

For Research Use Only

# Acetyl-Histone H4 (Lys12) Recombinant antibody



Catalog Number: 83095-1-RR

## Basic Information

<b>Catalog Number:</b> 83095-1-RR	<b>GenBank Accession Number:</b> BC069654	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 8359	<b>CloneNo.:</b> 1D18
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P62805	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> histone cluster 1, H4a	
	<b>Observed MW:</b> 12 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA, Dot Blot	<b>Positive Controls:</b> WB : Trichostatin A treated NIH/3T3 cells,
<b>Species Specificity:</b> Human, mouse	

## 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

\*\*\* 20ul sizes contain 0.1% BSA

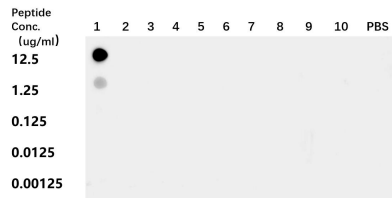
For technical support and original validation data for this product please contact:

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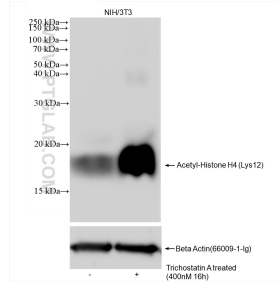
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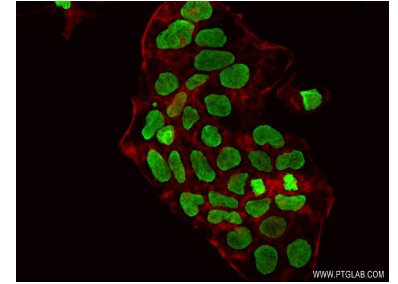
## Selected Validation Data



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 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: H4AK91ac. Column 10: PBS.



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.



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).