

## Rabbit Histone H2BK46ac Polyclonal Antibody | anti-H2BK46ac antibody

Histone H2BK46ac antibody (pAb)

| CATALOG # | HOST   | REACTIVITY                  | APPLICATIONS                                                     |
|-----------|--------|-----------------------------|------------------------------------------------------------------|
| AAA59884  | Rabbit | Human, Wide Range Predicted | Western Blot, Chromatin Immunoprecipitation, Immunoprecipitation |

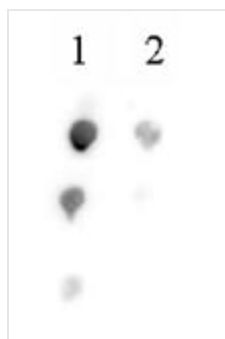
### PRODUCT SYNONYMS

Histone H2BK46ac; Polyclonal Antibody; Histone H2BK46ac antibody (pAb); anti-H2BK46ac antibody

### PRODUCT SPECIFICATIONS

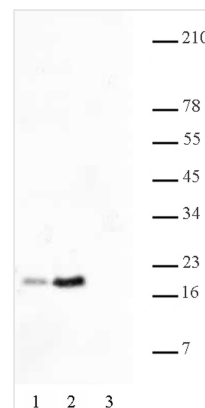
|                                                    |                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                               | Rabbit                                                                                                                                                                                                                                                                                    |
| Reactivity                                         | Human, Wide Range Predicted                                                                                                                                                                                                                                                               |
| Clonality                                          | Polyclonal                                                                                                                                                                                                                                                                                |
| Form/Format                                        | Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.                                                                                                                                                                                               |
| Applicable Applications for anti-H2BK46ac antibody | WB (Western Blot), ChIP (Chromatin immunoprecipitation)                                                                                                                                                                                                                                   |
| Conjugation                                        | Acetylated                                                                                                                                                                                                                                                                                |
| Immunogen                                          | This Histone H2B acetyl Lys46 antibody was raised against a peptide containing acetyl-lysine 46 of human histone H2B.                                                                                                                                                                     |
| 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 |

### IMAGES



#### DB (Dot Blot)

Histone H2B acetyl Lys46 pAb tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of Histone H2B acetyl Lys46 pAb for acetyl Lys46 histone H2B. Decreasing amounts of acetylated peptides corresponding to the immunogen and related sequences were spotted onto PVDF and probed with the antibody at 1:4,000. Lane 1: acetyl Lys46 histone H2B peptide. Lane 2: unmodified Lys46 histone H2B peptide. No detection of peptides (acetylated) corresponding to lysine 9, 14, 18, 23, 27, and 56 of Histone H3 was observed with Histone H2B acetyl Lys46 pAb. In addition, no detection of peptides (acetylated) corresponding to lysine 5, 15, 16, and 120 of Histone H2B was observed with Histone H2B acetyl Lys46 pAb.



#### WB (Western Blot)

Histone H2B acetyl Lys46 pAb tested by Western blot. Acid extract of HeLa cells (20 ug per lane) was probed with Histone H2B acetyl Lys46 polyclonal antibody (1:4,000 dilution). Lane 1: Untreated cells. Lane 2: Cells treated with sodium butyrate. Lane 3: Recombinant Histone H2B (200 ng).



#### ChIP (Chromatin Immunoprecipitation)

Histone H2B acetyl Lys46 pAb tested by ChIP. Chromatin IP performed using the ChIP-IT Express Kit and 50 ul of Ready-to-ChIP HeLa Chromatin per ChIP. Subsequent to the ChIP reaction, DNA was purified from the immunoprecipitated chromatin and a region of the human GAPDH promoter was amplified by PCR. Lane 1: ChIP using negative control rabbit IgG. Lane 2: ChIP using 10 ul of Histone H2B acetyl Lys46 pAb. Lane 3: PCR input control.

## ADDITIONAL INFORMATION

### Related Product Information for anti-H2BK46ac antibody

**Short Description:** Our Histone H2BK46ac antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation and Western blot; it has been shown to react with Human samples, but it is predicted that it will react with a wide range of sample types.

**Background:** Histone H2B 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. Histone H2A and Histone H2B are acetylated in bulk chromatin by p300 and form acetylated Histone H2A/Histone H2B heterodimers. When DNA associates with intact core histone octamers that contain acetylated H2A/H2B dimers, the inhibition of transcriptional initiation significantly decreases, indicating that acetylation of their lysine residues may mediate transcription.

### Product Categories/Family for anti-H2BK46ac antibody

[Primary Antibodies](#)

## NCBI AND UNIPROT INFORMATION

### Molecular Weight

15kDa

**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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://stage.aaabiotech.com/polyclonal/histone-h2bk46ac-antibody-western-blot-chromatin-immunoprecipitation-elisa/59884>