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# MonoMethyl-Histone H3-K4 Rabbit mAb

Catalog No.: A27915 Recombinant

## **Basic Information**

#### **Observed MW**

17 kDa

#### **Calculated MW**

16 kDa

## Category

Primary antibody

## **Applications**

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

#### **Cross-Reactivity**

Human, Mouse, Rat, Arabidopsis, Rice, Wheat, Other (Wide Range Predicted)

## CloneNo number

ARC69516

## **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 1:4000 - 1:20000
 IF/ICC 1:200 - 1:1000
 IHC-P 1:5000 - 1:20000
 DB 1:1000 - 1:2000
 ChIP 0.5μg antibody for 10μg-15μg of Chromatin
 ELISA Recommended starting

Recommended starting concentration is 1 µg/mL.

Please optimize the concentration based on your specific assay requirements. For highratio antibody dilutions (≥1:10000)□a sequential dilution method is strongly recommended to ensure measurement accuracy.

## **Immunogen Information**

Gene ID	Swiss Prot
8290/8350	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; Histone H3; H3-4; H3/t; H3/g; H3FT; HIST3H3

## **Product Information**

SourceIsotypePurificationRabbitIgGAffinity purification

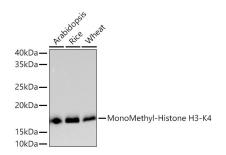
#### Storage

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

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

## Contact

2	400-999-6126
$\bowtie$	cn.market@abclonal.com.cr
•	www.abclonal.com.cr



Western blot analysis of various lysates using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915) at 1:5000 dilution incubated overnight at  $4^{\circ}$ C.

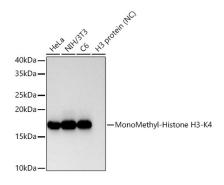
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 90 s.



Western blot analysis of various lysates using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915) at 1:10000 dilution incubated overnight at  $4^{\circ}$ C.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

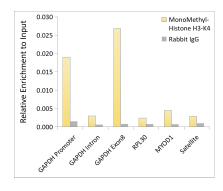
Lysates/proteins: 25 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

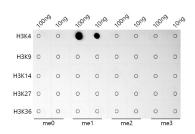
Detection: ECL Basic Kit (RM00020).

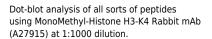
Negative control (NC): H3 protein.

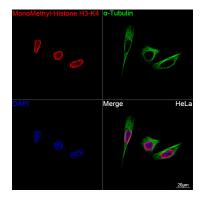
Exposure time: 45 s.



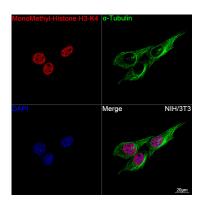
Chromatin immunoprecipitation was performed with 10  $\mu$ g of cross-linked chromatin from HeLa, using 0.5  $\mu$ g of MonoMethyl-Histone H3-K4 Rabbit mAb (A27915) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.





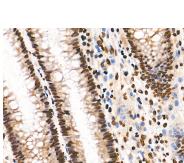


Confocal imaging of HeLa cells using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500)



Confocal imaging of NIH/3T3 cells using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915, 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  $\alpha\text{-}$  Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

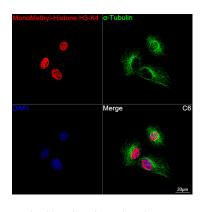


Immunohistochemistry analysis of paraffinembedded Human colon tissue using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915) at a dilution of 1:16000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

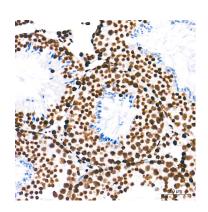
(Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x



Immunohistochemistry analysis of paraffinembedded Mouse brain tissue using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915) at a dilution of 1:16000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining



Confocal imaging of C6 cells using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915, 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) (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffinembedded Mouse testis tissue using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915) at a dilution of 1:16000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Rat brain tissue using MonoMethyl-Histone H3-K4 Rabbit mAb (A27915) at a dilution of 1:16000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.