

## Datasheet: VMA00971

<b>Description:</b>	MOUSE ANTI SMAD5
<b>Specificity:</b>	SMAD5
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Clone:</b>	AB01/1F7
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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](http://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 Stabilisers

0.09% Sodium Azide

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant protein of amino acids 1-465 of human SMAD5
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q99717</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4090</a> SMAD5    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MADH5
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti SMAD5 antibody</b> 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 (<a href="#">Li et al. 2018</a>). 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 (<a href="#">Umans et al. 2007</a>). SMAD5 has been shown to be involved with tumor progression, and SMAD5 appears to be required for chemoresistance in triple negative breast carcinoma cells (<a href="#">Opyrchal et al. 2017</a>).</p>
<b>Western Blotting</b>	Mouse anti SMAD5 detects a band of approximately 55 kDa in K562 cell lysates
<b>Storage</b>	Store undiluted at -20°C, avoiding repeated freeze thaw cycles
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	PrecisionAb is a trademark of Bio-Rad Laboratories
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/VMA00971">https://www.bio-rad-antibodies.com/SDS/VMA00971</a> Antibody (10040)
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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

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