For Research Use Only

Acetyl-Histone H3 (Lys27) Recombinant antibody

Catalog Number:82902-1-RR 1 Publications

proteintech®
Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
82902-1-RR

Size:
100ul , Concentration: 1000 ug/ml by Nanodrop;

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.:
1M16

Recommended Dilutions:
WB 1:2000-1:19600
IHC 1:1000-1:4000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, Dot Blot, ELISA

Cited Applications:
WB

Species Specificity:
Human, mouse, rat

Cited Species:
mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, HEK-293 cells, Jurkat cells, NIH/3T3 cells, HSC-T6 cells, mouse kidney tissue

IHC : mouse testis tissue,

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

Notable Publications

Author	Pubmed ID	Journal	Application
Fei-Fei Yang	39102466	J Med Chem	WB

Storage

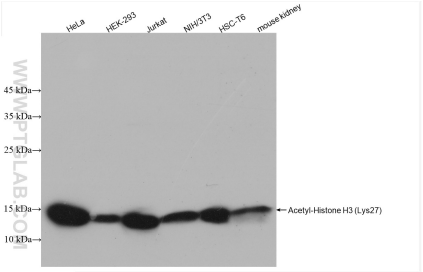
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

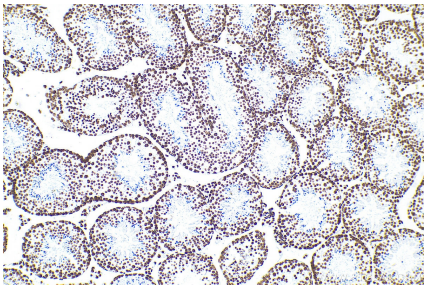
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

Selected Validation Data

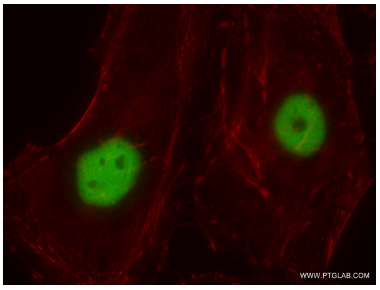
Dot blot analysis was used to confirm the specificity of Acetyl-Histone H3 (Lys27) antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1 µg/ml.The amount of peptide (ug/mL) spotted is indicated next to each row. Column 1: H3K27ac. Column 2: Unmodified H3K27. Column 3: H3K9ac.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



Immunohistochemical analysis of paraffin-embedded 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).



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 IgG(H+L) (SA00013-2), CL594-Phalloidin (red).