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Anti-SMAD1/SMAD2/SMAD3/SMAD5 Antibody

Catalog Number: PA1331

About SMAD1

SMADs are proteins that modulate the activity of transforming growth factor beta ligands. The SMADs, often in complex with other SMADs/CoSMAD, act as transcription factors that regulate the expression of certain genes. Zhu, H et al concluded that targeted ubiquitination of SMADs may serve to control both embryonic development and a wide variety of cellular responses to TGF-beta signals. R-Smads or receptor regulated Smads are a class of proteins that include SMAD1, SMAD2, SMAD3, SMAD5, and SMAD8. In response to signals by the TGF-beta superfamily of ligands these proteins associate with receptor kinases and are phosphorylated at an SSXS motif at their extreme C-terminus. These proteins then typically bind to the common mediator Smad or co-SMAD SMAD4.

Overview

Product Name	Anti-SMAD1/SMAD2/SMAD3/SMAD5 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SMAD1/SMAD2/SMAD3/SMAD5 Antibody catalog # PA1331. Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q15797

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SMAD 1/2/3/5, identical to the related mouse and rat sequences.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

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Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

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Anti-SMAD1/SMAD2/SMAD3/SMAD5 Antibody (PA1331) Images



Anti-SMAD 1/2/3/5 antibody, PA1331, Western blotting
Lane 1: Rat Heart Tissue Lysate
Lane 2: Rat Skeletal Muscle Tissue Lysate
Lane 3: Rat Kidney Tissue Lysate
Lane 4: Rat Brain Tissue Lysate
Lane 5: MM453 Cell Lysate
Lane 6: MM231 Cell Lysate
Lane 7: HELA Cell Lysate
Lane 8: SMMC Cell Lysate
Lane 9: SW620 Cell Lysate

5 Publications Citing This Product

1. PubMed ID: -, Hang Liang,Qian Wang,Ding Wang,Hongwu Zheng,Dhan V. Kalvakolanu,Hua Lu,Naiyan Wen,Xuyang Chen,Libo Xu,Jiaxin Ren,Baofeng Guo,Ling Zhang, RGFP966, a histone deacetylase 3 inhibitor, promotes glioma stem cell differentiation by blocking TGF-beta signaling via SMAD7,Biochemical Pharmacology,Volume 180,2020,114118,ISSN 0006-2952,https://doi. org/10.1016/j.bcp.2020.114118.

2. PubMed ID: 32826874, Hong L,Li F,Tang C,Li L,Sun L,Li X,Zhu L.Semaphorin 7A promotes endothelial to mesenchymal transition through ATF3 mediated TGF-beta2/Smad signaling.Cell Death Dis.2020 Aug 10;11(8):695.doi:10.1038/s41419-020-02818-x.PMID:32826874;PMCID:PMC7442651.

3. PubMed ID: 25820389, Xu T, Ni Mm, Huang C, Meng Xm, He Yh, Zhang L, Li J. Inflammation. 2015 Oct;38(5):1794-804. Doi: 10.1007/S10753-015-0157-6. Nlrc5 Mediates Il-6 And Il-1?? Secretion In Lx-2 Cells And Modulated By The Nf-??b/Smad3 Pathway.

Visit bosterbio.com/anti-smad-1-2-3-5-antibody-pa1331-boster.html to see all 5 publications.

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