

## Datasheet: AHP418

**BATCH NUMBER 147485**

<b>Description:</b>	RABBIT ANTI HISTONE H4 (ACETYLATED)
<b>Specificity:</b>	HISTONE H4 ACETYLATED
<b>Format:</b>	Serum
<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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/400
Immunoprecipitation	▪			
Western Blotting	▪			1/800
Immunofluorescence	▪			1/200
Chromatin 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 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 further information.

### Product Form

Serum - liquid

<b>Antiserum Preparation</b>	Antisera to acetylated histone H4 were raised by repeated immunisation of rabbits with highly purified antigen.
<b>Preservative Stabilisers</b>	0.02% Sodium Azide
<b>Immunogen</b>	KLH-conjugated peptide acetylated at lysines 5,8,12,16: NSGRGAcKGGAcKGLGAcKGGAAcKRHYCC.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P62805</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <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>RRID</b>	AB_2116715
<b>Specificity</b>	<b>Rabbit anti Histone H4 (Acetylated) antibody</b> was raised against the tetra-acetylated form of histone H4 and recognizes acetylated isoforms of histone H4.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Turner, B.M. <i>et al.</i> (1989) Histone H4 acetylation in human cells. Frequency of acetylation at different sites defined by immunolabeling with site-specific antibodies. <a href="#">FEBS Lett. 253 (1-2): 141-5.</a></li> <li>2. Turner, B.M. <i>et al.</i> (1992) Histone H4 isoforms acetylated at specific lysine residues define individual chromosomes and chromatin domains in Drosophila polytene nuclei. <a href="#">Cell. 69 (2): 375-84.</a></li> <li>3. Belyaev, N. <i>et al.</i> (1996) Differential underacetylation of histones H2A, H3 and H4 on the inactive X chromosome in human female cells. <a href="#">Hum Genet. 97 (5): 573-8.</a></li> <li>4. Perry, P. <i>et al.</i> (2004) A dynamic switch in the replication timing of key regulator genes in embryonic stem cells upon neural induction. <a href="#">Cell Cycle. 3 (12): 1645-50.</a></li> <li>5. Nye, A.C. <i>et al.</i> (2002) Alteration of large-scale chromatin structure by estrogen receptor. <a href="#">Mol Cell Biol. 22: 3437-49.</a></li> <li>6. Tsaprouni, L.G. <i>et al.</i> (2011) Differential patterns of histone acetylation in inflammatory bowel diseases. <a href="#">J Inflamm (Lond). 8: 1.</a></li> <li>7. Tian, L. and Chen, Z.J. (2001) Blocking histone deacetylation in Arabidopsis induces pleiotropic effects on plant gene regulation and development. <a href="#">Proc Natl Acad Sci U S A. 98: 200-5.</a></li> <li>8. Beck, H.C. <i>et al.</i> (2006) Quantitative proteomic analysis of post-translational modifications of human histones. <a href="#">Mol Cell Proteomics. 5: 1314-25.</a></li> <li>9. Catley, M.C. <i>et al.</i> (2004) Inhibitors of protein kinase C (PKC) prevent activated transcription: role of events downstream of NF-kappaB DNA binding. <a href="#">J Biol Chem. 279: 18457-66.</a></li> <li>10. Collas, P. <i>et al.</i> (1999) Active transgenes in zebrafish are enriched in acetylated</li> </ol>

histone H4 and dynamically associate with RNA Pol II and splicing complexes. [J Cell Sci. 112: 1045-54.](#)

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15. Vega-Flores, G. *et al.* (2014) The GABAergic septohippocampal pathway is directly involved in internal processes related to operant reward learning. [Cereb Cortex. 24 \(8\): 2093-107.](#)

16. Dincman, T.A. *et al.* (2016) Histone deacetylase inhibition is cytotoxic to oligodendrocyte precursor cells *in vitro* and *in vivo*. [Int J Dev Neurosci. 54: 53-61.](#)

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**Storage** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10081 available at: <https://www.bio-rad-antibodies.com/SDS/AHP418>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

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

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

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

### Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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