

# Datasheet: AHP418 BATCH NUMBER 169353

| Description:  | RABBIT ANTI HISTONE H4 (ACETYLATED) |
|---------------|-------------------------------------|
| Specificity:  | HISTONE H4 ACETYLATED               |
| Format:       | Serum                               |
| Product Type: | Polyclonal Antibody                 |
| Isotype:      | Polyclonal IgG                      |
| Quantity:     | 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|                                  | Yes | No | Not Determined | Suggested Dilution |
|----------------------------------|-----|----|----------------|--------------------|
| Flow Cytometry                   |     |    | •              |                    |
| Immunohistology - Frozen         |     |    | •              |                    |
| Immunohistology - Paraffin       |     |    |                |                    |
| ELISA                            | •   |    |                | 1/400              |
| Immunoprecipitation              | •   |    |                |                    |
| Western Blotting                 | -   |    |                | 1/800              |
| Immunofluorescence               | •   |    |                | 1/200              |
| Chromatin<br>Immunoprecipitation | •   |    |                |                    |

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

| Target Species              | Synthetic Peptide  |
|-----------------------------|--|
| Species Cross<br>Reactivity | Reacts with: Drosophila, Yeast, Human, Arabidopsis, Mouse, Zebrafish, Wheat, Asellus aquaticus Based on sequence similarity, is expected to react with:Mammals, Plants, Amphibia  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 |
| Product Form                | further information.  Serum - liquid   |

| Antiserum Preparation Antisera to acetylated histone H4 were raised by repeated immunisation of rabbits with highly purified antigen. |  |                                       |  |
|---|--|---------------------------------------|--|
| Preservative<br>Stabilisers   | <0.1% Sodium Azide (NaN <sub>3</sub> )   |                                       |  |
| Immunogen   | KLH-conjugated peptide acetylated at lysines 5,8,12,16: NSGRGAcKGGAcKGLGAcKGGAAcKRHYCC.  |                                       |  |
| External Database   |  |                                       |  |
| Links   | UniProt:   |                                       |  |
|   | P62805 Related reagents  |                                       |  |
|   | Entrez Gene:   |                                       |  |
|   | 554313 HIST2H4B Related reagents   |                                       |  |
|   | Neidled reagents   |                                       |  |
| Synonyms  | H4/A, H4/B, H4/C, H4/D, H4/E, H4/G, H4/H, H4/I, H4/J, H4/K, H4FA, H4FB, H4FC, H4FD, H4FE, H4FG, H4FH, H4FI, H4FJ H4FO, HIST2H4   |                                       |  |
| RRID  | AB_2116715   |                                       |  |
| Specificity   | Rabbit anti Histone H4 (Acetylated) antibody was raised ag form of histone H4 and recognizes acetylated isoforms of history  | •                                     |  |
| References  | 1. Turner, B.M. <i>et al.</i> (1989) Histone H4 acetylation in human acetylation at different sites defined by immunolabeling with si Lett. 253 (1-2): 141-5.                      | · ·                                   |  |
|   | 2. Turner, B.M. <i>et al.</i> (1992) Histone H4 isoforms acetylated a define individual chromosomes and chromatin domains in Dro 69 (2): 375-84.                                   | •                                     |  |
|   | 3. Collas, P. <i>et al.</i> (1999) Active transgenes in zebrafish are el H4 and dynamically associate with RNA Pol II and splicing collo45-54.                                     | <u> </u>                              |  |
|   | 4. Tian, L. and Chen, Z.J. (2001) Blocking histone deacetylatic pleiotropic effects on plant gene regulation and development. 98: 200-5.   | •                                     |  |
|   | 5. Lin, X. et al. (2001) Reversal of GSTP1 CpG island hyperm of pi-class glutathione S-transferase (GSTP1) expression in h by treatment with procainamide. Cancer Res. 61: 8611-6. | •                                     |  |
|   | 6. Nye, A.C. <i>et al.</i> (2002) Alteration of large-scale chromatin s receptor. Mol Cell Biol. 22: 3437-49.  | tructure by estrogen                  |  |
|   | 7. Santos, A.P. et al. (2002) The architecture of interphase chi   | romosomes and gene                    |  |
|   | positioning are altered by changes in DNA methylation and his 115: 4597-605.   | stone acetylation. <u>J Cell Sci.</u> |  |
|   | 8. Perry, P. et al. (2004) A dynamic switch in the replication tin   | ning of key regulator genes           |  |
|   | in embryonic stem cells upon neural induction. Cell Cycle. 3 (   |                                       |  |
|   | O Catley M.C. at al. (2004) labilities of matrix binary C (DK)   | O\ + + +                              |  |

9. Catley, M.C. et al. (2004) Inhibitors of protein kinase C (PKC) prevent activated

transcription: role of events downstream of NF-kappaB DNA binding. <u>J Biol Chem. 279:</u> 18457-66.

- 10. Beck, H.C. *et al.* (2006) Quantitative proteomic analysis of post-translational modifications of human histones. <u>Mol Cell Proteomics</u>. 5: 1314-25.
- 11. Barzotti, R. *et al.* (2006) DNA methylation, histone H3 methylation, and histone H4 acetylation in the genome of a crustacean. <u>Genome</u>. 49: 87-90.
- 12. Foy, R.L. *et al.* (2008) Role of Jade-1 in the histone acetyltransferase (HAT) HBO1 complex. J Biol Chem. 283: 28817-26.
- 13. Tsaprouni, L.G. *et al.* (2011) Differential patterns of histone acetylation in inflammatory bowel diseases. J Inflamm (Lond). 8: 1.
- 14. Dincman, T.A. *et al.* (2016) Histone deacetylase inhibition is cytotoxic to oligodendrocyte precursor cells *in vitro* and *in vivo*. <u>Int J Dev Neurosci. 54: 53-61.</u>

## **Further Reading**

1. Belyaev, N. *et al.* (1996) Differential underacetylation of histones H2A, H3 and H4 on the inactive X chromosome in human female cells. <u>Hum Genet. 97 (5): 573-8.</u>

#### Storage

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

| Guarantee                        | 12 months from date of despatch  |
|----------------------------------|--|
| Health And Safety<br>Information | Material Safety Datasheet documentation #10081 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP418">https://www.bio-rad-antibodies.com/SDS/AHP418</a> 10081 |

**Regulatory** For research purposes only

# Related Products

# **Recommended Secondary Antibodies**

Goat Anti Rabbit IgG (Fc) (STAR121...) Biotin, FITC, HRP

Sheep Anti Rabbit IgG (STAR35...) RPE

Goat Anti Rabbit IgG (H/L) (STAR124...) HRP

### **Recommended Useful Reagents**

#### TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +1 919 878 3751

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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

'M429065:240315'

#### Printed on 03 Jan 2025