

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

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 ChromatinCUT&Tag 10⁵ cells /1 µg

Contact

www.abclonal.com

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.

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

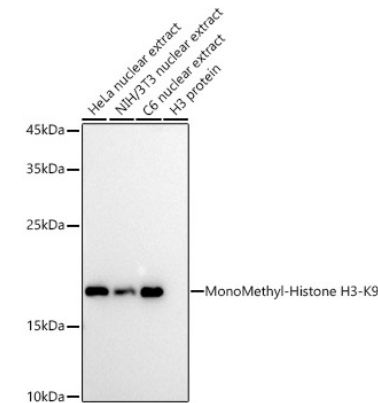
Storage

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

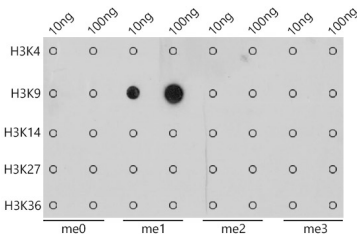
Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.



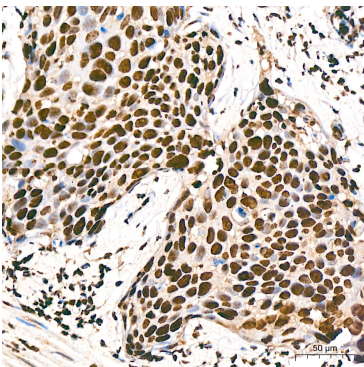
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10⁵ K562 cells with 1 µg MonoMethyl-Histone H3-K9 antibody (A20734) , along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of H3K9me1 in representative gene loci (MYOD1), as shown in figure.



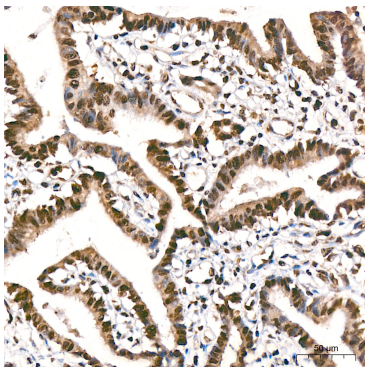
Western blot analysis of various lysates using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic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



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

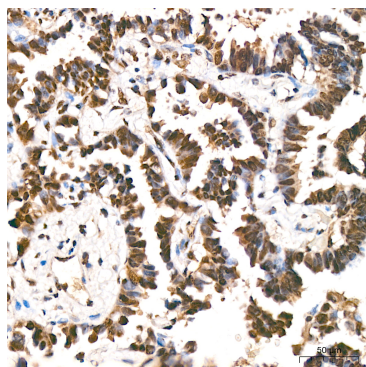


Immunohistochemistry analysis of paraffin-embedded Human cervix cancer tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

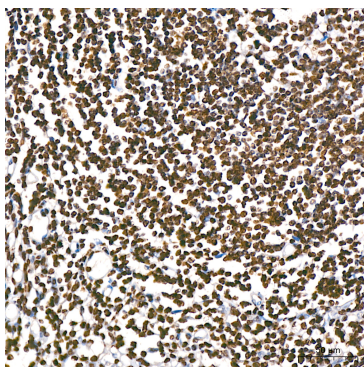


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

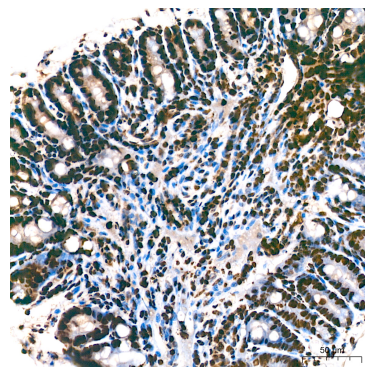
Validation Data



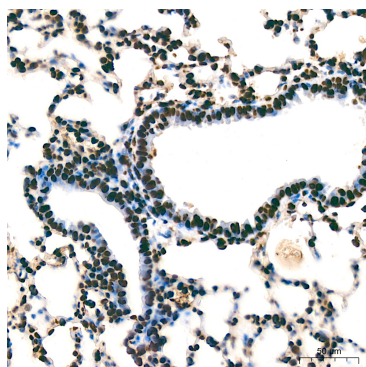
Immunohistochemistry analysis of paraffin-embedded Human lung adenocarcinoma tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



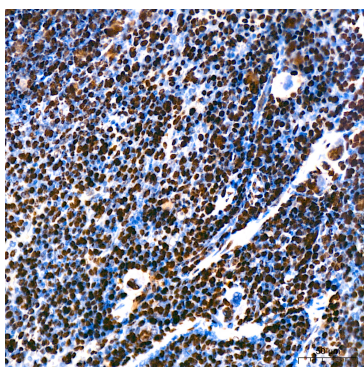
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



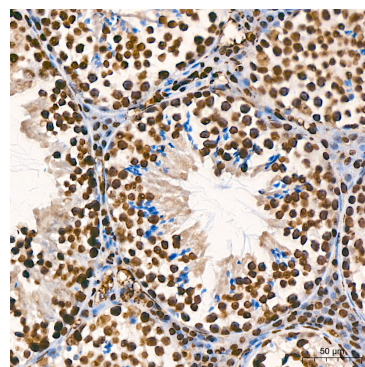
Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



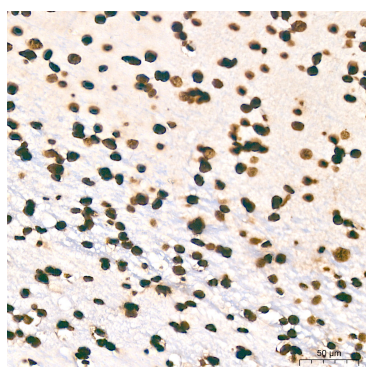
Immunohistochemistry analysis of paraffin-embedded Mouse lung tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



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.



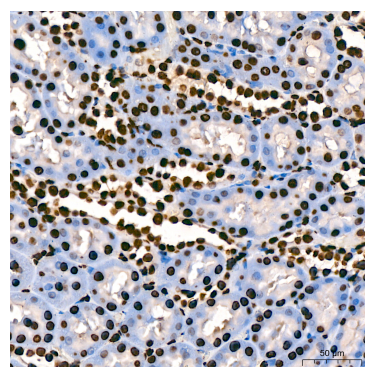
Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of



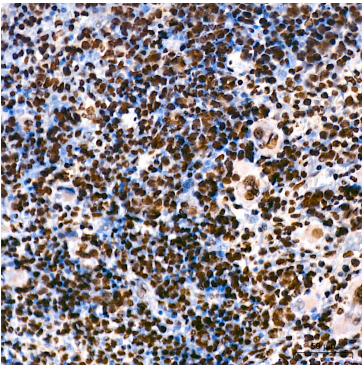
Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of



Immunohistochemistry analysis of paraffin-embedded Rat kidney tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of

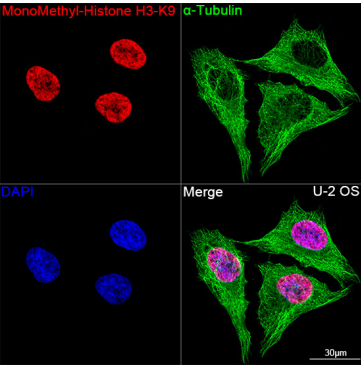
Validation Data

1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



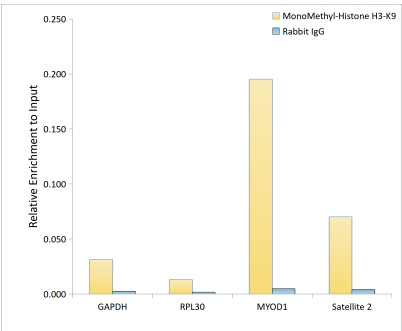
Immunohistochemistry analysis of paraffin-embedded Rat spleen tissue using MonoMethyl-Histone H3-K9 Rabbit mAb (A20734) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

1:800 (40x lens). High pressure antigen retrieval performed with 0.01M 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 α-Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.

1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



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.