

Product Datasheet

Smad3 Antibody - BSA Free NB100-56479

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Updated 9/9/2025 v.20.1

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NB100-56479

Smad3 Antibody - BSA Free

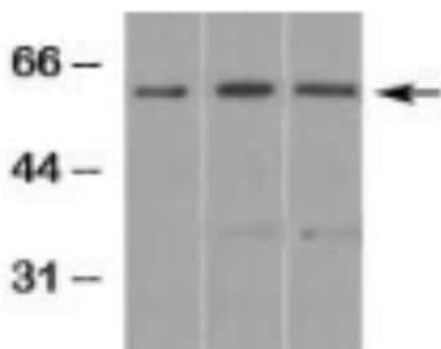
| Product Information | |
|---------------------|--|
| Unit Size | 0.1 mg |
| Concentration | 1.0 mg/ml |
| Storage | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles. |
| Clonality | Polyclonal |
| Preservative | 0.05% Sodium Azide |
| Isotype | IgG |
| Purity | Protein G purified |
| Buffer | PBS |

| Product Description | |
|---------------------|--|
| Description | Novus Biologicals Rabbit Smad3 Antibody - BSA Free (NB100-56479) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-Smad3 Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee. |
| Host | Rabbit |
| Gene ID | 4088 |
| Gene Symbol | SMAD3 |
| Species | Human, Mouse, Rat, Porcine, Bovine, Canine, Primate |
| Immunogen | A portion of amino acids 100-150 of human SMAD3 was used as the immunogen. |

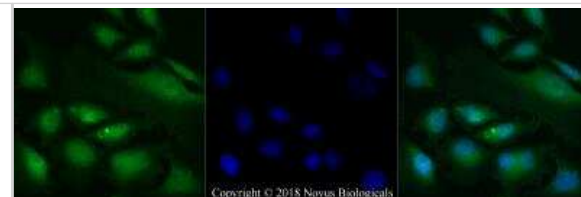
| Product Application Details | |
|-----------------------------|---|
| Applications | Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry |
| Recommended Dilutions | Western Blot 0.5 - 2 ug/mL, Simple Western 1:50, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 5 ug/mL |
| Application Notes | See Simple Western Antibody Database for Simple Western validation: Tested in Bladder, separated by Size, antibody dilution of 1:50 |

Images

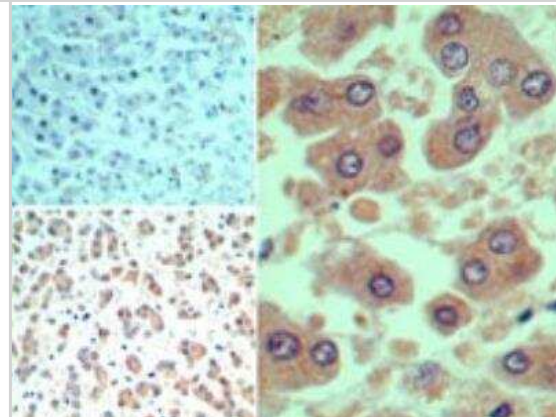
Western Blot: Smad3 Antibody [NB100-56479] - Analysis in human fibroblast and HeLa whole cell lysates. Untreated lysates show a band around 55 kDa. 1:1000 dilution, 1 hour blocking in milk 5%. WB image submitted by a verified customer review.



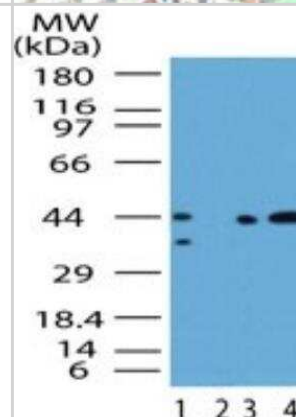
Immunocytochemistry/Immunofluorescence: Smad3 Antibody [NB100-56479] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.5% Triton X-100. The cells were incubated with anti-Smad3 at 10 ug/mL overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



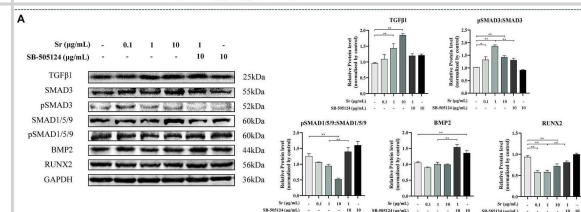
Immunohistochemistry-Paraffin: Smad3 Antibody [NB100-56479] - Human liver tissue probed with SMAD3 antibody (bottom left, right) and isotype control antibody (top left) at 10 ug/mL.



Western Blot: Smad3 Antibody [NB100-56479] - Analysis using SMAD3 antibody. Lysate from human liver in the 1) absence and 2) presence of immunizing peptide, 3) mouse liver and 4) rat liver probed with SMAD3 antibody at 0.5 ug/mL. I goat anti-rabbit Ig HRP secondary antibody and PicoTect ECL substrate solution were used for this test.



Effects of Sr and SB-505124 on the transforming growth factor β (TGF β)/SMAD family member (SMAD) signaling pathway and downstream gene transcription in bovine chondrocytes. Chondrocytes were treated with different doses of Sr (0, 0.1, 1, 10 μ g/ml) with or without activin receptor-like kinase 5 (ALK5) kinase inhibitor (10 μ M SB-505124). (A) Western blot analysis and relative protein expression levels of SMAD3, pSMAD3, SMAD1/5/9, pSMAD1/5/9, TGF β , bone morphogenetic protein 2 (BMP2), and runt-related transcription factor 2 (RUNX2). (B) mRNA expression levels of TGF β 1, serpin family E member 1 (SERPINE1), ALK5, ALK1, and inhibitor of DNA binding 1 (ID1). All experiments were repeated at least thrice. Data are means \pm SEM (n = 3 in each group) *p < 0.05; **p < 0.01. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/35712700>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Salemi S, Schori L, Gerwinn T et al. Myostatin Overexpression and Smad Pathway in Detrusor Derived from Pediatric Patients with End-Stage Lower Urinary Tract Dysfunction International Journal of Molecular Sciences 2023-02-24 [PMID: 36901894] (Western Blot, Human)

Smith SS, Chu D, Qu T et al. Species-specific sensitivity to TGF β signaling and changes to the Mmp13 promoter underlie avian jaw development and evolution eLife 2022-06-06 [PMID: 35666955] (Western Blot, Human)

Chen B, Li R, Hernandez S et al. Differential effects of Smad2 and Smad3 in regulation of macrophage phenotype and function in the infarcted myocardium Journal of Molecular and Cellular Cardiology 2022-07-01 [PMID: 35780861]

Wu X, Wang H, Chen H et al. Overexpression of smad7 inhibits the TGF-beta/Smad signaling pathway and EMT in NPHP1-defective MDCK cells Biochem Biophys Res Commun 2021-12-10 [PMID: 34689106] (WB, ICC/IF, Canine)

Li Y, Zhao S, Xu S et al. Palmitoylethanolamide (PEA) reduces postoperative adhesions after experimental strabismus surgery in rabbits by suppressing canonical and non-canonical TGF beta signaling through PPAR alpha Biochemical pharmacology 2020-12-29 [PMID: 33385371] (WB, Mouse)

Chen SM, Hsu LJ, Lee HL et al. Lactobacillus Attenuate the Progression of Pancreatic Cancer Promoted by Porphyromonas Gingivalis in K-rasG12D Transgenic Mice Cancers (Basel) 2020-11-26 [PMID: 33255941] (IHC-P, Mouse)

Details:
Pancreas samples from transgenic mice exposed to *P. gingivalis* underwent immunohistochemical analysis.

Sivadas VP, George NA, Kattoor J, Kannan S. Novel mutations and expression alterations in SMAD3/TGFBR2 genes in oral carcinoma correlate with poor prognosis. Genes Chromosomes Cancer 2013-11-01 [PMID: 23913824] (WB, Human)

Ruebel KH, Leontovich AA, Tanizaki Y et al. Effects of TGFbeta1 on gene expression in the HP75 human pituitary tumor cell line identified by gene expression profiling. Endocrine. 2008-02-01 [PMID: 18401765] (WB, Human)





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Products Related to NB100-56479

| | |
|-------------|--|
| NB820-59232 | Human Liver Whole Tissue Lysate (Adult Whole Normal) |
| NBP2-33376H | Blue Marker Antibody (6F4-F6) [HRP] |
| HAF008 | Goat anti-Rabbit IgG Secondary Antibody [HRP] |
| NB7160 | Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP] |
| NBP2-24891 | Rabbit IgG Isotype Control |

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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