

Datasheet: AHP962 BATCH NUMBER 155721

| Description: | RABBIT ANTI HISTONE H4 (Ac5) |
|---------------|------------------------------|
| Specificity: | HISTONE H4 Ac5 |
| 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 | • | | | 1/1000 |
| Immunoprecipitation | • | | | |
| Western Blotting | • | | | 1/600 |
| Immunofluorescence | • | | | 1/400 |
| 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 Based on sequence similarity, is expected to react with:Mammals, Amphibia, Plants 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 we | ere raised by repeated immunisation of rabbits with |
|--|---|
| highly purified antigen. | |

| Preservative Stabilisers | 0.02% Sodium Azide (NaN ₃) |
|-----------------------------|---|
| Immunogen | Ovalbumin-conjugated peptide: NSGRGAcKGGKGLCc. |
| External Database Links | UniProt: P62805 Related reagents |
| | Entrez Gene: <u>554313</u> HIST2H4B <u>Related reagents</u> |
| 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_567394 |
| Specificity | Rabbit anti Histone H2 (Ac5) antibody recognizes Histone H4 when acetylated at lysine 5. |

References

- 1. Turner, B.M. *et al.* (1989) Histone H4 acetylation in human cells. Frequency of acetylation at different sites defined by immunolabeling with site-specific antibodies. <u>FEBS</u> <u>Lett. 253 (1-2): 141-5.</u>
- 2. Turner, B.M. *et al.* (1992) Histone H4 isoforms acetylated at specific lysine residues define individual chromosomes and chromatin domains in *Drosophila* polytene nuclei. <u>Cell.</u> 69 (2): 375-84.
- 3. 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>
- 4. Auger, A. *et al.* (2008) Eaf1 is the platform for NuA4 molecular assembly that evolutionarily links chromatin acetylation to ATP-dependent exchange of histone H2A variants. <u>Mol Cell Biol. 28: 2257-70.</u>
- 5. Tsaprouni, L.G. *et al.* (2011) Differential patterns of histone acetylation in inflammatory bowel diseases. <u>J Inflamm (Lond)</u>. 8 (1): 1.
- 6. Ito, K. *et al.* (2000) Glucocorticoid receptor recruitment of histone deacetylase 2 inhibits interleukin-1beta-induced histone H4 acetylation on lysines 8 and 12. <u>Mol Cell Biol. 20:</u> 6891-903.
- 7. Nie, M. *et al.* (2003) Transcriptional regulation of cyclooxygenase 2 by bradykinin and interleukin-1beta in human airway smooth muscle cells: involvement of different promoter elements, transcription factors, and histone h4 acetylation. <u>Mol Cell Biol. 23: 9233-44.</u>
- 8. Nie, M. *et al.* (2005) beta2-Adrenoceptor agonists, like glucocorticoids, repress eotaxin gene transcription by selective inhibition of histone H4 acetylation. <u>J Immunol. 175:</u> 478-86.
- 9. Tanny, J.C. *et al.* (2004) Budding yeast silencing complexes and regulation of Sir2 activity by protein-protein interactions. <u>Mol Cell Biol. 24: 6931-46.</u>

- 10. Spada, F. *et al.* (2005) Histone H4 post-translational modifications in chordate mitotic and endoreduplicative cell cycles. <u>J Cell Biochem. 95: 885-901.</u>
- 11. Lacoste, N. *et al.* (2002) Disruptor of telomeric silencing-1 is a chromatin-specific histone H3 methyltransferase. <u>J Biol Chem. 277: 30421-4.</u>
- 12. McManus, K.J. *et al.* (2006) The transcriptional regulator CBP has defined spatial associations within interphase nuclei. PLoS Comput Biol. 2: e139.
- 13. Krogan, N.T. *et al.* (2012) APETALA2 negatively regulates multiple floral organ identity genes in Arabidopsis by recruiting the co-repressor TOPLESS and the histone deacetylase HDA19. Development. 139: 4180-90.
- 14. Havasi, A. *et al.* (2013) Histone Acetyl Transferase (HAT) HBO1 and JADE1 in Epithelial Cell Regeneration. Am J Pathol. 182: 152-62.
- 15. Miyamoto, Y. *et al.* (2015) Involvement of the Tyro3 receptor and its intracellular partner Fyn signaling in Schwann cell myelination. Mol Biol Cell. 26 (19): 3489-503.

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.

| 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/AHP962 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

Email: antibody_sales_us@bio-rad.com

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 Fax: +44 (0)1865 852 739 Europe

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