For Research Use Only

Acetyl-Histone H3 (Lys27) Recombinant antibody, PBS Only



Catalog Number:82902-1-PBS

Basic Information

Catalog Number: 82902-1-PBS

1mg/ml

Source:

Rabbit

GenBank Accession Number:

BC066245

GeneID (NCBI):

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8350

UNIPROT ID: P68431

Isotype: Full Name:

histone cluster 1, H3a

Purification Method: Protein A purification

CloneNo.:

1M16

Applications

Tested Applications:

WB, IF, Dot Blot, Indirect ELISA

Species Specificity:

Human, mouse, rat

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. Acetyl-Histone H3 (Lys27) is enhancer specific mark and plays positive role in gene expression.

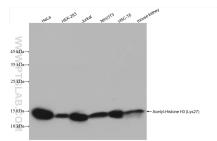
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

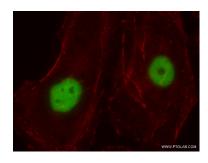
Selected Validation Data



Dot blot analysis was used to confirm the specificity of Acetyl-Histone H3 (Lys27) antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1 µg/ml. The amount of peptide (ug/ml.) spotted is indicated next to each row. Column 1: H3K27ac. Column 2: Unmodified H3K27. Column 3: H3K9ac. Column 4: H3K14ac. Column 5: H3K18ac. Column 6: H3K23ac. Column 7: H3K36ac. Column 8: H4K5ac. Column 9: H4K8ac. Column 10: H4K12ac.



Various cell lysates were subjected to SDS PAGE followed by western blot with 82902-1-RR Acetyl-Histone H3 (Lys27) antibody) at dilution of 1:9800 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82902-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Acetyl-Histone H3 (Lys27) antibody (82902-1-RR, Clone: 1M16) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 82902-1-PBS in a different storage buffer formulation.