

## Datasheet: AHP2700

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| <b>Description:</b>  | RABBIT ANTI SMAD2 (pSer465/pSer467)/SMAD3 (pSer423/pSer425) |
| <b>Specificity:</b>  | SMAD2 (pSer465/pSer467)/SMAD3 (pSer423/pSer425)             |
| <b>Format:</b>       | Purified                                                    |
| <b>Product Type:</b> | Polyclonal Antibody                                         |
| <b>Isotype:</b>      | Polyclonal IgG                                              |
| <b>Quantity:</b>     | 50 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 | ▪   |    |                | 1/500 - 1/2000     |

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

|                       |       |
|-----------------------|-------|
| <b>Target Species</b> | Human |
|-----------------------|-------|

|                     |                       |
|---------------------|-----------------------|
| <b>Product Form</b> | Purified IgG - liquid |
|---------------------|-----------------------|

|                              |                                                                                                                                                                                                                  |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Antiserum Preparation</b> | Antiserum to SMAD2 (pSer465/pSer467)/SMAD3 (pSer423/pSer425) was raised by repeated immunization of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography. |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                        |                           |
|------------------------|---------------------------|
| <b>Buffer Solution</b> | Phosphate buffered saline |
|------------------------|---------------------------|

|                                     |                                    |
|-------------------------------------|------------------------------------|
| <b>Preservative<br/>Stabilisers</b> | 0.02% Sodium Azide<br>50% Glycerol |
|-------------------------------------|------------------------------------|

|                  |                                                                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen</b> | Phospho specific-peptide corresponding to residues surrounding serine 465/467 of human SMAD2 and serine 423/425 of human SMAD3 |
|------------------|--------------------------------------------------------------------------------------------------------------------------------|

### External Database Links

#### UniProt:

[Q15796](#)

[Related reagents](#)

[P84022](#)

[Related reagents](#)

**Entrez Gene:**[4087](#) SMAD2 [Related reagents](#)[4088](#) SMAD3 [Related reagents](#)**Synonyms**

MADH2, MADH3, MADR2

**Specificity****Rabbit anti SMAD2 (pSer465/pSer467)/SMAD3 (pSer423/pSer425) antibody**

recognizes mothers against decapentaplegic homolog 2 (SMAD2), when phosphorylated at serine 465 and serine 467 and mothers against decapentaplegic homolog 3 (SMAD3) when phosphorylated at serine 423 and serine 425. The SMAD protein family mediates transforming growth factor-beta (TGF- $\beta$ ) signaling from the membrane to the nucleus ([Attisano, L. & Wrana, J.L. 2002](#)). SMAD2 is phosphorylated on serine 465 and serine 467 by TGF beta type I receptor (TbetaRI). This phosphorylation is essential for SMAD2's binding to SMAD4 and for the orchestration of TGF beta signaling ([Abdollah, S. et al. 1997](#)). The antibody also recognizes SMAD3 phosphorylated on Ser423 and Ser425 by homology.

The TGF beta signaling pathway is involved in many cellular processes including cell growth, differentiation and proliferation. The pathway is deregulated in various diseases, including cancer.

**Storage**

Store at -20°C

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

**Guarantee**

12 months from date of despatch

**Health And Safety Information**

Material Safety Datasheet documentation #10049 available at:  
<https://www.bio-rad-antibodies.com/SDS/AHP2700>  
10049

**Regulatory**

For research purposes only

## Related Products

### Recommended Useful Reagents

[RABBIT ANTI SMAD2 \(VPA00182\)](#)[RABBIT ANTI SMAD3 \(VPA00166\)](#)**North & South** Tel: +1 800 265 7376**America** Fax: +1 919 878 3751Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)**Worldwide**

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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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