

A20734

Leader in Biomolecular Solutions for Life Science



# MonoMethyl-Histone H3-K9 Rabbit mAb

Catalog No.: A20734 **Recombinant**

## Basic Information

### Observed MW

17kDa

### Calculated MW

16kDa

### Category

SMab Recombinant Monoclonal Antibody

### Applications

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

<b>DB</b>	1:500 - 1:1000
<b>WB</b>	1:500 - 1:1000
<b>IHC-P</b>	1:500 - 1:1000
<b>IF/ICC</b>	1:50 - 1:200
<b>ChIP</b>	5µg antibody for 5µg-10µg of Chromatin
<b>CUT&amp;Tag</b>	10 <sup>5</sup> cells /1 µg

## Contact



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

## Immunogen Information

### Gene ID

8290/8350

### Swiss Prot

Q16695/P68431

### Immunogen

A synthetic monomethylated peptide around K9 of human Histone H3 (P68431).

### 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

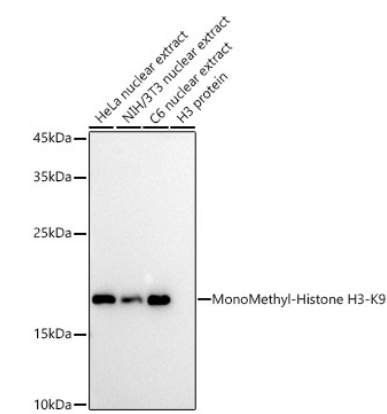
Store at -20°C. Avoid freeze / thaw cycles.

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

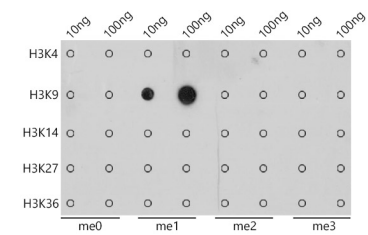
Validation Data



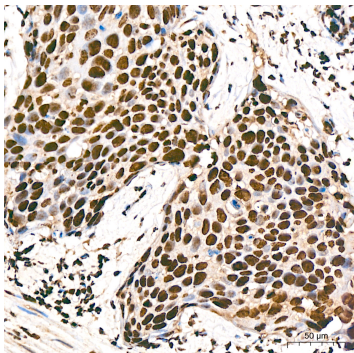
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10<sup>5</sup> K562 cells with 1 µg MonoMethyl-Histone H3-K9 antibody (A20734) , along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of H3K9me1 in representative gene loci (MYOD1),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



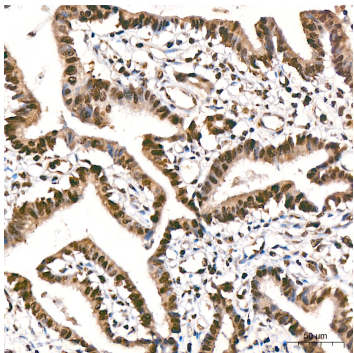
Western blot analysis of various lysates using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at 1:1000 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit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



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

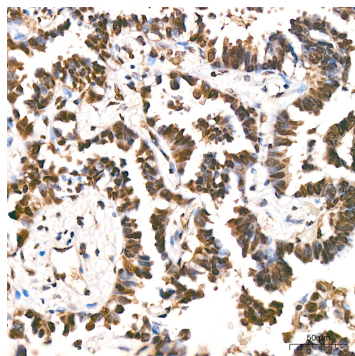


Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded human cervix cancer tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.

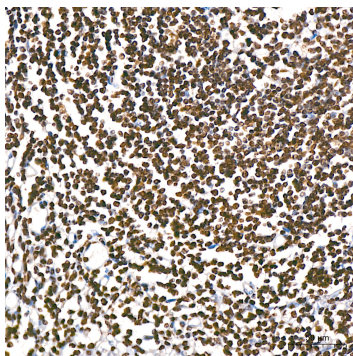


Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded human colon carcinoma tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.

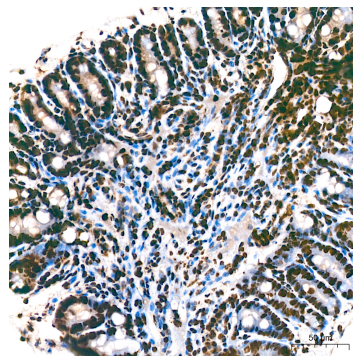
## Validation Data



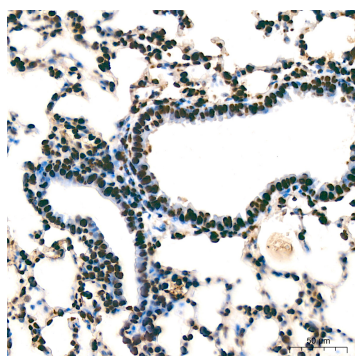
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded Human lung adenocarcinoma tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



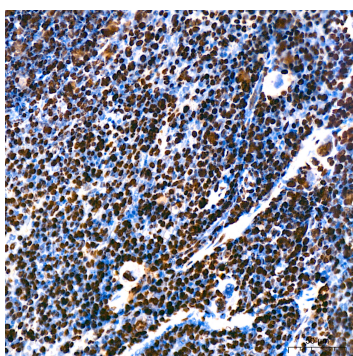
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded human tonsil tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



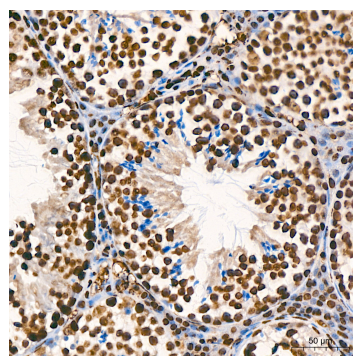
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded mouse colon tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



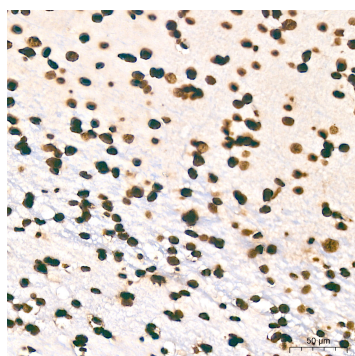
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded mouse lung tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



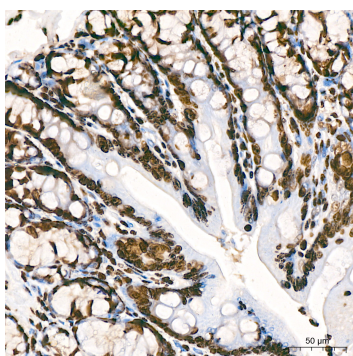
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded mouse spleen tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



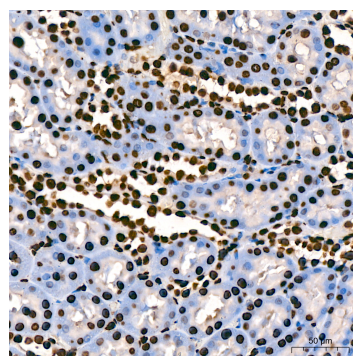
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded mouse testis tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in 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 was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



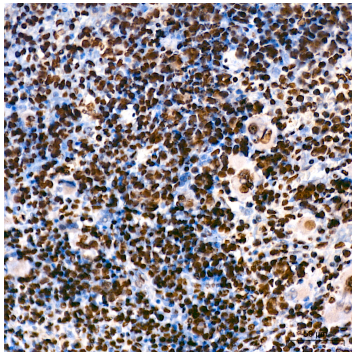
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded rat colon tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



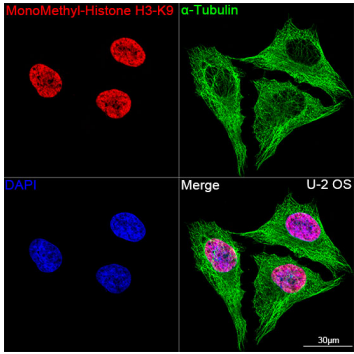
Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in paraffin-embedded rat kidney tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens).High pressure antigen retrieval was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



Validation Data



Immunohistochemistry analysis of MonoMethyl-Histone H3-K9 in 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 was performed with 0.01 M Tris-EDTA buffer (pH 9.0) prior to IHC staining.



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



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.