mouse, Rat (predicted: Zebrafish)
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.		Predicted MW.: 42 kDa
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.		Observed MW.: 42 kDa
		Subcellular Location: Cytoplasm

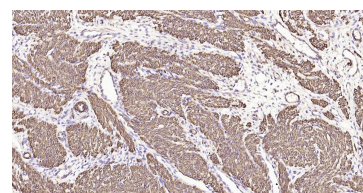
— VALIDATION IMAGES —



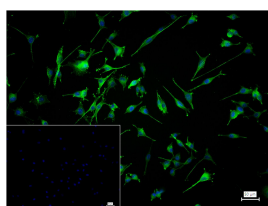
25 ug total protein per lane of various lysates (see on figure) probed with alpha smooth muscle Actin monoclonal antibody, unconjugated (bsm-52392R) at 1:2000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



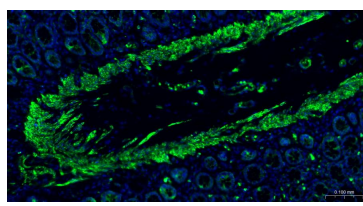
Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with alpha smooth muscle Actin Monoclonal Antibody, Unconjugated(bsm-52392R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



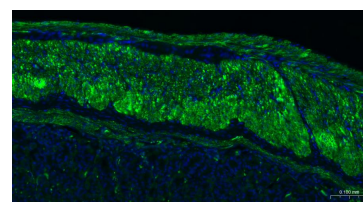
Paraformaldehyde-fixed, paraffin embedded Human Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with alpha smooth muscle Actin Monoclonal Antibody, Unconjugated(bsm-52392R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



4% Paraformaldehyde-fixed NIH/3T3 treated with 5 ng/mL TGF- β 1 for 72h (M) cell; Triton X-100 at r.t. for 20 min; Antibody incubation with (alpha smooth muscle Actin) monoclonal



Paraformaldehyde-fixed, paraffin embedded Human small intestine; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with alpha smooth



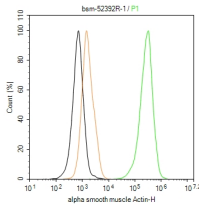
Paraformaldehyde-fixed, paraffin embedded Mouse stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with alpha smooth muscle

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Antibody, unconjugated (bsm-52392R) 1:100, 90 min at 37°C; followed by BF488 conjugated Goat Anti-Rabbit IgG antibody (green, bs-60295G-BF488) at 37°C for 90 min, DAPI (blue, C02-04002) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.

muscle Actin Monoclonal Antibody, Unconjugated (bsm-52392R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei.

Actin Monoclonal Antibody, Unconjugated (bsm-52392R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei.



The NIH/3T3 treated with 5 ng/mL TGF- β 1 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 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 (bsm-52392R, 1:100); Isotype Control (orange): Rabbit IgG (bs-0295P). Blank control (black): PBS. Acquisition of 20,000 events was performed.

— SELECTED CITATIONS —

- **[IF=7.9]** Rui Cao. et al. Kaempferol attenuates carbon tetrachloride (CCl₄)-induced hepatic fibrosis by promoting ASIC1a degradation and suppression of the ASIC1a-mediated ERS. PHYTOMEDICINE. 2023 Oct;:155125 IHC,WB ;Rat. 37820466
- **[IF=4.6]** Demircan Volkan. et al. Evaluation of therapeutic use of a combination of pentoxifylline and vitamin E in radiation-induced renal fibrosis. SCI REP-UK. 2024 Mar;14(1):1-14 IHC ;Rat. 38521858
- **[IF=4.2]** Muxin Yu. et al. Neutrophil extracellular traps-induced pyroptosis of liver sinusoidal endothelial cells exacerbates intrahepatic coagulation in cholestatic mice. BBA-MOL BASIS DIS. 2025 Mar;1871:167700 IHC,IF ;Mouse. 39914029
- **[IF=4.175]** Huajun Wang. et al. LncRNA NEAT1 promotes proliferation, migration, invasion and epithelial-mesenchymal transition process in TGF- β 2-stimulated lens epithelial cells through regulating the miR-486-5p/SMAD4 axis. Cancer Cell Int. 2020 Dec;20(1):1-12 WB ;Human. 33292220
- **[IF=3.913]** Xiaoliang Zhou. et al. Ursolic acid inhibits human dermal fibroblasts hyperproliferation, migration, and collagen deposition induced by TGF- β via regulating the Smad2/3 pathway. GENE. 2023 May;867:147367 ICC,WB ;Human. 36931410