For Research Use Only

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



Purification Method:

Protein A purification

CloneNo.:

1M16

Catalog Number:82902-1-PBS

Basic Information

Catalog Number: 82902-1-PBS

GenBank Accession Number:

BC066245

GeneID (NCBI):

100ug, Concentration: 1mg/ml by

UNIPROT ID:

Source: P68431 Rabbit Full Name:

Isotype: histone cluster 1, H3a

IgG

Nanodrop:

Applications

Tested Applications:

WB, IHC, IF/ICC, 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.

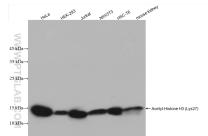
Storage

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

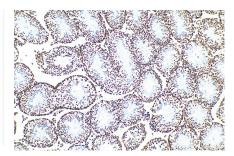
Selected Validation Data



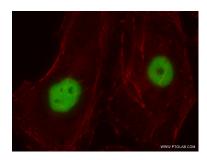
Dot blot analysis was used to confirm the specificity of Acetyl-Histone H3 (Lys27) antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1 µg/ml. The amount of peptide (ug/ml.) spotted is indicated next to each row. Column 1: H3K27ac. Column 2: Unmodified H3K27. Column 3: H3K9ac. 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.



Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using 82902-1-RR (Acetyl-Histone H3 (Lys27) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). 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.