

A2355

Leader in Biomolecular Solutions for Life Science



## MonoMethyl-Histone H3-K4 Rabbit pAb

Catalog No.: A2355

35 Publications

### Basic Information

#### Observed MW

17kDa

#### Calculated MW

16kDa

#### Category

Polyclonal Antibody

#### Applications

WB, IHC-P, IF/ICC, ChIP, ChIP-seq, 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	1:500 - 1:1000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200
ChIP	5µg antibody for 5µg-10µg of Chromatin
ChIP-seq	1:20 - 1:100

### Immunogen Information

**Gene ID**  
8290/8350

**Swiss Prot**  
Q16695/P68431

#### Immunogen

A synthetic monomethylated peptide around K4 of human histone H3 (NP\_003520.1).

#### Synonyms

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

### Contact



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

### Product Information

**Source**  
Rabbit

**Isotype**  
IgG

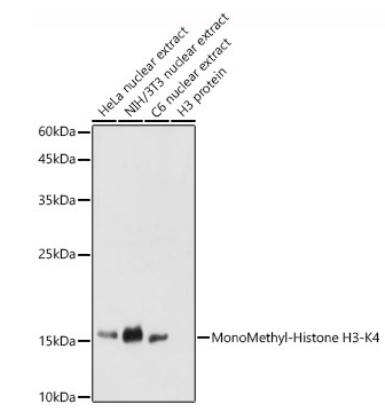
**Purification**  
Affinity purification

#### Storage

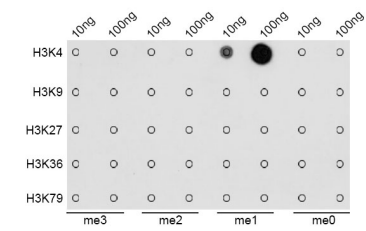
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

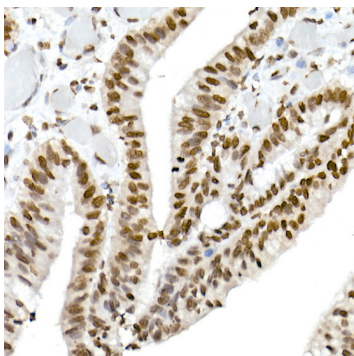
Validation Data



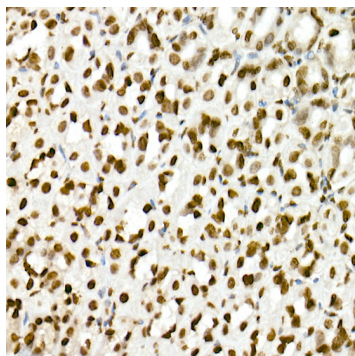
Western blot analysis of various lysates using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at 1:1000 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 5s.



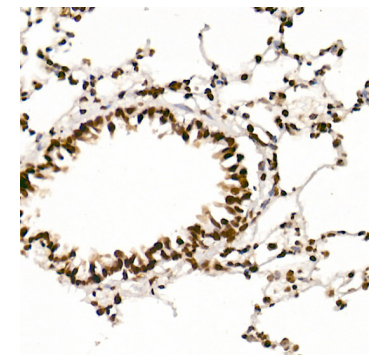
Dot-blot analysis of all sorts of methylation peptides using MonoMethyl-Histone H3-K4 antibody (A2355).



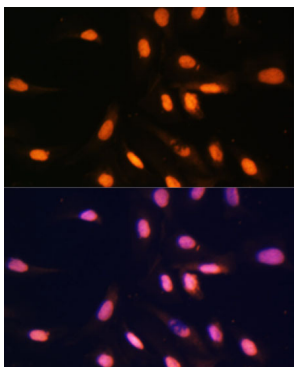
Immunohistochemistry analysis of MonoMethyl-Histone H3-K4 in paraffin-embedded human colon carcinoma using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



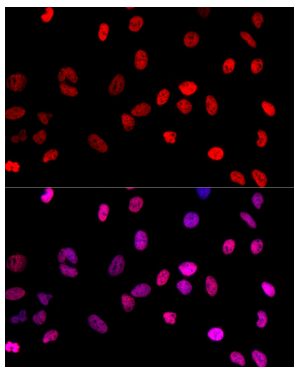
Immunohistochemistry analysis of MonoMethyl-Histone H3-K4 in paraffin-embedded mouse stomach using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of MonoMethyl-Histone H3-K4 in paraffin-embedded rat lung using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

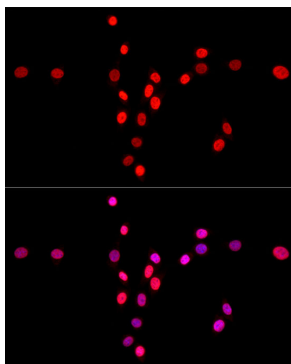


Immunofluorescence analysis of U-2 OS cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:100. Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

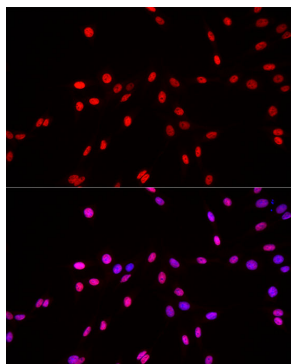


Immunofluorescence analysis of HeLa cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:20 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

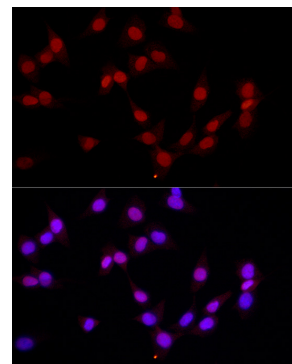
## Validation Data



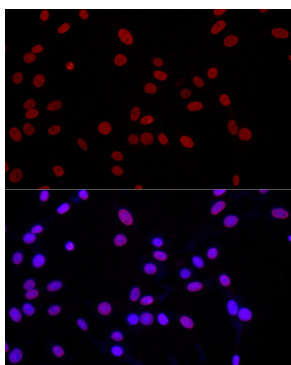
Immunofluorescence analysis of NIH/3T3 cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:20 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:20 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using MonoMethyl-Histone H3-K4 Rabbit pAb (A2355) at dilution of 1:20 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



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Chromatin immunoprecipitation analysis of extracts of HeLa cells, using MonoMethyl-Histone H3-K4 Rabbit pAb antibody (A2355) 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.

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