

# MonoMethyl-Histone H3-K18 Rabbit mAb

**Catalog No.: A20680** Recombinant

## Basic Information

**Observed MW**

17kDa

**Calculated MW**

16kDa

**Category**

Primary antibody

**Applications**
WB,DB,IHC-  
P,IF/ICC,IP,ELISA,ChIP,CUT&Tag
**Cross-Reactivity**
Human, Mouse, Rat, Other (Wide Range  
Predicted)
**CloneNo number**

ARC2621

## Recommended Dilutions

<b>WB</b>	1:500 - 1:1000
<b>DB</b>	1:500 - 1:1000
<b>IHC-P</b>	1:50 - 1:200
<b>IF/ICC</b>	1:50 - 1:200
<b>IP</b>	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
<b>ELISA</b>	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
<b>ChIP</b>	5µg antibody for 5µg-10µg of Chromatin
<b>CUT&amp;Tag</b>	10 <sup>5</sup> cells /1 µg

## 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.

## Immunogen Information

**Gene ID**

8290/8350

**Swiss Prot**

Q16695/P68431

**Immunogen**

A synthetic monomethylated peptide around K18 of human histone H3 (P68431).

**Synonyms**

H3t; H3.4; H3/g; H3FT; H3C16; HIST3H3; MonoMethyl-Histone H3-K18

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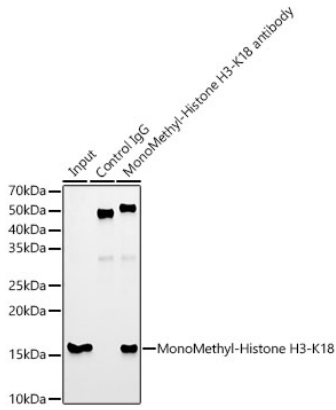
 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

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

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## Validation Data

Immunoprecipitation analysis of 600 µg extracts of 293F cells using 5 µg MonoMethyl-Histone H3-K18 antibody (A20680). Western blot was performed from the immunoprecipitate using MonoMethyl-Histone H3-K18 antibody (A20680) at a dilution of 1:1000.



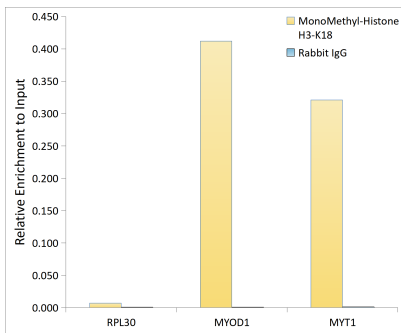
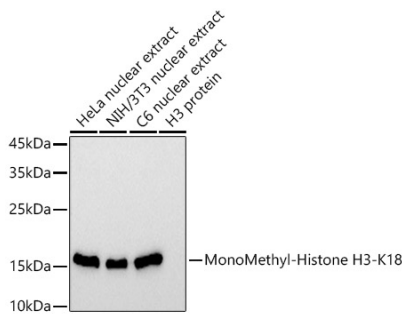
Western blot analysis of various lysates using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at 1:1000 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane.

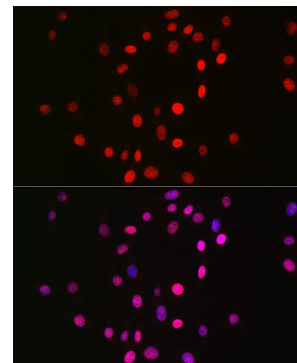
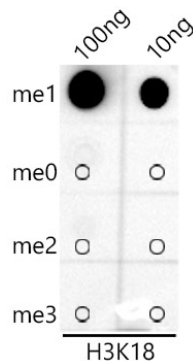
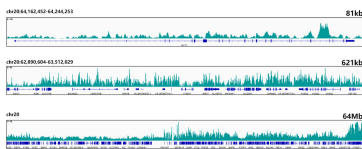
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using MonoMethyl-Histone H3-K18 antibody (A20680) 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.



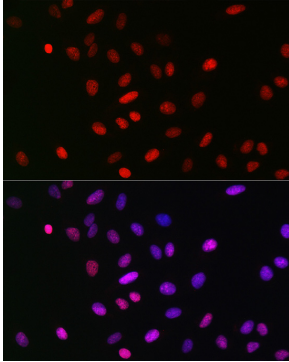
CUT&Tag was performed using the CUT&Tag

Dot-blot analysis of all sorts of peptides

Immunofluorescence analysis of NIH/3T3

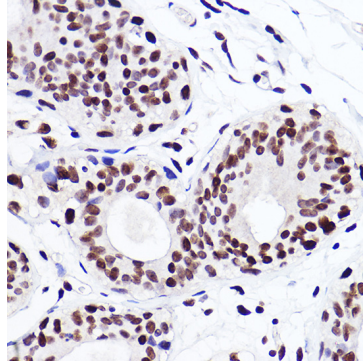
## Validation Data

Assay Kit (pAG-Tn5) for Illumina(RK20265) from  $10^5$  K562 cells with  $1\mu\text{g}$  MonoMethyl-Histone H3-K18 Rabbit mAb(A20680), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of H3K18Me1 in representative gene loci (MYT1), as shown in figure.



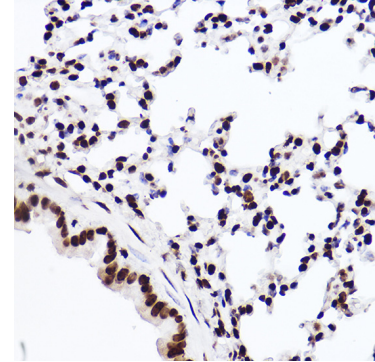
Immunofluorescence analysis of U-2 OS cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

using MonoMethyl-Histone H3-K18 antibody (A20680) at 1:1000 dilution.

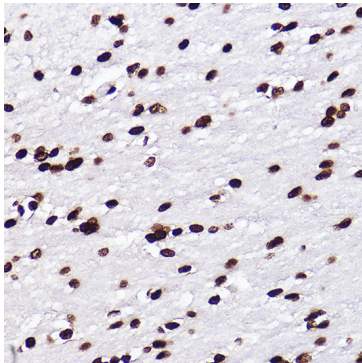


Immunohistochemistry analysis of paraffin-embedded Human breast cancer using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.

cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of paraffin-embedded Mouse lung using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.