SouthernBiotech

Mouse Anti-Acetyl-Histone H4 (Lys8)

Cat. No.	Form	Quantity
13700-01	Purified (UNLB) Antibody	0.1 mg

DESCRIPTION

Clone SB162a
Ig Isotype Mouse IgG1κ
Immunogen Synthetic Peptide
Specificity Histone H4 acetylated at Lysine 8, Mr 11 kDa.
Species Reactivity Human. Other species not tested.

Nucleosomes, the primary protein component of chromatin, are the basic units of DNA packaging in eukaryotes. Nucleosomes consist of a major segment 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, methylation and ubiquitination. These modifications have a direct effect on chromatin structure and chromatin–protein interactions, and are involved in DNA repair, chromosome condensation, and gene regulation.

RESEARCH APPLICATIONS

- ELISA
- Western blotting
- Immunoprecipitation
- Immunocytochemistry
- Immunohistochemistry
- Flow Cytometry

CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of monoclonal antibody is tested by Western Blot and/or ELISA to conform to characteristics of a standard reference reagent. Representative data are included in this product insert.

WORKING DILUTIONS

Western Blot:	Purified antibody	0.1μg/mL
ELISA:	Purified antibody	0.1μg/mL
IHC/ICC:	Purified antibody	0.5-1μg/mL
Flow Cytometry:	Purified antibody	≤0.1μg/10^6 cells
Other Applications:	Since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need.	

HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 0.2 mL of borate buffered saline, pH 8.2, containing 30% glycerol and 0.01% BSA. Store at -20°C.

REFERENCES

1. Nowak S.J., and Corces V.G. 2004. *Trends in Genetics*, 20 (4), 214-220
2. Hans F., and Dimitrov S. 2001. *Oncogene*, 20:3021-3027
3. Hooser, A.V., D.W. Goodrich, C.D., Allis, B.R. Brinkley, and M.A. Mancini. 1998. *J Cell Sci*. 111:3497-3506

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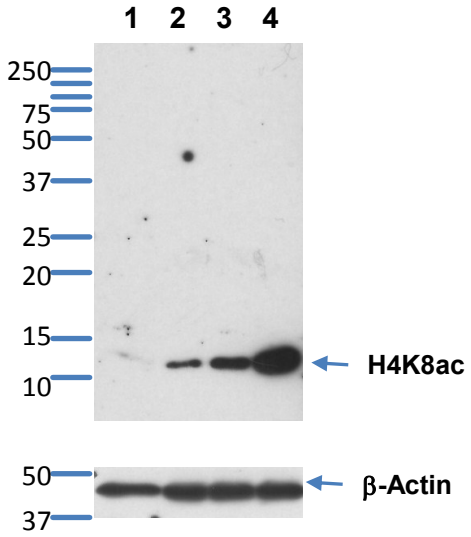
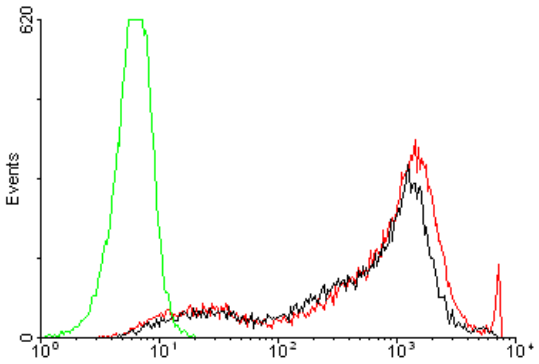
Western Blot



H4K8ac expression on Jurkat cell lysate (20µg/lane) treated with the acetyltransferase inhibitor, curcumin.

Lane 1: 30uM
Lane 2: 15uM
Lane 3: 7.5uM
Lane 4: Un-treated

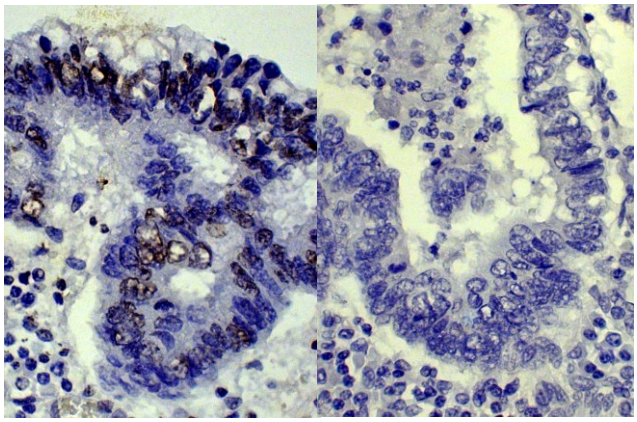
Flow Cytometry



Intracellular staining of Jurkat cells with Anti-H4K8ac-UNLB (0.03µg/10^6 cells) followed by Goat Anti-Mouse IgG1, Human Ads-Cy5 (Cat. No. 1070-15).

Red: TSA treated cells
Black: Non-treated cells
Green: Isotype control

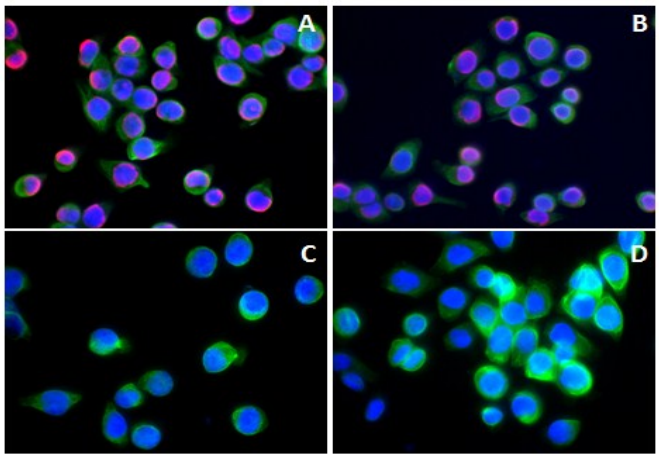
Immunohistochemistry



Paraffin sections of human cancer tissue were stained with Anti-H4K8ac-UNLB . Goat Anti-Mouse IgG1, Human Ads-HRP (Cat. No. 1070-05) was used as a secondary. Sections were developed with DAB and counterstained with Hematoxylin.

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

Immunocytochemistry



MIAPaCa-2 cells stained with DAPI (blue) and anti-Cytokeratin-FITC (green).

A: TSA treated cells with Anti-H4K8ac followed by CY™3 labeled secondary.

B: Non-treated cells with Anti-H4K8ac followed by CY™3 labeled secondary.

C: TSA treated cells with Anti-H4K8ac blocked with immunizing peptide prior to staining, followed by CY™3 labeled secondary.

D: TSA treated cells with Mouse IgG1 isotype control followed by CY™3 labeled secondary.

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