

Datasheet: VMA00971

BATCH NUMBER 100005724

Description:	MOUSE ANTI SMAD5
Specificity:	SMAD5
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	AB01/1F7
Isotype:	IgG2b
Quantity:	100 µl

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	▪			1/2000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. 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 dependent 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	Mouse monoclonal antibody affinity purified on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen *E. coli*-derived recombinant protein of amino acids 1-465 of human SMAD5

External Database Links

UniProt:

[Q99717](#) [Related reagents](#)

Entrez Gene:

[4090](#) SMAD5 [Related reagents](#)

Synonyms MADH5

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line

Specificity **Mouse anti SMAD5 antibody** recognizes mothers against decapentaplegic homolog 5, also known as JV5-1 and MADH5. SMADs are a group of transcription factors that transmit signals from TGF-beta at the cell surface to the nucleus ([Li et al. 2018](#)). TGF-beta signaling is crucial for adult homeostasis and also proper embryonic development. Related to the function of TGF-beta in development, SMAD5 knockout in mice results in early embryonic lethality. SMAD5 is closely related to SMAD1 and SMAD8, and primarily mediates bone morphogenetic protein (Bmp) signaling ([Umans et al. 2007](#)). SMAD5 has been shown to be involved with tumor progression, and SMAD5 appears to be required for chemoresistance in triple negative breast carcinoma cells ([Opyrchal et al. 2017](#)).

Western Blotting Mouse anti SMAD5 detects a band of approximately 55 kDa in K562 cell lysates

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

Guarantee 12 months from date of despatch

Acknowledgements PrecisionAb is a trademark of Bio-Rad Laboratories

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/VMA00971>
Antibody (10040)

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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