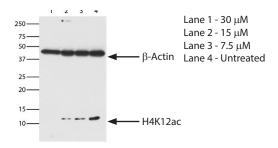


# **Antibodies for Histone Research**

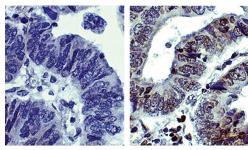
Nucleosomes are the fundamental repeating subunit of chromatin and are the basic units of DNA packaging in eukaryotes. Nucleosomes consist of 147 base pairs of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). Histones consist of a globular domain and a more flexible amino terminus (histone "tail") which may undergo various post-translational modifications, including acetylation, phosphorylation, and methylation. These modifications have a direct effect on chromatin structure and chromatin protein interactions, and are involved in DNA repair, chromosome condensation, and gene regulation.

## Mouse Anti-Acetyl-Histone H4 (Lys12) (H4K12ac)

| Cat. No. | Description                               | Clone  | Size   |
|----------|---|--------|--------|
| 13400-01 | Mouse Anti-Acetyl-Histone H4 (Lys12)-UNLB | SB156b | 0.1 mg |

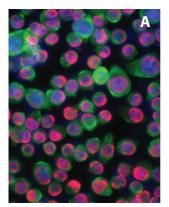


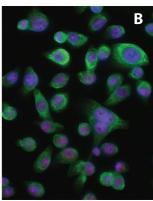
Western Blotting - H4K12ac expression on Jurkat cell lysate (20  $\mu g/lane)$  treated with the acetyltransferase inhibitor, curcumin. Goat Anti-Mouse IgG, Human ads-HRP (SB Cat. No. 1030-05) was used as a secondary at 1:6K.

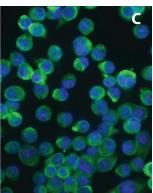


Left - Antibody blocked with immunizing peptide Right - Without immunizing peptide block

Immunohistochemistry (Paraffin Sections) - Deparaffinized and antigen-retrieved gastric cancer tissue was incubated with Mouse Anti-H4K12ac-UNLB at 2  $\mu$ g/mL followed by Goat Anti-Mouse IgG(H+L), Human ads-HRP (SB Cat. No. 1031-05). Tissue was developed with DAB and counterstained with hematoxylin.





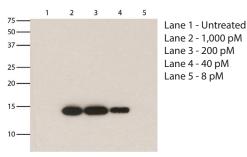


- A Antibody not blocked with H4K12ac peptide B - Antibody blocked with 5 µg/mL H4K-
- B Antibody blocked with 5 μg/mL H4K-12ac peptide
- C Isotype control

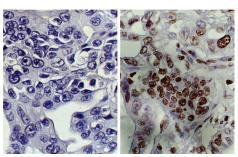
Immunocytochemistry - MIA PaCa-2 cells were intracellularly stained with Mouse Anti-H4K12ac-BIOT (in development) at 1  $\mu$ g/mL followed by Streptavidin-CY°3 (SB Cat. No. 7100-12). Cells were counterstained with Cytokeratin-FITC (green) and DAPI (blue).

#### Mouse Anti-Acetyl-Histone H2A (Lys9) (H2AK9ac)

| Cat. No. | Description                               | Clone  | Size   |
|----------|---|--------|--------|
| 13200-01 | Mouse Anti-Acetyl-Histone H2A (Lys9)-UNLB | SB146a | 0.1 mg |



Western Blotting - Trichostatin A dose dependent expression of H2AK9ac on Jurkat cell lysate. Goat Anti-Mouse IgG, Human ads-HRP (SB Cat. No. 1030-05) was used a a secondary at 1:6K.

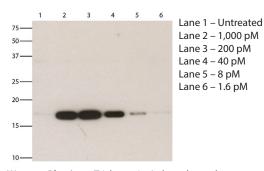


Left - Antibody blocked with immunizing peptide Right - Without immunizing peptide block

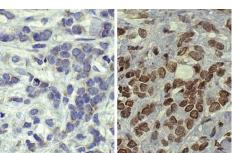
Immunohistochemistry - Paraffin sections of human cancer tissues were stained with Mouse Anti-H2AK9ac-UNLB. Goat Anti-Mouse IgG, Human ads-BIOT (SB Cat. No. 1030-08) was used as a secondary followed by Streptavidin-HRP (SB Cat. No. 7100-05). Sections were developed with DAB and couterstained with hematoxylin.

## Mouse Anti-Acetyl-Histone H3 (Lys18) (H3K18ac)

| Cat. No. | Description                               | Clone  | Size   |
|----------|---|--------|--------|
| 13300-01 | Mouse Anti-Acetyl-Histone H3 (Lys18)-UNLB | SB157a | 0.1 mg |



**Western Blotting** - Trichostatin A dose dependent expression of H3K18ac on Jurkat cell lysate. Goat Anti-Mouse IgG, Human ads-HRP (SB Cat. No. 1030-05) was used a a secondary at 1:6K.

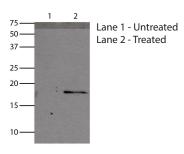


Left - Antibody blocked with immunizing peptide Right - Without immunizing peptide block

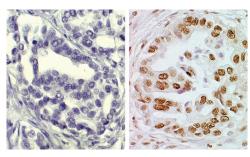
**Immunohistochemistry** - Paraffin sections of human cancer tissues were stained with Mouse Anti-H3K18ac-UNLB. Goat Anti-Mouse IgG, Human ads-BIOT (SB Cat. No. 1030-08) was used as a secondary followed by Streptavidin-HRP (SB Cat. No. 7100-05). Sections were developed with DAB and couterstained with hematoxylin.

#### Mouse Anti-Acetyl-Histone H3 (Lys4) (H3K4ac)

| Cat. No. | Description                              | Clone  | Size   |
|----------|--|--------|--------|
| 13600-01 | Mouse Anti-Acetyl-Histone H3 (Lys4)-UNLB | SB157d | 0.1 ma |



Western Blotting - Untreated Jurkat cells lysate and Jurkat cell lystate treated with Trichostatin A were resolved by a 15% SDS-PAGE. Goat Anti-Mouse IgG, Human ads-HRP (SB Cat. No. 1030-05) was used as a secondary.

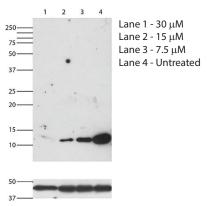


Left - Antibody blocked with immunizing peptide Right - Without immunizing peptide block

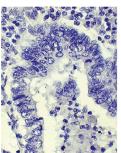
Immunohistochemistry (Paraffin Sections) - Human cancer tissue was stained with Mouse Anti-H3K4ac-UNLB followed by Goat Anti-Mouse IgG(H+L), Human ads-BIOT (SB Cat. No. 1031-08) then Streptavidin-HRP (SB Cat. No. 7100-05). Tissue was developed with DAB and counterstained with hematoxylin.

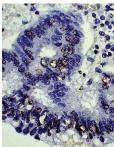
## Mouse Anti-Acetyl-Histone H4 (Lys8) (H4K8ac)

| Cat. No. | Description                              | Clone  | Size   |
|----------|--|--------|--------|
| 13700-01 | Mouse Anti-Acetyl-Histone H4 (Lys8)-UNLB | SB162a | 0.1 mg |



Western Blotting - H4K8ac expression on Jurkat cell lysate (20  $\mu$ g/lane) treated with the acetyltransferase inhibitor, curcumin. Goat Anti-Mouse IgG, Human ads-HRP (SB Cat. No. 1030-05) was used as a secondary at 1:6K.



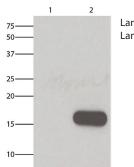


Left - Antibody blocked with immunizing peptide Right - Without immunizing peptide block

**Immunohistochemistry (Paraffin Sections)** - Human cancer tissue was stained with Mouse Anti-H4K8ac-UNLB followed by Goat Anti-Mouse  $\lg G_1$ , Human ads-HRP (SB Cat. No. 1070-05). Tissue was developed with DAB and counterstained with hematoxylin.

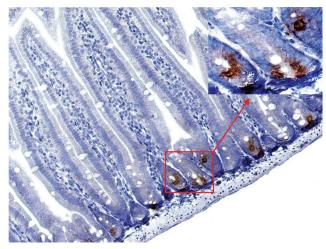
# Mouse Anti-Phospho-Histone H3 (Thr3) (H3T3P)

| Cat. No. | Description                               | Clone  | Size   |
|----------|---|--------|--------|
| 13500-01 | Mouse Anti-Phospho-Histone H3 (Thr3)-UNLB | SB153a | 0.1 mg |



Lane 1 - Lysate without treatment Lane 2 - Lysate with CLA-OA treament

Western Blotting - Mouse Anti-Human H3T3P-UNLB on HEP-2 cell lysate with or without CLA-OA treatment.  $_{\text{Cy}^n}$  is a registered trademark of GE Healthcare.



Immunohistochemistry (Paraffin Sections) - Sections of mouse small intestine tissue were stained with Mouse Anti-H3T3P-UNLB. Goat Anti-Mouse IgG(H+L), Human ads-BIOT (SB Cat. No. 1031-08) was used as a secondary followed by Streptavidin-HRP (SB Cat. No. 7100-05).