For Research Use Only

## Acetyl-Histone H4 (Lys12) Recombinant antibody, PBS Only

Catalog Number:83095-1-PBS Featured Product



**Basic Information** 

Catalog Number:

GenBank Accession Number:

Purification Method: Protein A purification

83095-1-PBS

GeneID (NCBI):

CloneNo.:

1mg/ml Source:

Size:

8359 UNIPROT ID:

BC069654

1D18

Rabbit Isotype:

Full Name: histone cluster 1, H4a

Observed MW:

12 kDa

P62805

**Applications** 

**Tested Applications:** 

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

Species Specificity:

human, mouse, rat

## **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 -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

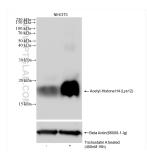
Storage Buffer:

PBS Only

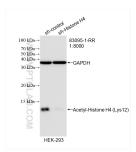
## Selected Validation Data



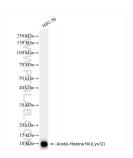
Dot blot analysis was used to confirm the specificity of Histone H4AK12ac antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1 µg/ml.The amount of peptide ( µ g/ml.) spotted is indicated next to each row. Column 1: H4AK12ac. Column 2: Unmodified H4AK12. Column 3: H4AK5ac. Column 4: Unmodified H4AK5. Column 5: H4AK8Ac. Column 6: Unmodified H4AK8. Column 7: H4AK16ac. Column 8:Unmodified H4AK16. Column 9: H4AK91ac. Column 10:



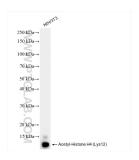
Untreated and trichostatin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer formulation.



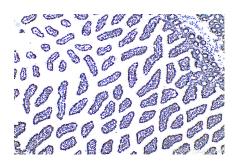
WB result of Acetyl-Histone H4 (Lys12) antibody (83095-1-RR; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Acetyl-Histone H4 (Lys12) transfected HEK-293 cells. This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer formulation.



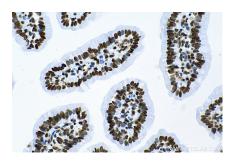
HSC-T6 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer formulation.



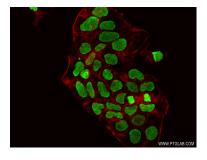
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer formulation.



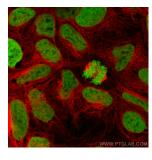
Immunohistochemical analysis of paraffinembedded mouse small intestine tissue slide using 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer



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). This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 83095-1-PBS in a different storage buffer formulation.