#### bsm-52392R

## [ Primary Antibody ]

# alpha smooth muscle Actin Recombinant Rabbit ANTIB mAb

#### - DATASHEET -

Host: Rabbit Clonality: Recombinant Isotype: IgG CloneNo.: 8C3 SWISS: P62736

Target: alpha smooth muscle Actin

Immunogen: A synthesized peptide derived from human Actin: 1-30.

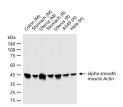
Purification: affinity purified by Protein A

#### Concentration: 1mg/ml

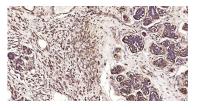
GenelD: 59

- **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.

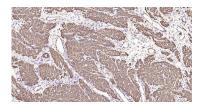
#### – VALIDATION IMAGES



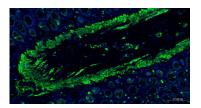
25 ug total protein per lane of various lysates (see on figure) probed with alpha smooth muscle Actin monoclonal antibody, unconjugated (bsm-52392R) at 1:2000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



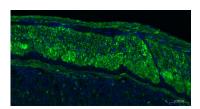
Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with alpha smooth muscle Actin Monoclonal Antibody, Unconjugated(bsm-52392R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit,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



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



sales@bioss.com.cn techsupport@bioss.com.cn 400-901-9800

Applications: WB (1:1000-5000) IHC-P (1:100-500) IHC-F (1:100-500) IF (1:100-500) ICC/IF (1:100)

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

Predicted MW.: 42 kDa

Subcellular Location: Cytoplasm 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.

### - 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=4.175] Huajun Wang. et al. LncRNA NEAT1 promotes proliferation, migration, invasion and epithelial-mesenchymal transition process in TGF-β2-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
- [IF=2.9] Cunping Yin. et al.Notch 2 from bone marrow mesenchymal stem cells alleviates smoke inhalation-induced lung injury by mediating alveolar cell differentiation..JOURNAL OF MOLECULAR HISTOLOGY.2025 Mar 22;56(2):113. Western blot ;Rat. 40119225