

# MonoMethyl-Histone H3-K4 Rabbit pAb

Catalog No.: A2355SP **46 Publications**

## Basic Information

### Observed MW

17 kDa

### Calculated MW

15 kDa

### Category

Primary antibody

### Applications

WB,IF/ICC,IHC-P,DB,ChIP,ELISA

### Cross-Reactivity

Human, Mouse, Rat, Other (Wide Range Predicted)

## Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is located separately from the other H3 genes that are in the histone gene cluster on chromosome 6p22-p21.3.

## Recommended Dilutions

**WB** 1:1000 - 1:5000

**IF/ICC** 1:200 - 1:800

**IHC-P** 1:2000 - 1:8000

**DB** 1:1000 - 1:2000

**ChIP** 3 µg antibody for 5 µg - 10 µg of Chromatin

### ELISA

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ( $\geq 1:10000$ ) a sequential dilution method is strongly recommended to ensure measurement accuracy.

## Immunogen Information

### Gene ID

8290/8350

### Swiss Prot

Q16695/P68431

### Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

### Synonyms

H3t; H3.4; H3/g; H3FT; H3C16; HIST3H3; MonoMethyl-Histone H3-K4

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide. May contain 0.05% BSA as specified on the Certificate of Analysis.

## Contact

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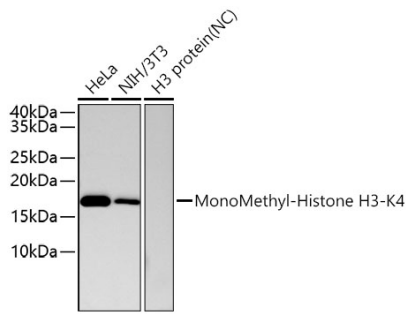
 | 400-999-6126

 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

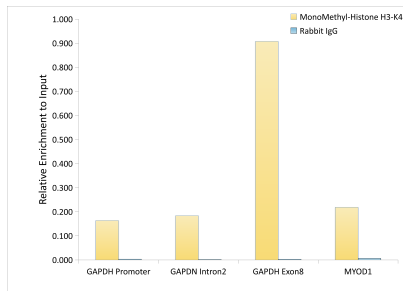
 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

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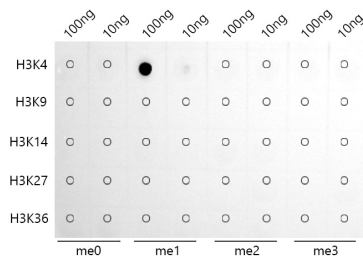
## Validation Data



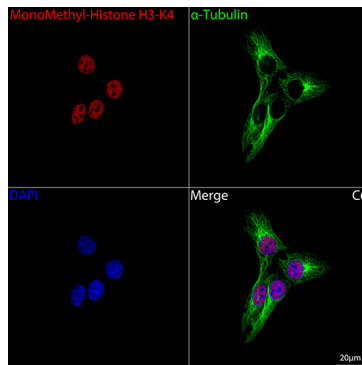
Western blot analysis of various lysates using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP) at 1:5000 dilution incubated overnight at 4°C.  
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25 µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Negative control (NC): H3 protein.  
 Exposure time: 90 s.



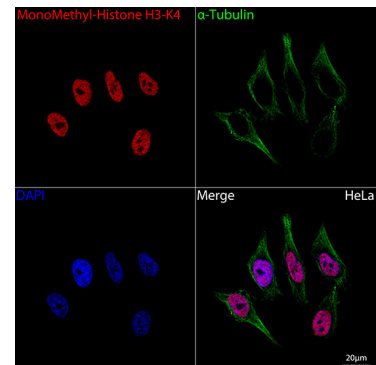
Chromatin immunoprecipitation was performed with 10 µg of cross-linked chromatin from HeLa cells, using 3 µg of MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.



Dot-blot analysis of all sorts of peptides using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP) at 1:1000 dilution.

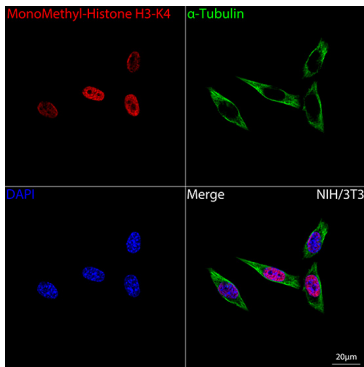


Confocal imaging of C6 cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

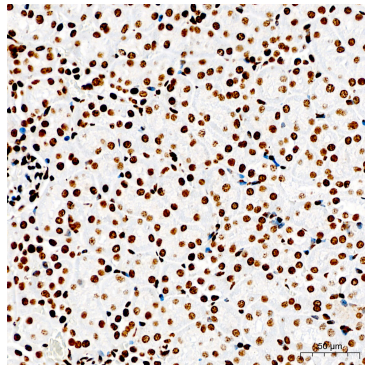


Confocal imaging of HeLa cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

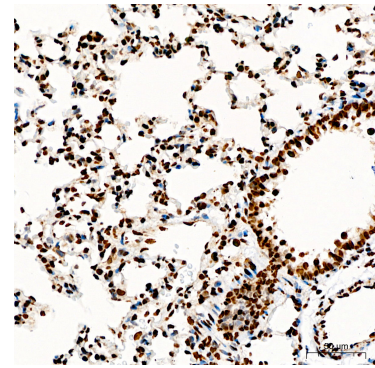
## Validation Data



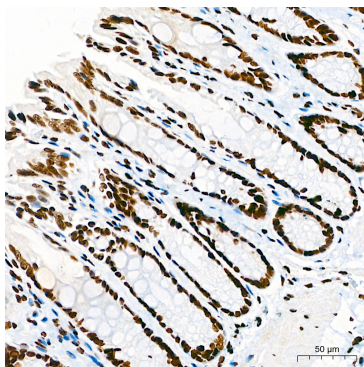
Confocal imaging of NIH/3T3 cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Mouse kidney tissue using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP) at a dilution of 1:4000 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse lung tissue using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP) at a dilution of 1:4000 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355SP) at a dilution of 1:4000 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.