

## Datasheet: AHP3075

|                      |   |
|----------------------|---|
| <b>Description:</b>  | RABBIT ANTI SYMMETRIC-DI-METHYL-HISTONE H4 (Arg3) |
| <b>Specificity:</b>  | SYMMETRIC DI-METHYL-HISTONE H4 (Arg3)             |
| <b>Format:</b>       | Purified  |
| <b>Product Type:</b> | Polyclonal Antibody                               |
| <b>Isotype:</b>      | Polyclonal IgG                                    |
| <b>Quantity:</b>     | 0.1 ml  |

## 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.

### Target Species

Human

### Species Cross Reactivity

Based on sequence similarity, is expected to react with: Broad

**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

### Antiserum Preparation

Antiserum to symmetric-di-methyl-histone H4 (Arg3) was raised by repeated immunization of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.035% Sodium Azide (NaN<sub>3</sub>)  
30% Glycerol

### Carrier Free

Yes

|                                      |   |
|--------------------------------------|---|
| <b>Immunogen</b>                     | A peptide containing symmetrically di-methylated Arg3 of human histone H4   |
| <b>External Database Links</b>       | <p><b>UniProt:</b><br/> <a href="#">P62805</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">554313</a>    HIST2H4B    <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                      | H4/A, H4/B, H4/C, H4/D, H4/E, H4/G, H4/H, H4/I, H4/J, H4/K, H4/M, H4/N, H4/O, H4F2, H4FA, H4FB, H4FC, H4FD, H4FE, H4FG, H4FH, H4FI, H4FJ, H4FK, H4FM, H4FN, H4FO, HIST2H4   |
| <b>Specificity</b>                   | <p><b>Rabbit anti Human symmetric di-methyl-histone H4 (Arg3)</b> recognizes histone H4 when symmetrically di-methylated at arginine 3.</p> <p>Histone H4 is one of the four core histones that make up the nucleosome core particle. Nucleosomes are the smallest subunit of chromatin and are made up of 146 bp of DNA wrapped around an octamer comprised of pairs of the four core histones (H2A, H2B, H3, and H4) (<a href="#">Smith, 1991</a>). Histones can be mono-, di- or tri-methylated by histone methyltransferases (HMTs). Depending on which amino acid residues are methylated, methylation of histones may increase or decrease the transcription of genes. Methylation events that weaken the binding between histone tails and DNA lead to increased transcription because they make the DNA more accessible to transcription factor proteins and RNA polymerase. Methylation of histones is therefore crucial for the regulation of gene expression (<a href="#">Gupta et al. 2010</a>). Symetrical demethylation of histone H4 at arginine 3 by the PRMT methyltransferases PRMT5 and PRMT7 normally leads to transcriptional repression (<a href="#">Girardot et al. 2014</a>).</p> <p>Wide species cross-reactivity is expected from Rabbit anti Human symmetric di-methyl-histone H4 (Arg3) antibody based on sequence.</p> |
| <b>Storage</b>                       | <p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. Should this product contain a precipitate we recommend microcentrifugation before use.</p>  |
| <b>Guarantee</b>                     | 12 months from date of despatch   |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10049 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP3075">https://www.bio-rad-antibodies.com/SDS/AHP3075</a><br>10049   |
| <b>Regulatory</b>                    | For research purposes only  |

## Related Products

### Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
- Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
- Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
- Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

|                                  |   |                  |   |               |   |
|----------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a> | <b>Worldwide</b> | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> | <b>Europe</b> | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
|----------------------------------|---|------------------|---|---------------|---|

To find a 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)  
'M394898:220218'

Printed on 18 Jan 2024

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)