

# Histone H4 (Mono Methyl Lys21) Rabbit pAb

CatalogNo: YH0011

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- WB, ELISA

### MW

- 11kD (Observed)

### Isotype

- IgG

## 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.

## Recommended Dilution Ratios

**WB 1:500-2000**

**ELISA 1:10000-20000**

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** Synthetic Mono-Methyl peptide from human protein at AA range: 21

**Specificity** The antibody detects endogenous Mono-Methyl-Histone H4 (K21). 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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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): HRKVL

## Target Information

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

**Protein Name** Histone H4

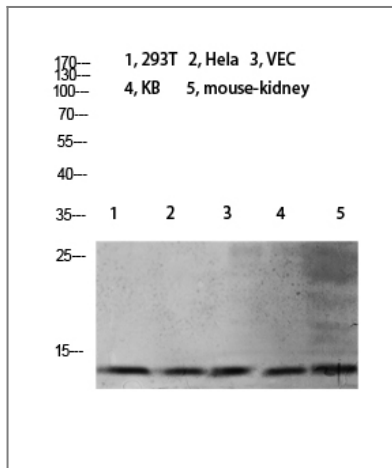
Organism	Gene ID	UniProt ID
Human	<a href="#">121504</a> ; <a href="#">554313</a> ; <a href="#">8294</a> ; <a href="#">8359</a> ; <a href="#">8360</a> ; <a href="#">8361</a> ; <a href="#">8362</a> ; <a href="#">8363</a> ; <a href="#">8364</a> ; <a href="#">8365</a> ; <a href="#">8366</a> ; <a href="#">8367</a> ; <a href="#">8368</a> ; <a href="#">8370</a> ;	<a href="#">P62805</a> ;
Mouse	<a href="#">100041230</a> ;	<a href="#">P62806</a> ;
Rat	<a href="#">100360950</a> ;	<a href="#">P62804</a> ;

**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



Western blot analysis of 3T3 mouse-kidney KB K562 Hela 293T lysate, antibody was diluted at 1000. Secondary antibody (catalog#:RS0002) was diluted at 1:20000

## Contact information

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Please scan the QR code to access additional product information:  
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