bsm-52224R **[Primary Antibody]**

Smad3 Recombinant Rabbit mAb

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

DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: 3D1
GeneID: 4088
SWISS: P84022
Target: Smad3
Immunogen: A synthesized peptide derived from human SMAD3: 200-250.
Purification: affinity purified by Protein A
Concentration: 1mg/1ml
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: Smad3 is a 50 kDa member of a family of proteins that act as key mediators of TGF beta superfamily signaling in cell proliferation, differentiation and development. The Smad family is divided into three subclasses: receptor regulated Smads, activin/TGF beta receptor regulated (Smad2 and 3) or BMP receptor regulated (Smad 1, 5, and 8); the common partner, (Smad4) that functions via its interaction to the various Smads; and the inhibitory Smads, (Smad6 and 7). Activated Smad3 oligomerizes with Smad4 upon TGF beta stimulation and translocates as a complex into the nucleus, allowing its binding to DNA and transcription factors. Phosphorylation of the two TGF beta dependent serines 423 and 425 in the C terminus of Smad3 is critical for Smad3 transcriptional activity and TGF beta signaling.

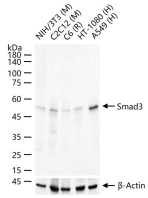
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)
ICC/IF (1:50-200)

Reactivity: Human, Mouse, Rat

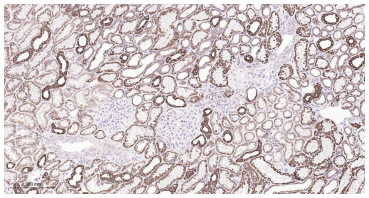
Predicted MW.: 47 kDa

Subcellular Location: Cytoplasm ,Nucleus

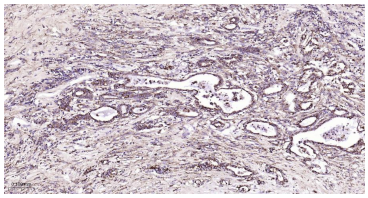
VALIDATION IMAGES



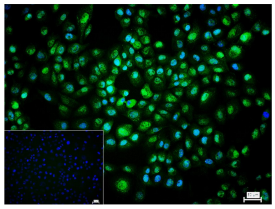
25 ug total protein per lane of various lysates (see on figure) probed with Smad3 monoclonal antibody, unconjugated (bsm-52224R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



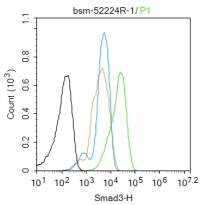
Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Smad3 Monoclonal Antibody, Unconjugated(bsm-52224R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Pancreatic Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Smad3 Monoclonal Antibody, Unconjugated(bsm-52224R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



HT-1080 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Smad3) monoclonal Antibody, Unconjugated



Blank control:HUVEC. Primary Antibody (green line): Rabbit Anti-Smad3 antibody (bsm-52224R) Dilution: 1ug/Test; Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 0.5ug/Test. Protocol The cells were fixed with 4% PFA

(bsm-52224R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

(10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature.The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=3.647]** Li L et al. Anti-fibrotic effect of melittin on TRIM47 expression in Human embryonic lung fibroblast through regulating TRIM47 pathway. Life Sci. 2020 Sep 1;256:117893. WB ;Human. 32502539
- **[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=1.813]** Wu Li-Juan. et al. Dahuang Zhechong Pills Suppress Silicosis Fibrosis Progression via p38 MAPK/TGF-β1/Smad Pathway In Vitro. Evid-Based Compl Alt. 2021;2021:6662261 WB ;Mouse. 33868442
- **[IF=2.2]** He Xiao-yan. et al. Dahuang Zhechong Pill Alleviates Liver Fibrosis Progression by Regulating p38 MAPK/NF-κB/TGF-β1 Pathway. CHIN J INTEGR MED. 2024 Jun;:1-8 WB ;Rat. 38888716