

Product datasheet for **TA319188**

SMAD3 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1:15,000 - 1:50,000, WB: 1:500 - 1:10,000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human Smad3 protein.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	SMAD family member 3
Database Link:	NP_001138574 Entrez Gene 17127 Mouse Entrez Gene 25631 Rat Entrez Gene 4088 Human P84022
Synonyms:	HSPC193; HsT17436; JV15-2; LDS1C; LDS3; MADH3



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Note: This antibody is suitable for Cancer, Immunology and Nuclear Signaling research. Smad3 (also known as Mothers against decapentaplegic homolog 3, Mothers against DPP homolog 3, Mad3, hMAD-3, JV15-2 or hSMAD3) is a transcriptional modulator activated by TGF- β (transforming growth factor) and activin type I receptor kinase. These activators exert diverse effects on a wide array of cellular processes. The Smad proteins mediate much of the signaling responses induced by the TGF- β superfamily. Briefly, activin type I receptor kinase phosphorylates receptor-activated Smads (R-Smads) at the two extreme serines in the C-terminal SSXS motif; e.g. Smad2 and Smad3 proteins in the TGF- β pathway, or Smad1, Smad5 or Smad8 in the Bone Morphogenetic Proteins (BMP) pathway. The phosphorylated R-Smad then translocates into the nucleus, where it regulates transcription of target genes. Based on microarray and animal model experiments, Smad3 accounts for at least 80% of all TGF- β -mediated responses.

Protein Families: Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGF β /BMP signaling pathway, Transcription Factors

Protein Pathways: Adherens junction, Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway, Wnt signaling pathway

Product images:



Western blot using affinity purified anti-Smad3 to detect over-expressed Smad3 in 231 cells (lane 2). Lane 1 shows mock infection of 231 cells with lentiviral vector alone. The membrane was probed with the primary antibody at a 1:5,000 dilution. Personal Communication, Allan Weissman, CCR-NCI, Bethesda, MD. Personal Communication