

## Histone H4 (Acetyl Lys12) Polyclonal Antibody

<b>Catalog No :</b>	YK0013
<b>Reactivity :</b>	Human;Mouse;Rat;Monkey
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Histone H4
<b>Fields :</b>	>>Neutrophil extracellular trap formation;>>Alcoholism;>>Viral carcinogenesis;>>Systemic lupus erythematosus
<b>Gene Name :</b>	HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4H/HIST1H4I/HIST1H4J/HIST1H4K/HIST1H4L/HIST2H4A/HIST2H4B/HIST4H4
<b>Protein Name :</b>	Histone H4
<b>Human Gene Id :</b>	121504/554313/8294/8359/8360/8361/8362/8363/8364/8365/8366/8367/8368/8370
<b>Human Swiss Prot No :</b>	P62805
<b>Mouse Gene Id :</b>	1.00041e+008
<b>Mouse Swiss Prot No :</b>	P62806
<b>Rat Gene Id :</b>	1.00361e+008
<b>Rat Swiss Prot No :</b>	P62804
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Histone H4 around the acetylated site of Lys12. AA range:10-59
<b>Specificity :</b>	Acetyl-Histone H4 (K12) Polyclonal Antibody detects endogenous levels of Histone H4 protein only when acetylated at K12.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

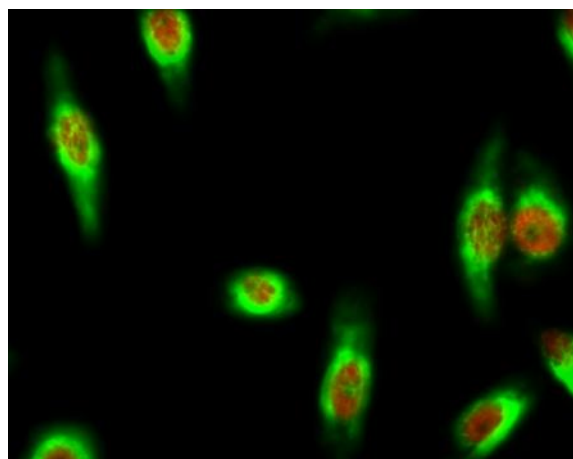
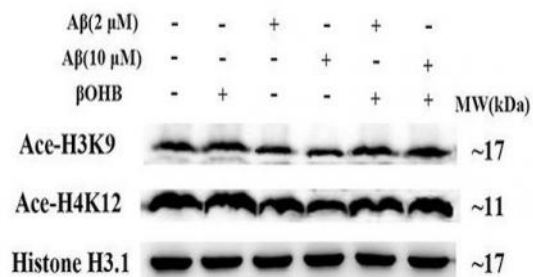
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<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	11kD
<b>Cell Pathway :</b>	Protein_Acetylation
<b>Background :</b>	<p>Histones are basic nuclear proteins 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. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H4 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the histone microcluster on chromosome 6p21.33. [provided by RefSeq, Aug 2015],</p>
<b>Function :</b>	<p>function: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.,PTM:Acetylation at Lys-6, Lys-9, Lys-13 and Lys-17 occurs in coding regions of the genome but not in heterochromatin.,PTM:Citrullination at Arg-4 by PADI4 impairs methylation.,PTM:Monomethylated, dimethylated or trimethylated at Lys-21. Monomethylation is performed by SET8. Trimethylation is performed by SUV420H1 and SUV420H2 and induces gene silencing.,PTM:Monomethylation at Arg-4 by PRMT1 favors acetylation at Lys-9 and Lys-13. Demethylation is p</p>
<b>Subcellular Location :</b>	Nucleus. Chromosome.
<b>Expression :</b>	B-cell lymphoma,Bone marrow,Brain,Clones donated by HIP,Corpus call

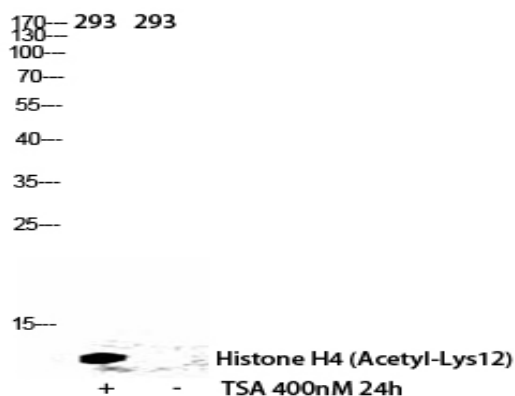
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## Products Images

Zhang, Jingzhu, et al. "Intermittent Fasting Alleviates the Increase of Lipoprotein Lipase Expression in Brain of a Mouse Model of Alzheimer's Disease: Possibly Mediated by  $\beta$ -hydroxybutyrate." *Frontiers in cellular neuroscience* 12 (2018): 1.



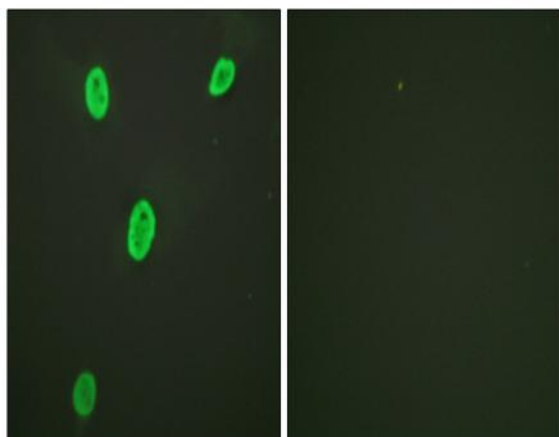
Immunofluorescence analysis of HeLa cell. 1, Histone H4 (Acetyl Lys12) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight).  $\beta$ -Tubulin Monoclonal Antibody (5G3) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).



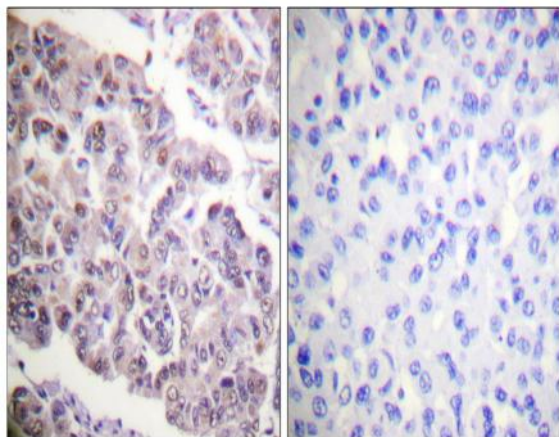
Western Blot analysis of 293 cells using Acetyl-Histone H4 (K12) Polyclonal Antibody diluted at 1:500. Secondary antibody (catalog#:RS0002) was diluted at 1:20000

**Mouse-kidney HELA**

Western blot analysis of Mouse-kidney HELA lysis using Acetyl-Histone H4 (K12) antibody. Antibody was diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of HeLa cells, using Histone H4 (Acetyl-Lys12) Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Histone H4 (Acetyl-Lys12) Antibody. The picture on the right is blocked with the synthesized peptide.