

## Rabbit Histone H4K12ac Polyclonal Antibody | anti-H4K12ac antibody

Histone H4K12ac antibody (pAb)

| CATALOG # | HOST   | REACTIVITY                                        | APPLICATIONS                                                                                                        |
|-----------|--------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| AAA59951  | Rabbit | Budding Yeast, Human, Mouse, Wide Range Predicted | Western Blot, Immunofluorescence, Immunocytochemistry, Dot Blot, Chromatin Immunoprecipitation, Immunoprecipitation |

### PRODUCT SYNONYMS

Histone H4K12ac; Polyclonal Antibody; Histone H4K12ac antibody (pAb); anti-H4K12ac antibody

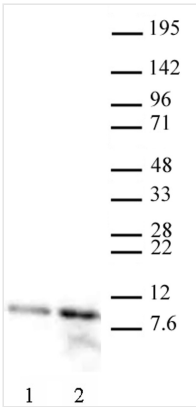
### PRODUCT SPECIFICATIONS

|                                                   |                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                              | Rabbit                                                                                                                                                                                                                                                                                    |
| Reactivity                                        | Budding Yeast, Human, Mouse, Wide Range Predicted                                                                                                                                                                                                                                         |
| Clonality                                         | Polyclonal                                                                                                                                                                                                                                                                                |
| Isotype                                           | IgG                                                                                                                                                                                                                                                                                       |
| Purity/Purification                               | Protein A Chromatography                                                                                                                                                                                                                                                                  |
| Form/Format                                       | Purified IgG in PBS (pH7.5) with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic. For your convenience, an unpurified serum version of this antibody is also available.                                                                                                |
| Concentration                                     | 1ug/ul (varies by lot)                                                                                                                                                                                                                                                                    |
| Applicable Applications for anti-H4K12ac antibody | WB (Western Blot), IF (Immunofluorescence), ICC (Immunocytochemistry), DB (Dot Blot), ChIP (Chromatin immunoprecipitation)                                                                                                                                                                |
| Conjugation                                       | Acetylated                                                                                                                                                                                                                                                                                |
| Immunogen                                         | This Histone H4 acetyl Lys12 antibody was raised against a peptide including acetyl-lysine 12 of histone H4.                                                                                                                                                                              |
| Abs Residue                                       | Lys                                                                                                                                                                                                                                                                                       |
| Preparation and Storage                           | Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20 degree C for up to 2 years. Keep all reagents on ice when not in storage.1ug/ul |



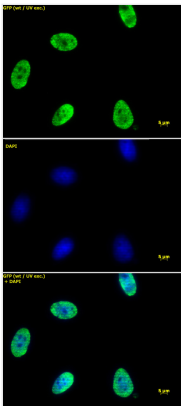
DB (Dot Blot)

Histone H4 acetyl Lys12 antibody (pAb) tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of Histone H4 acetyl Lys12 antibody for acetyl Lys12 histone H4. Acetylated peptides corresponding to the immunogen and related peptides were spotted onto PVDF and probed with Histone H4 acetyl Lys12 antibody at a dilution of 1 ug/ml. The amount of peptide (picomoles) spotted is indicated next to each row. Lane 1: acetyl-Lys5 peptide. Lane 2: unmodified Lys5 peptide. Lane 3: acetyl-Lys8 peptide. Lane 4: unmodified Lys8 peptide. Lane 5: acetyl-Lys12 peptide. Lane 6: unmodified Lys12 peptide. Lane 7: acetyl-Lys16 peptide. Lane 8: unmodified Lys16 peptide.



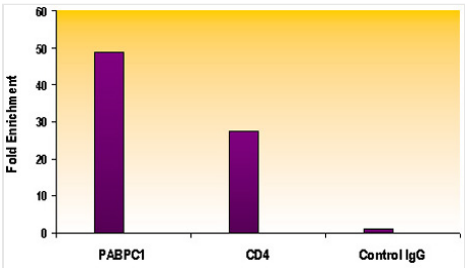
WB (Western Blot)

Histone H4 acetyl Lys12 antibody (pAb) tested by Western blot. HeLa nuclear extract (20 ug per lane) probed with Histone H4 acetyl Lys12 antibody (1 ug per ml). Lane 1: no treatment. Lane 2: cells treated with sodium butyrate.



IF (Immunofluorescence)

Histone H4 acetyl Lys12 antibody tested by immunofluorescence. HeLa cells stained at 2 ug/ml with Histone H4 acetyl Lys12 antibody. Top panel: Histone H4 acetyl Lys12 antibody. Middle panel: DAPI. Bottom panel: merge.



ChIP (Chromatin Immunoprecipitation)

Histone H4 acetyl Lys12 antibody tested by ChIP analysis. Chromatin IP performed using the ChIP-IT Express Kit and HeLa Chromatin (1.5 x 10<sup>6</sup> cell equivalents per ChIP) using 3 ug of Histone H4 acetyl Lys12 antibody or the equivalent amount of rabbit IgG as a negative control. Real time, quantitative PCR (RT-qPCR) was performed on DNA purified from each of the ChIP reactions using a primer pair specific for the indicated gene. Data are presented as Fold Enrichment of the ChIP antibody signal versus the negative control IgG using the ddCT method.

ADDITIONAL INFORMATION

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-H4K12ac antibody</b> | <p>Short Description: Our Histone H4K12ac antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, Dot blot, Immunocytochemistry, Immunofluorescence and Western blot; it has been shown to react with Budding Yeast, Human and Mouse samples, but it is predicted that it will react with a wide range of sample types.</p> <p>Background: Histone H4 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points; it is responsible for establishing higher-order chromatin structure. Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation, ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation; they play a major role in regulating gene expression. Lysine N-epsilon-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in chromatin remodeling and in the regulation of gene expression in various cellular functions. The acetylation of histone H4 Lys12 is carried out by several histone acetyltransferases (HATs). Histone H4 Lys12 acetylation by TIP60 occurs in the nucleus, whereas Hat1-mediated acetylation of histone H4 Lys12 occurs in the cytoplasm, indicating the spatial regulation of histone acetylation. The acetylation of histone H4 Lys12 residue is commonly associated with transcriptional activation.</p> |
| <b>Product Categories/Family for anti-H4K12ac antibody</b>   | <p>Primary Antibodies</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                  |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 28173560                                                                                                                                         |
| NCBI GeneID                      | 121504                                                                                                                                           |
| NCBI Accession #                 | NP_778224; AB_2793396                                                                                                                            |
| NCBI GenBank Nucleotide #        | NM_175054.2                                                                                                                                      |
| UniProt Accession #              | P62805; P02304; P02305; Q6DRA9; Q6FGB8; Q6NWP7; A2VCL0; Q0VAS5; Q6B823                                                                           |
| Molecular Weight                 | 11,367 Da                                                                                                                                        |
| NCBI Official Full Name          | histone H4                                                                                                                                       |
| NCBI Official Synonym Full Names | histone cluster 4, H4                                                                                                                            |
| NCBI Official Symbol             | HIST4H4                                                                                                                                          |
| NCBI Official Synonym Symbols    | H4/p; HIST1H4A; HIST1H4B; HIST1H4C; HIST1H4D; HIST1H4E; HIST1H4F; HIST1H4H; HIST1H4I; HIST1H4J; HIST1H4K; HIST1H4L; HIST2H4A; HIST2H4B; MGC24116 |
| NCBI Protein Information         | histone H4; histone 4, H4; OTTHUMP00000239323                                                                                                    |
| UniProt Protein Name             | Histone H4                                                                                                                                       |
| UniProt Gene Name                | <b>HIST1H4A</b>                                                                                                                                  |
| UniProt Synonym Gene Names       | H4/A; H4FA                                                                                                                                       |
| UniProt Entry Name               | H4_HUMAN                                                                                                                                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/histone-h4k12ac-antibody-western-blot-immunofluorescence-immunocytochemistry-dot-blot-chromatin-immunoprecipitation-elisa/59951>