

## AbFlex® Histone H3K14ac antibody (rAb)

**Catalog Nos:** 91397, 91398

**Application(s):** ELISA, WB

**Reactivity:** Mouse, Wide Range Predicted

**Quantities:** 100 µg, 10 µg

**Purification:** Protein A Chromatography

**Host:** Mouse

**Isotype:** IgG2a

**Concentration:** 1 µg/µl

**Molecular Weight:** 17 kDa

**Background:** AbFlex® antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports. AbFlex® Histone H3K14ac antibody (rAb) was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells.

**Histone H3** 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). 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; these modifications play a major role in regulating gene expression. Acetylation of histones is linked to a number of specific processes including transcriptional regulation and genomic organization.

**Immunogen:** This Histone H3 acetyl Lys14 antibody was raised against a peptide including acetyl-lysine 14 of histone H3.

**Buffer:** Purified antibody is in 140 mM Hepes, pH 7.5, 70 mM NaCl, 32 mM NaOAc, 0.035% sodium azide, and 30% glycerol. Sodium azide is highly toxic.

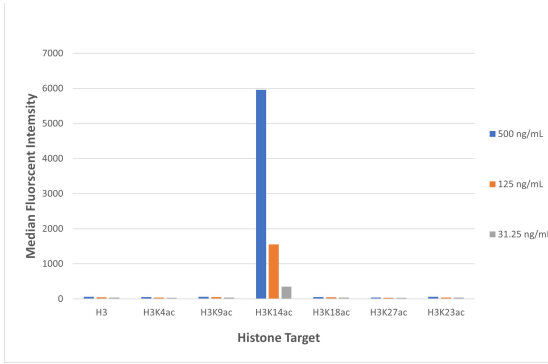
### Application Notes:

Applications Validated by Active Motif:

WB: 0.5 - 2 µg/ml

**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.

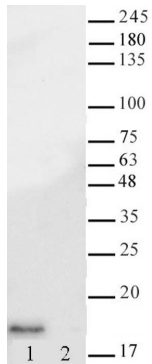
This product is for research use only and is not for use in diagnostic procedures.



AbFlex<sup>®</sup> Histone H3K14ac antibody (rAb) tested by Luminex bead-based specificity analysis.

Luminex bead-based specificity analysis was used to confirm the specificity of AbFlex<sup>®</sup> Histone H3K14ac antibody (rAb) antibody. Various proteins were conjugated to MagPlex Luminex beads and incubated with various amounts of AbFlex<sup>®</sup> Histone H3K14ac antibody (rAb). Protein-bound antibody was detected with anti-mouse IgG-Phycoerythrin and read in a Luminex instrument

Luminex<sup>®</sup> is a registered trademark of Luminex Corporation.



AbFlex<sup>®</sup> Histone H3 acetyl Lys14 (rAb) antibody tested by Western blot. HeLa nuclear extract (20 µg per lane) was probed with Histone H3 acetyl Lys14 antibody at 2 micro;g/ml.

Lane 1: Sodium Butyrate

Lane 2: No treatment.