

Datasheet for ABIN3043341

anti-SMAD4 antibody (C-Term)[Go to Product page](#)**1** Image**5** Publications

Overview

Quantity:	100 µg
Target:	SMAD4
Binding Specificity:	AA 526-552, C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMAD4 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-Smad4 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human Smad4, identical to the related mouse and rat sequences.
Sequence:	EIHLHRALQL LDEVLHTMPI ADPQPLD
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Smad4 Antibody Picoband® (ABIN3043341). 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.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: SMAD4

Alternative Name: SMAD4 ([SMAD4 Products](#))

Background: Synonyms: Mothers against decapentaplegic homolog 4, MAD homolog 4, Mothers against DPP homolog 4, Deletion target in pancreatic carcinoma 4, SMAD family member 4, SMAD 4, Smad4, hSMAD4, SMAD4, DPC4, MADH4,
Background: SMAD4 (Mothers Against Decapentaplegic Drosophila Homolog of 4), also known as MADH4 or DPC4, is a protein that in humans is encoded by the SMAD4 gene. It belongs to the Darwin family of proteins that modulate members of the TGF β protein superfamily. Hahn et al. (1996) identified the SMAD4 gene on chromosome 18q21.1. Howe et al. (1998) identified the SMAD4 gene within a region on 18q21.1 defined by linkage analysis in kindred with juvenile polyposis syndrome. To test the hypothesis that the SMAD4 gene is a tumor suppressor that is critical for transmitting signals from transforming growth factor-beta and related ligands. SMAD4 plays a pivotal role in signal transduction of the transforming growth factor beta superfamily cytokines by mediating transcriptional activation of target genes.
Sequence Similarities: Belongs to the Darwin/SMAD family.

Molecular Weight: 60 kDa

Gene ID: 4089

UniProt: [Q13485](#)

Pathways: [Cell Division Cycle](#), [Chromatin Binding](#), [Autophagy](#)

Application Details

Application Notes: Western blot, 0.1-0.5 μ g/mL, Human, Mouse, Rat
1. Hein, L., Altman, J. D., Kobilka, B. K. :Two functionally distinct alpha-2-adrenergic receptors regulate sympathetic neurotransmission. Nature 402: 181-184, 1999. 2. Hoehe, M. R., Berrettini, W. H., Lentes, K.-U.:Dra I identifies a two allele DNA polymorphism in the human alpha-2-adrenergic receptor gene (ADRAR), using a 5.5 kb probe (p ADRAR). Nucleic Acids Res. 16: 9070 only, 1988. 3. Yang-Feng, T. L., Kobilka, B. K., Caron, M. G., Lefkowitz, R. J., Francke, U.:Chromosomal assignment of genes for an alpha-adrenergic receptor (ADRAR) and for another member of this receptor family coupled to guanine nucleotide regulatory proteins (RG21). (Abstract) Cytogenet. Cell Genet. 46: 722-723, 1987.

Application Details

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C, -20 °C

Storage Comment: 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.

Publications

Product cited in: Xu, Xu, Saud, Lu, Liu, Fang, Zhang, Hu, Li: "Effect of Kuijie Granule on the Expression of TGF-β/Smads Signaling Pathway in Patients with Ulcerative Colitis." in: **Evidence-based complementary and alternative medicine : eCAM**, Vol. 2016, pp. 2601830, (2016) ([PubMed](#)).

Cheng, Xiao, Ainiwaer, Wang, Wu, Mao, Yang, Bao: "Molecular responses of radiation-induced liver damage in rats." in: **Molecular medicine reports**, Vol. 11, Issue 4, pp. 2592-600, (2015) ([PubMed](#)).

Tang, Li, Yu, Gao, Liu, Chen, Xing, Liu, Yao: "Quercetin prevents ethanol-induced iron overload by regulating hepcidin through the BMP6/SMAD4 signaling pathway." in: **The Journal of nutritional biochemistry**, Vol. 25, Issue 6, pp. 675-82, (2014) ([PubMed](#)).

Chen, Kong, Wan, Xiao, Li, Wang, Lin, Wang: "Effects of huogu I formula (I) on correlated factors of bone regeneration in chickens with steroid-induced necrosis of femoral head." in: **Chinese**

journal of integrative medicine, Vol. 18, Issue 5, pp. 378-84, (2012) ([PubMed](#)).

Dong, Jia, Zhang, Li, Geng, Zhou, Li, Liu, Niu: "Emodin protects rat liver from CCl(4)-induced fibrogenesis via inhibition of hepatic stellate cells activation." in: **World journal of gastroenterology**, Vol. 15, Issue 38, pp. 4753-62, (2010) ([PubMed](#)).

Images

