

Datasheet: VMA00252KT

Description:	SMAD4 ANTIBODY WITH CONTROL LYSATE
Specificity:	SMAD4
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	1B6
Isotype:	IgG1
Quantity:	2 Westerns

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

PrecisionAb antibodies have been extensively [validated for the western blot application](#). The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

20µl Mouse monoclonal antibody prepared by affinity chromatography on Protein G from ascites

Buffer Solution

Phosphate buffered saline

Preservative

0.09% Sodium Azide (NaN₃)

Stabilisers

Immunogen Purified recombinant fragment of human SMAD4 expressed in *E. coli*

External Database Links**UniProt:**

[Q13485](#) [Related reagents](#)

Entrez Gene:

[4089](#) SMAD4 [Related reagents](#)

Synonyms DPC4, MADH4

Specificity

Mouse anti Human SMAD4 antibody recognizes the Mothers against decapentaplegic homolog 4, also known as MAD homolog 4, SMAD, mothers against DPP homolog 4, deleted in pancreatic carcinoma locus 4, deletion target in pancreatic carcinoma 4, mothers against decapentaplegic homolog 4 and mothers against decapentaplegic.

SMAD4 encodes a member of the Smad family of signal transduction proteins. Smad proteins are phosphorylated and activated by transmembrane serine-threonine receptor kinases in response to TGF-beta signaling. A product of SMAD4 gene, Mothers against decapentaplegic homolog 4 forms homomeric complexes and heteromeric complexes with other activated Smad proteins, which then accumulate in the nucleus and regulate the transcription of target genes. This protein binds to DNA and recognizes an 8-bp palindromic sequence (GTCTAGAC) called the Smad-binding element (SBE). The Smad proteins are subject to complex regulation by post-translational modifications. Mutations or deletions in SMAD4 have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome. (provided by RefSeq, Oct 2009).

Mouse anti Human SMAD4 antibody detects a band of 65 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting Anti SMAD4 detects a band of approximately 65 kDa in Jurkat cell lysates

Instructions For Use Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

Lysate Composition 400µg Jurkat lysate lyophilized in RIPA buffer.

Lysate Reconstitution - If using DDT reconstitute the lyophilized lysate with 190µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.
- If using BME reconstitute the lyophilized lysate with 180µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.
Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

Storage Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.

Guarantee	As supplied, 12 months from date of despatch.
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Acknowledgements	PrecisionAb™ is a trademark of Bio-Rad Laboratories.
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Health And Safety Information	Material Safety Datasheet documentation #10040 #10561 available at: Antibody (10040): https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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