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Anti-SMAD1 Antibody Picoband®

Catalog Number: PB9395

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. It was 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 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SMAD1 Antibody Picoband® catalog # PB9395. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na2HPO4, and 0.05 mg NaN3. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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 in the middle region of human SMAD1, different from the related mouse sequence by two amino acids, and from the related rat sequence by five amino acids.

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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
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

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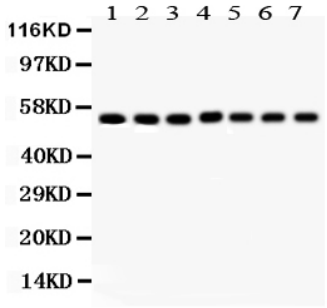
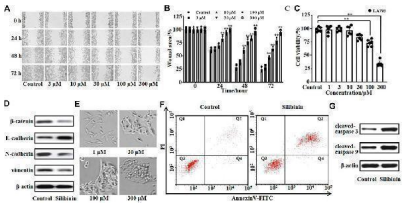
Anti-SMAD1 Antibody Picoband® (PB9395) Images



Anti-SMAD1 Picoband antibody, PB9395, Western blottingAll lanes: Anti SMAD1 (PB9395) at 0.5ug/mlLane 1: Rat Cardiac Muscle Tissue Lysate at 50ugLane 2: Mouse Cardiac Muscle Tissue Lysate at 50ugLane 3: Rat Skeletal Muscle Tissue Lysate at 50ugLane 4: Mouse Skeletal Muscle Tissue Lysate at 50ugLane 5: 293T Whole Cell Lysate at 40ugLane 6: MCF-7 Whole Cell Lysate at 40ugLane 7: HELA Whole Cell Lysate at 40ugPredicted bind size: 52KDObserved bind size: 52KD



Silibinin inhibited the growth and promoted the apoptosis of LA795 cells. (A) . Migration of LA795 cells in the presence of 0, 3, 10, 30, 100, and 300 uM silibinin assessed by wound healing assay (n = 4). (B) . Statistical results of the percentage of wound area in (A) (n = 4) (C) . Statistical results of LA795 cells viability incubated with different concentrations of silibinin (n = 6). (D) . Expression of beta -catenin, E-cadherin, N-cadherin, and vimentin of LA795 cells after treated with 200 uM silibinin for 24 h (n = 3). (E) . Representative real-time images of LA795 cells incubated with different concentrations of silibinin (n = 6). (F) . Representative images of apoptotic cells after 200 uM silibinin treatment for 24 h detected by annexin V apoptosis assay (n = 3). (G) . Expression of cleaved-caspase 3 and cleaved-caspase 9 of LA795 cells after 200 uM silibinin treatment for 24 h (n = 3).Index in PubMed under a CC BY license. PMID: 33935737

6 Publications Citing This Product

1. PubMed ID: 10.3389/fphar.2021.643489, Inhibition of TMEM16A by Natural Product Silibinin: Potential Lead Compounds for Treatment of Lung Adenocarcinoma

2. 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.

3. PubMed ID: 24746831, Tang Y, Li Y, Yu H, Gao C, Liu L, Chen S, Xing M, Liu L, Yao P. J Nutr Biochem. 2014 Jun;25(6):675-82. Doi: 10.1016/J.Jnutbio.2014.02.009. Epub 2014 Mar 19. Quercetin Prevents Ethanol-Induced Iron Overload By Regulating Hepcidin Through The Bmp6/S...

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