For Research Use Only

Acetyl-Histone H3 (Lys9/Lys27) Recombinant monoclonal antibody

Catalog Number:86860-1-RR

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Basic Information

Catalog Number:
86860-1-RR

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC066245

GeneID (NCBI):
8350

UNIPROT ID:
P68431

Full Name:
histone cluster 1, H3a

Observed MW:
15 kDa

Purification Method:
Protein A purification

CloneNo.:
251199D1

Recommended Dilutions:
WB: 1:2000-1:10000
IF/ICC: 1:2000-1:8000
FC (Intra): 0.13 ug per 10^6 cells in a 100 µl suspension
Dot Blot: 1:10-1:100
ChIP-qPCR: 1:10-1:100

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), Dot Blot, ELISA, ChIP-qPCR

Species Specificity:
human, mouse

Positive Controls:

WB : Trichostatin A treated NIH/3T3 cells, Trichostatin A treated HeLa cells

IF/ICC : Trichostatin A treated HeLa cells,

FC (Intra) : Trichostatin A treated NIH/3T3 cells,

Dot Blot : / /,

ChIP-qPCR : HeLa cells,

Background Information

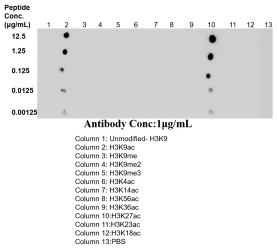
Histones are small, highly basic proteins that consist of a globular domain with unstructured N- and C-terminal tails protruding from the main structure. Histone H3 is one of the five main histones that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. In addition to their role in DNA compartmentalization, histones also play crucial roles in various biologic processes, including gene expression and regulation, DNA repair, chromatin condensation, cell cycle progression, chromosome segregation, and apoptosis. The ability of histones to regulate chromatin dynamics primarily originates from various posttranslational modifications carried out by histone-modifying enzymes.

Storage

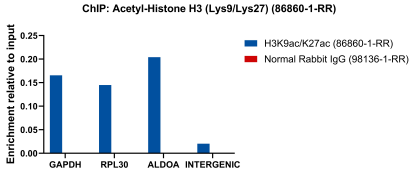
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

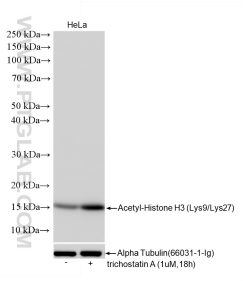
Selected Validation Data



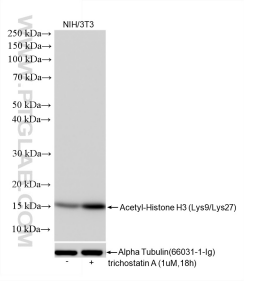
Dot blot analysis was used to confirm the specificity of 86860-1-RR Acetyl-Histone H3 (Lys9/Lys27) antibody. peptides were spotted onto NC and probed with antibody at 1 μg/ml.The amount of peptide (μ g/mL) spotted is indicated next to each row.



Chromatin was prepared from HeLa cells. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 15 μg of cross-linked chromatin, 5 μg of Acetyl-Histone H3 (Lys9/Lys27) (86860-1-RR) or 5 ug of Normal Rabbit IgG (98136-1-RR), and 20 μl of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR.



Various lysates were subjected to SDS PAGE followed by western blot with 86860-1-RR (Acetyl-Histone H3 (Lys9/Lys27) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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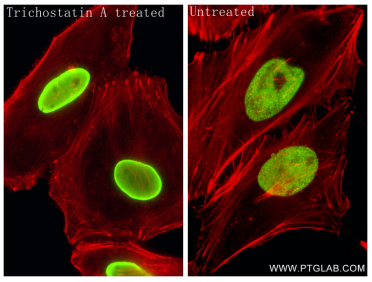
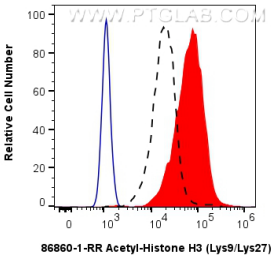


Immunofluorescent analysis of (4% PFA) fixed Trichostatin A treated HeLa cells using Acetyl-Histone H3 (Lys9/Lys27) antibody (86860-1-RR, Clone: 251199D1) at dilution of 1:4000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10^6 Trichostatin A treated NIH/3T3 cells were intracellularly stained with 0.13 ug Acetyl-Histone H3 (Lys9/Lys27) Recombinant monoclonal antibody (86860-1-RR, Clone:251199D1) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.13 ug Isotype Control (blue). Cells were fixed and permeabilized with Flow Cytometry Phosphorylated Protein Fixation/Permeabilization Kit (PF00026).