

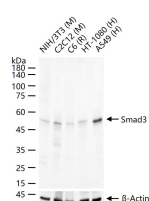
bsm-52224R**[Primary Antibody]****Bioss**
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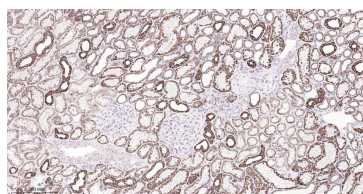
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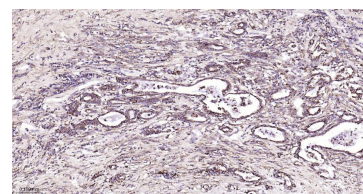
400-901-9800

SMAD3 Recombinant Rabbit mAb**— 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)
ICC/IF (1:50-200)**Reactivity:** Human, Mouse, Rat**Predicted MW.:** 47 kDa**Observed MW.:** 50 kDa**Subcellular Location:** Cytoplasm ,Nucleus**— VALIDATION IMAGES —**

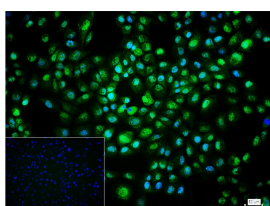
25 ug total protein per lane of various lysates (see on figure) probed with Smad3 monoclonal antibody, unconjugated (bsm-52224R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



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 (bsm-52224R) 1:100, 90 minutes at 37°C;

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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.

— SELECTED CITATIONS —

- **[IF=8.5]** Yulong Hu. et al. Structural characterization of an active polysaccharide from Gardenia jasminoides and its anti-pulmonary fibrosis effect associated with TGF- β 1/Smad3 signaling pathway. INT J BIOL MACROMOL. 2025 Nov;330:148272 WB ;Human. 41086895
- **[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=3.647]** 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=2.2]** He Xiao-yan. et al. Dahuang Zhechong Pill Alleviates Liver Fibrosis Progression by Regulating p38 MAPK/NF- κ B/TGF- β 1 Pathway. CHIN J INTEGR MED. 2024 Jun;1-8 WB ;Rat. 38888716
- **[IF=1.813]** Wu Li-Juan. et al. Dahuang Zhechong Pills Suppress Silicosis Fibrosis Progression via p38 MAPK/TGF- β 1/Smad Pathway In Vitro. Evid-Based Compl Alt. 2021;2021:6662261 WB ;Mouse. 33868442