Histone H4 (Acetyl Lys12) Rabbit pAb

CatalogNo: YK0013 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat,Monkey

Applications
- WB,IHC,IF,ELISA

MW
- 11kD (Observed)

Isotype
- IgG

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
IF 1:200-1:1000
ELISA 1:10000
Not yet tested in other applications.

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human Histone H4 around the acetylated site of Lys12. AA range:10-59

Specificity

Acetyl-Histone H4 (K12) Polyclonal Antibody detects endogenous levels of Histone H4 protein only when acetylated at K12.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):LGkGG

Target Information

Gene name HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4H/HIST1H4I/HIST1H4J/HIST1H4K/HIST1H4L/HIST2H4A/HIST2H4B/HIST4H4

Protein Name Histone H4

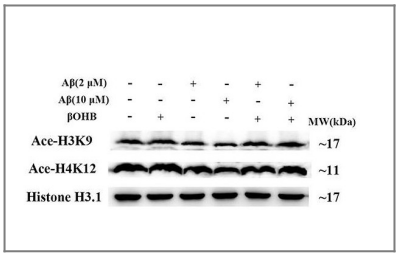
Organism	Gene ID	UniProt ID
Human	121504; 554313; 8294; 8359; 8360; 8361; 8362; 8363; 8364; 8365; 8366; 8367; 8368; 8370;	P62805;
Mouse	100041230;	P62806;
Rat	100360950;	P62804;

Cellular Localization Nucleus. Chromosome.

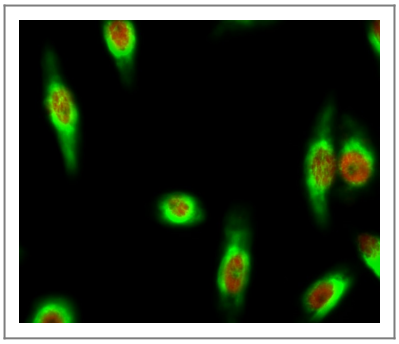
Tissue specificity B-cell lymphoma,Bone marrow,Brain,Clones donated by HIP,Corpus call

Function 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 performed by JMJD6.,PTM:Sumoylated, which is associated with transcriptional repression.,PTM:Ubiquitinated by the CUL4-DDB-RBX1 complex in response to ultraviolet irradiation. This may weaken the interaction between histones and DNA and facilitate DNA accessibility to repair proteins.,similarity:Belongs to the histone H4 family.,subunit:The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA.,

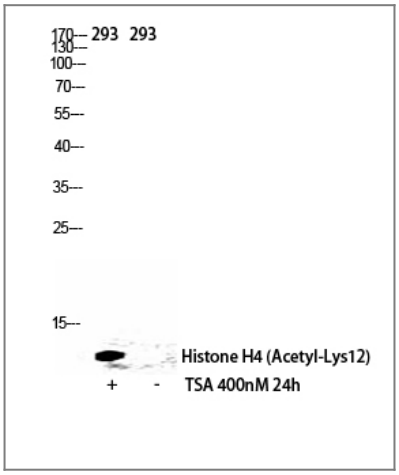
Validation Data



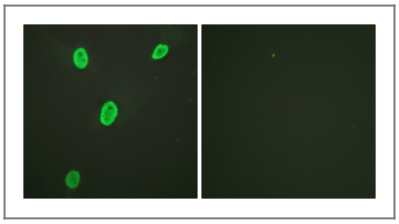
Zhang, Jingzhu, et al. "Intermittent Fasting Alleviates the Increase of Lipoprotein Lipase Expression in Brain of a Mouse Model of Alzheimer's Disease: Possibly Mediated by β-hydroxybutyrate." Frontiers in cellular neuroscience 12 (2018): 1.



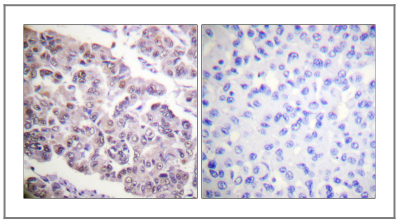
Immunofluorescence analysis of Hela cell. 1,Histone H4 (Acetyl Lys12) Polyclonal Antibody(red) was diluted at 1:200(4° overnight). β-Tubulin Monoclonal Antibody(5G3)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min).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



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.

Contact information

Orders:	order.cn@immunoway.com
Support:	support.cn@immunoway.com
Telephone:	400-8787-807(China)
Website:	http://www.immunoway.com.cn
Address:	2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information: **Histone H4 (Acetyl Lys12) Rabbit pAb**