

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 MouseEntrez Gene 25631 RatEntrez 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-b (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-b 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-b 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-b-mediated responses.

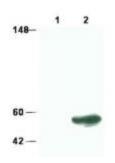
Protein Families:

Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/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