

Resource Summary Report

Generated by [nidm-terms](#) on Aug 15, 2026

SMAD4 (D3R4N) XP

RRID:AB_2736998

Type: Antibody

Proper Citation

Cell Signaling Technology Cat# 46535, RRID:AB_2736998

Antibody Information

URL: http://antibodyregistry.org/AB_2736998

Proper Citation: Cell Signaling Technology Cat# 46535, RRID:AB_2736998

Target Antigen: Smad4

Host Organism: rabbit

Clonality: monoclonal

Comments: Applications: W, IP, IHC-P, IF-IC, F, ChIP, ChIP-seq

Antibody Name: SMAD4 (D3R4N) XP

Description: This monoclonal targets Smad4

Target Organism: monkey, rat, mouse, human

Clone ID: D3R4N

Antibody ID: AB_2736998

Vendor: Cell Signaling Technology

Catalog Number: 46535

Record Creation Time: 20250820T001112+0000

Record Last Update: 20250820T073611+0000

Ratings and Alerts

No rating or validation information has been found for SMAD4 (D3R4N) XP.

No alerts have been found for SMAD4 (D3R4N) XP.

Data and Source Information

Source: [Antibody Registry](#)

Usage and Citation Metrics

We found 22 mentions in open access literature.

Listed below are recent publications. The full list is available at [nidm-terms](#) .

Zhang Y, et al. (2026) Paneth-like transition drives resistance to dual targeting of KRAS and EGFR in colorectal cancer. *Cancer cell*, 44(1), 77.

Yang D, et al. (2026) A cell-intrinsic glucocorticoid biosynthesis and sensing circuit maintains a homeostatic Th17 cell state. *Immunity*.

Zheng D, et al. (2025) CD4⁺ anti-TGF- β CAR T cells and CD8⁺ conventional CAR T cells exhibit synergistic antitumor effects. *Cell reports. Medicine*, 6(3), 102020.

Yasukawa K, et al. (2025) ACVR2A attenuation impacts lactate production and hyperglycolytic conditions attracting regulatory T cells in hepatocellular carcinoma. *Cell reports. Medicine*, 6(4), 102038.

Ling J, et al. (2025) Artificial intelligence-driven discovery of YH395A: A novel TGF- β R1 inhibitor with potent anti-tumor activity against triple-negative breast cancer. *Cell communication and signaling : CCS*, 23(1), 326.

Luo P, et al. (2025) ERBB4 selectively amplifies TGF- β pro-metastatic responses. *Cell reports*, 44(2), 115210.

Marohl T, et al. (2025) PCSK5M452I is a recessive hypomorph exclusive to MCF10DCIS.com cells. *Molecular cancer research : MCR*.

Murimwa GZ, et al. (2025) SMAD4 Deficiency Promotes Pancreatic Cancer Progression and Confers Susceptibility to TGF- β Inhibition. *Cancer research*, 85(16), 2987.

Eigenbrood J, et al. (2025) Spatial Profiling Identifies Regionally Distinct Microenvironments and Targetable Immunosuppressive Mechanisms in Pediatric Osteosarcoma Pulmonary Metastases. *Cancer research*, 85(12), 2320.

Xiao M, et al. (2024) Smad4 sequestered in SFPQ condensates prevents TGF- β tumor-suppressive signaling. *Developmental cell*, 59(1), 48.

Haga M, et al. (2024) Positive and negative feedback regulation of the TGF- β 1 explains two equilibrium states in skin aging. *iScience*, 27(5), 109708.

Pu T, et al. (2024) Stromal-derived MAOB promotes prostate cancer growth and progression. *Science advances*, 10(6), eadi4935.

Lee JH, et al. (2024) TGF- β and RAS jointly unmask primed enhancers to drive metastasis. *Cell*, 187(22), 6182.

Shi M, et al. (2024) Genetic and microenvironmental evolution of colorectal liver metastases under chemotherapy. *Cell reports. Medicine*, 5(12), 101838.

Ye F, et al. (2023) TGF β Antagonizes IFN γ -Mediated Adaptive Immune Evasion via Activation of the AKT-Smad3-SHP1 Axis in Lung Adenocarcinoma. *Cancer research*, 83(13), 2262.

Aoyama S, et al. (2023) Prolyl isomerase Pin1 promotes extracellular matrix production in hepatic stellate cells through regulating formation of the Smad3-TAZ complex. *Experimental cell research*, 425(2), 113544.

Li J, et al. (2023) TOPK mediates immune evasion of renal cell carcinoma via upregulating the expression of PD-L1. *iScience*, 26(7), 107185.

Zhu X, et al. (2023) Acetate controls endothelial-to-mesenchymal transition. *Cell metabolism*, 35(7), 1163.

Singh DK, et al. (2023) 5-Azacytidine- and retinoic-acid-induced reprogramming of DCCs into dormancy suppresses metastasis via restored TGF β -SMAD4 signaling. *Cell reports*, 42(6), 112560.

Lin X, et al. (2022) Decreased Expression of EZH2 in Granulosa Cells Contributes to Endometriosis-Associated Infertility by Targeting IL-1R2. *Endocrinology*, 164(2).