

Datasheet: AHP418

BATCH NUMBER 159805

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 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

Antiserum Preparation	Antisera to acetylated histone H4 were raised by repeated immunisation of rabbits with highly purified antigen.
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Immunogen	KLH-conjugated peptide acetylated at lysines 5,8,12,16: NSGRGAcKGGAcKGLGAcKGGAAcKRHYCC.
External Database Links	<p>UniProt: P62805 Related reagents</p> <p>Entrez Gene: 554313 HIST2H4B Related reagents</p>
Synonyms	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
RRID	AB_2116715
Specificity	Rabbit anti Histone H4 (Acetylated) antibody was raised against the tetra-acetylated form of histone H4 and recognizes acetylated isoforms of histone H4.
References	<ol style="list-style-type: none"> 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. FEBS Lett. 253 (1-2): 141-5. 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. Cell. 69 (2): 375-84. 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. Hum Genet. 97 (5): 573-8. 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. Cell Cycle. 3 (12): 1645-50. 5. Nye, A.C. <i>et al.</i> (2002) Alteration of large-scale chromatin structure by estrogen receptor. Mol Cell Biol. 22: 3437-49. 6. Tsaprouni, L.G. <i>et al.</i> (2011) Differential patterns of histone acetylation in inflammatory bowel diseases. J Inflamm (Lond). 8: 1. 7. Tian, L. and Chen, Z.J. (2001) Blocking histone deacetylation in Arabidopsis induces pleiotropic effects on plant gene regulation and development. Proc Natl Acad Sci U S A. 98: 200-5. 8. Beck, H.C. <i>et al.</i> (2006) Quantitative proteomic analysis of post-translational modifications of human histones. Mol Cell Proteomics. 5: 1314-25. 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. J Biol Chem. 279: 18457-66. 10. Collas, P. <i>et al.</i> (1999) Active transgenes in zebrafish are enriched in acetylated

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

11. Foy, R.L. *et al.* (2008) Role of Jade-1 in the histone acetyltransferase (HAT) HBO1 complex. [J Biol Chem. 283: 28817-26.](#)

12. Lin, X. *et al.* (2001) Reversal of GSTP1 CpG island hypermethylation and reactivation of pi-class glutathione S-transferase (GSTP1) expression in human prostate cancer cells by treatment with procainamide. [Cancer Res. 61: 8611-6.](#)

13. Santos, A.P. *et al.* (2002) The architecture of interphase chromosomes and gene positioning are altered by changes in DNA methylation and histone acetylation. [J Cell Sci. 115: 4597-605.](#)

14. Barzotti, R. *et al.* (2006) DNA methylation, histone H3 methylation, and histone H4 acetylation in the genome of a crustacean. [Genome. 49: 87-90.](#)

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.](#)

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 Information Material Safety Datasheet documentation #10081 available at: <https://www.bio-rad-antibodies.com/SDS/AHP418>
10081

Regulatory For research purposes only

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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