

# MonoMethyl-Histone H3-K9 Rabbit mAb

**Catalog No.: A20734** **Recombinant**

## Basic Information

**Observed MW**

17kDa/

**Calculated MW**

16kDa

**Category**

Primary antibody

**Applications**

WB,DB,IHC-P,IF/ICC,ELISA,ChIP,CUT&amp;Tag

**Cross-Reactivity**

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

**CloneNo number**

ARC2677

## Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an 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 found in the large histone gene cluster on chromosome 6p22-p21.3.

## Recommended Dilutions

**WB** 1:500 - 1:1000**DB** 1:500 - 1:1000**IHC-P** 1:500 - 1:1000**IF/ICC** 1:50 - 1:200**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.**ChIP** 5µg antibody for 5µg-10µg of Chromatin**CUT&Tag** 10<sup>5</sup> cells /1 µg

## Immunogen Information

**Gene ID**

8290/8350

**Swiss Prot**

Q16695/P68431

**Immunogen**

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

**Synonyms**

H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FA; H3C10; H3C11; H3C12; HIST1H3A; MonoMethyl-Histone H3-K9

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

Affinity purification

**Storage**

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

Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

Contact

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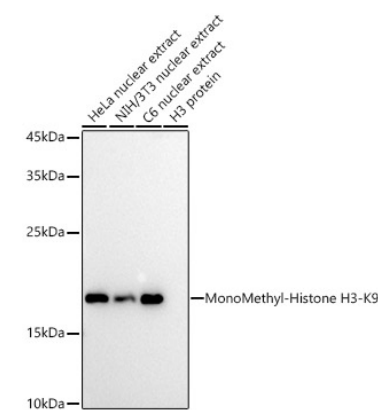
☎ | 400-999-6126

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

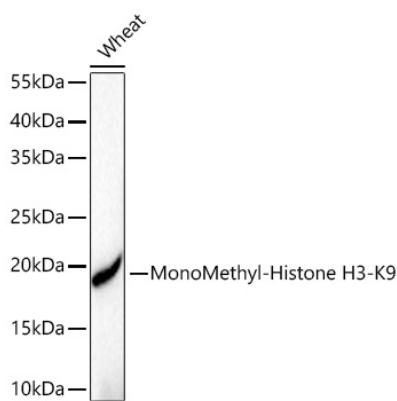
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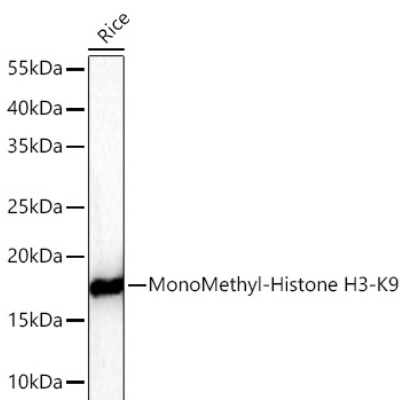
Validation Data



Western blot analysis of various lysates using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 10s.

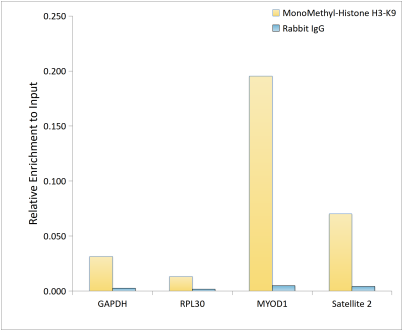


Western blot analysis of lysates from Wheat using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at 1:1000 dilution incubated overnight at 4°C.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 10s.

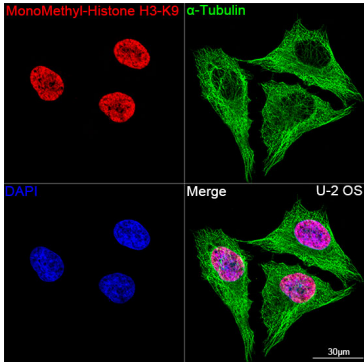
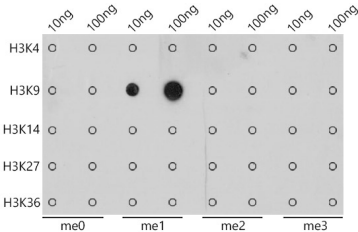
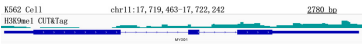


Western blot analysis of lysates from Rice using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at 1:1000 dilution incubated overnight at 4°C.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 90s.

Validation Data



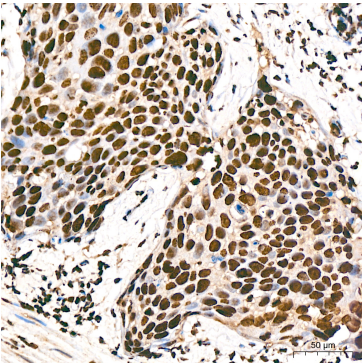
Chromatin immunoprecipitation analysis of extracts from HeLa cells, using MonoMethyl-Histone H3-K9 antibody (A20734) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



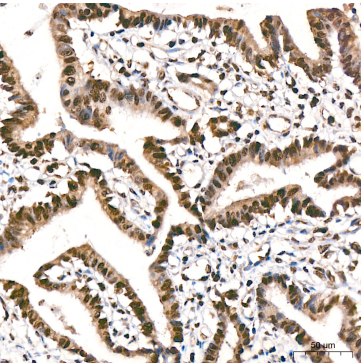
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10<sup>5</sup> K562 cells with 1 μg MonoMethyl-Histone H3-K9 antibody (A20734) , along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of H3K9me1 in representative gene loci (MYOD1), as shown in figure.

Dot-blot analysis of all sorts of peptides using MonoMethyl-Histone H3-K9 antibody (A20734) at 1:1000 dilution.

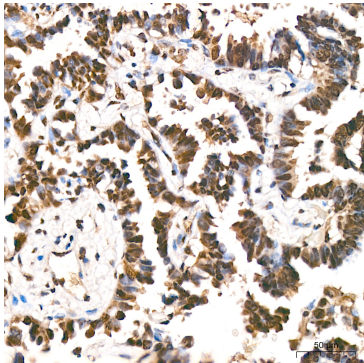
Confocal imaging of U-2 OS cells using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734,dilution 1:100)(Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012,dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Human cervix cancer tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



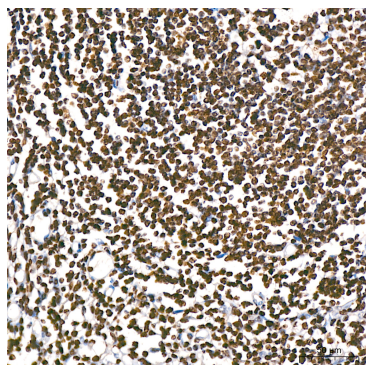
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



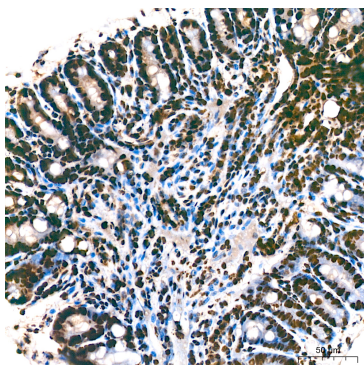
Immunohistochemistry analysis of paraffin-embedded Human lung adenocarcinoma tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



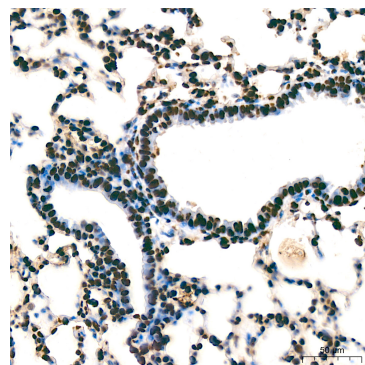
## Validation Data



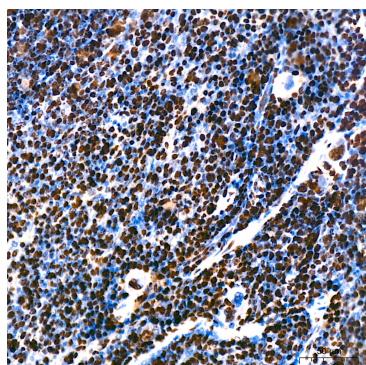
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



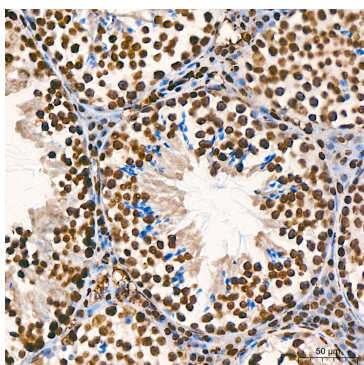
Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



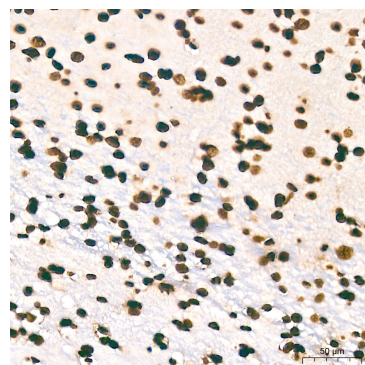
Immunohistochemistry analysis of paraffin-embedded Mouse lung tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



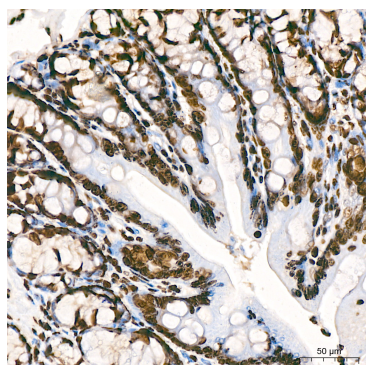
Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



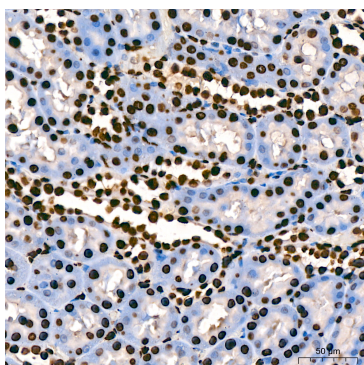
Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



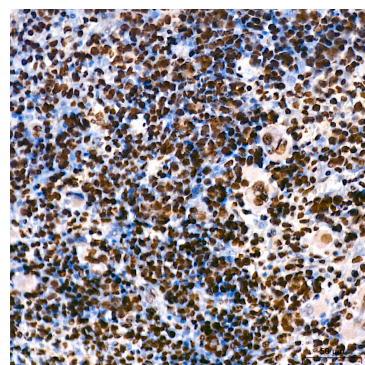
Immunohistochemistry analysis of paraffin-embedded Rat brain tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat kidney tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat spleen tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.