

For Research Use Only

# Acetyl-Histone H4 (Lys12) Recombinant antibody

Catalog Number: 83095-1-RR

Featured Product



## Basic Information

Catalog Number:

83095-1-RR

Size:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC069654

GeneID (NCBI):

8359

UNIPROT ID:

P62805

Full Name:

histone cluster 1, H4a

Observed MW:

12 kDa

Purification Method:

Protein A purification

CloneNo.:

1D18

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:1000-1:4000

IF/ICC 1:150-1:600

## Applications

Tested Applications:

WB, IHC, IF/ICC, Dot Blot, ELISA

Species Specificity:

human, 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 : Trichostatin A treated NIH/3T3 cells, HEK-293 cells, HSC-T6 cells, NIH/3T3 cells

IHC : mouse small intestine tissue,

IF/ICC : Caco-2 cells,

## Background Information

Histone H4 is a 103 amino acid protein, which belongs to the histone H4 family. Histone H4 localizes in the nucleus and is a core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. Acetylation of histone H4 is necessary for chromatin decompaction during DNA replication.

## 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

For technical support and original validation data for this product please contact:

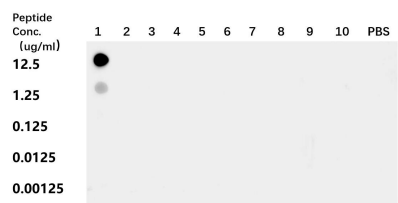
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

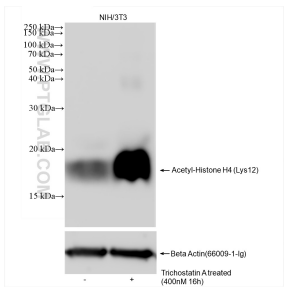
W: [ptgcn.com](http://ptgcn.com)

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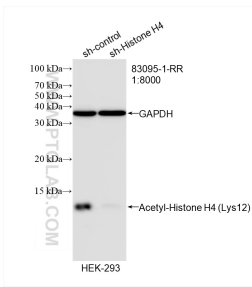
Selected Validation Data



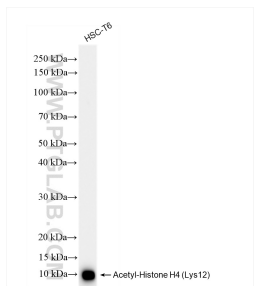
Dot blot analysis was used to confirm the specificity of Histone H4AK12ac antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1  $\mu$ g/ml. The amount of peptide ( $\mu$ g/ml) spotted is indicated next to each row. Column 1: H4AK12ac. Column 2: Unmodified H4AK12. Column 3: H4AK5ac. Column 4: Unmodified H4AK5. Column 5: H4AK8ac. Column 6: Unmodified H4AK8. Column 7: H4AK16ac. Column 8: Unmodified H4AK16. Column 9: H4AK91ac. Column 10:



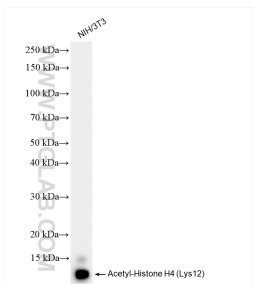
Untreated and trichostatin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



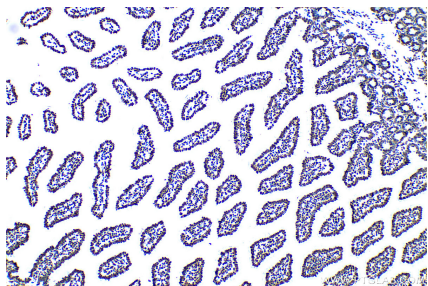
WB result of Acetyl-Histone H4 (Lys12) antibody (83095-1-RR; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Acetyl-Histone H4 (Lys12) transfected HEK-293 cells.



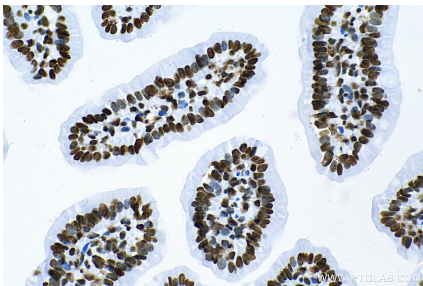
HSC-T6 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



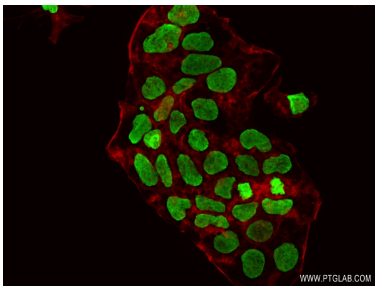
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



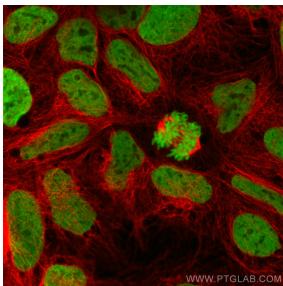
Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed Caco-2 cells using Acetyl-Histone H4 (Lys12) antibody (83095-1-RR, Clone: 1D18) at dilution of 1:300 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed Caco-2 cells using Acetyl-Histone H4 (Lys12) antibody (83095-1-RR, Clone: 1D18) at dilution of 1:500 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).