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## Smad3 Recombinant Rabbit mAb

Catalog Number: bsm-52224R

Target Protein: Smad3

Concentration: 1mg/1ml

Form: Liquid

Host: Rabbit

Clonality: Recombinant

Clone No.: 3D1

Isotype: IgG

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 Cytoplasm ,Nucleus

Locations:

Entrez Gene: 4088

Swiss Prot: P84022

Source: A synthesized peptide derived from human SMAD3: 200-250.

Purification: affinity purified by Protein A

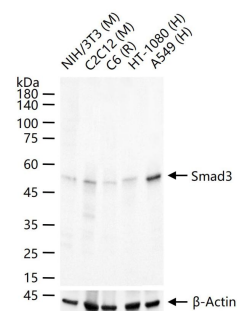
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

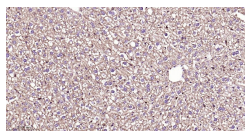
**Background:** Smad3 is a 50 kDa member of a family of proteins that act as key mediators of TGF beta superfamily signaling in cell proliferation, differentiation and development. The Smad family is divided into three subclasses: receptor regulated Smads, activin/TGF beta receptor regulated (Smad2 and 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.

### VALIDATION IMAGES

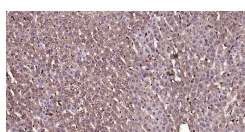
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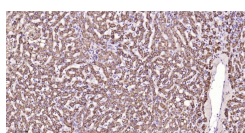
25 ug total protein per lane of various lysates (see on figure) probed with Smad3 monoclonal antibody, unconjugated (bsm-52224R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



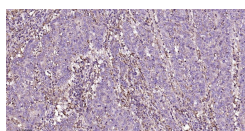
Paraformaldehyde-fixed, paraffin embedded Mouse Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Smad3 Monoclonal Antibody, Unconjugated(bsm-52224R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



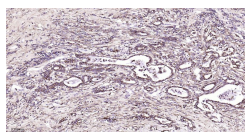
Paraformaldehyde-fixed, paraffin embedded Rat Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Smad3 Monoclonal Antibody, Unconjugated(bsm-52224R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Liver; 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 Colon 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.



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.

## PRODUCT SPECIFIC PUBLICATIONS

**[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- $\kappa$  B/TGF- $\beta$ 1 Pathway. CHIN J INTEGR MED. 2024 Jun;;1-8 WB ; Rat . 38888716