For Research Use Only

Acetyl-Histone H4 (Lys12) Recombinant antibody

Catalog Number:83095-1-RR

Featured Product



Basic Information

Catalog Number: GenBank Accession Number: **Purification Method:** 83095-1-RR BC069654 Protein A purification

GeneID (NCBI): Size: CloneNo.: 100ul, Concentration: 1000 ug/ml by 8359 1D18

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Source: P62805 WB 1:5000-1:50000 Rabbit IHC 1:1000-1:4000 Full Name: IF/ICC 1:150-1:600 Isotype: histone cluster 1, H4a

IgG Observed MW:

12 kDa

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

Store at -20°C. Stable for one year after shipment.

Storage Buffer: PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

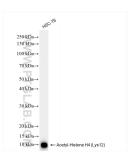
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

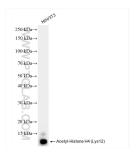
Selected Validation Data



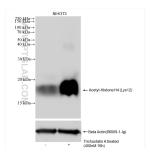
Dot blot analysis was used to confirm the specificity of Histone H4AK12ac antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1 µg/ml.The amount of peptide (µg/ml) spotted is indicated next to each row. Column 1: H4AK12ac. Column 2: Unmodified H4AK12. Column 3: H4AK5ac. Column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



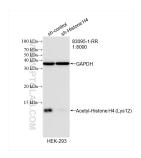
HSC-T6 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



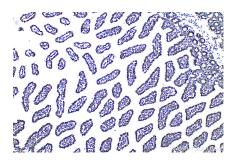
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 83095-1-RR (Acetyl-Histone H4(Lys12) antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



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.



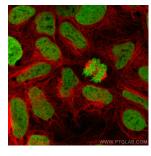
WB result of Acetyl-Histone H4 (Lys12) antibody (83095-1-RR; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Acetyl-Histone H4 (Lys12) transfected HEK-293 cells



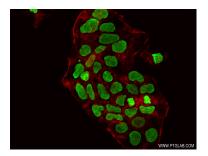
Immunohistochemical analysis of paraffinembedded mouse small intestine tissue slide using 83095-1-RR (Acetyl-Histone H4 (Lys12) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



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).