

## Histone H2BK15ac antibody (pAb)

**Catalog Nos:** 61321, 61322

**RRID:** AB\_2793590

**Isotype:** IgG

**Application(s):** WB

**Reactivity:** Human, Wide Range Predicted

**Volumes:** 100  $\mu$ l, 10  $\mu$ l

**Purification:** Affinity Purified

**Host:** Rabbit

**Molecular Weight:** 15 kDa

**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. Acetylation of Lys15 is a histone onco-modification candidate as it has been found to be a property of non-dying cells.

**Immunogen:** This antibody was raised against a peptide including acetyl-lysine 15 of human histone H2B.

**Buffer:** Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

### Application Notes:

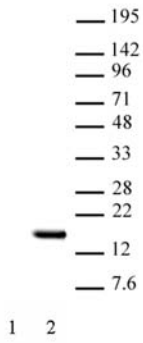
Applications Validated by Active Motif:

WB\*: 1:500 - 1:1,000 dilution

\*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

**Storage and Guarantee:** 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°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



**Histone H2B acetyl Lys15 pAb tested by Western blot.**

Nuclear extract of HeLa cells (20 µg per lane) was probed with Histone H2B acetyl Lys15 polyclonal antibody (1:500 dilution).

Lane 1: Untreated cells.

Lane 2: Cells treated with sodium butyrate.

**Histone H2B acetyl Lys15 pAb tested by dot blot analysis.**

Specificity Data: Dot blot analysis was used to confirm the specificity of Histone H2B acetyl Lys15 pAb for acetyl-Lys 15 of histone H2B. Decreasing amounts of modified and unmodified peptides were spotted onto PVDF and probed with the antibody at a dilution of 1:750.

Lane 1: Peptide acetylated at lysine 5 of H2B.

Lane 2: Peptide acetylated at lysine 12 of H2B.

Lane 3: Peptide acetylated at lysine 15 of H2B.

Lane 4: Unmodified lysine 15 peptide.

Lane 5: Peptide acetylated at lysine 16 of H2B.

Lane 6: Peptide acetylated at lysine 46 of H2B.

Lane 7: Peptide acetylated at lysine 120 of H2B.

