

Datasheet: VPA00182KT

Description:	SMAD2 ANTIBODY WITH CONTROL LYSATE
Specificity:	SMAD2
Format:	Purified
Product Type:	PrecisionAb Polyclonal
Isotype:	Polyclonal IgG
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	<p>Reacts with: Mouse</p> <p>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.</p>
Product Form	Purified IgG - liquid
Preparation	20µl Rabbit polyclonal antibody purified by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<p>0.09% Sodium Azide (NaN₃)</p> <p>1% Bovine Serum Albumin</p>
Immunogen	Synthetic peptide corresponding to an internal region of human SMAD2

External Database Links	UniProt: Q15796 Related reagents Entrez Gene: 4087 SMAD2 Related reagents
Synonyms	MADH2, MADR2
Specificity	<p>Rabbit anti Human SMAD2 antibody recognizes SMAD2 also known as mothers against decapentaplegic homolog 2 , MAD homolog 2, mothers against DPP homolog 2, JV18-1 Mad-related protein 2, hMAD-2, SMAD family member 2, SMAD 2, Smad2 and hSMAD2.</p> <p>SMAD2 belongs to the SMAD family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the <i>C. elegans</i> gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for SMAD2 (provided by RefSeq, May 2012).</p> <p>Rabbit anti Human SMAD2 antibody detects a band of 60 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.</p>
Western Blotting	Anti SMAD2 detects a band of approximately 60 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	<ul style="list-style-type: none"> - 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. <p>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.</p>
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.

Acknowledgements PrecisionAb™ is a trademark of Bio-Rad Laboratories.

Health And Safety Information Material Safety Datasheet documentation #10041 #10561 available at:
Antibody (10041): <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>
Lysate Material (10561): <https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rabbit IgG (H/L) (STAR208...) [HRP](#)

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