

# MonoMethyl-Histone H3-K18 Rabbit mAb

Catalog No.: A20680 Recombinant

### **Basic Information**

#### **Observed MW**

17kDa

#### **Calculated MW**

16kDa

# Category

Primary antibody

### **Applications**

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

#### **Cross-Reactivity**

Human, Mouse, Rat, Other (Wide Range Predicted)

# CloneNo number

ARC2621

## **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

DB 1:500 - 1:1000

WB 1:500 - 1:1000

IHC-P 1:50 - 1:200

IP 0.5μg-4μg antibody for 200μg-400μg extracts of whole cells

**IF/ICC** 1:50 - 1:200

**ChIP** 5μg antibody for 5μg-10μg of Chromatin

**CUT&Tag** 10<sup>5</sup> cells /1 μg

# **Contact**

www.abclonal.com

# **Immunogen Information**

Gene ID	Swiss Prot	
8290/8350	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

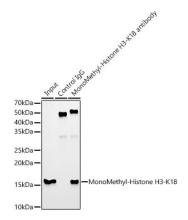
## **Product Information**

Source	Isotype	Purification
Rabbit	IgG	Affinity purification

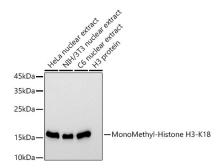
# Storage

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

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



Immunoprecipitation analysis of 600  $\mu$ g extracts of 293F cells using 5  $\mu$ g 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.

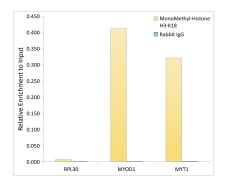
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

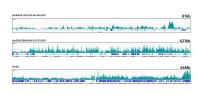
Blocking buffer: 3% nonfat dry milk in TBST.

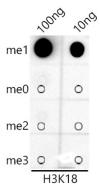
Detection: ECL Basic Kit (RM00020).

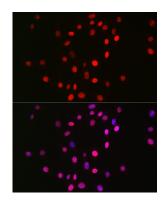
Exposure time: 30s.



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

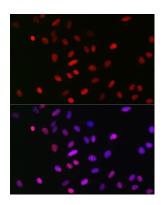
Dot-blot analysis of all sorts of peptides

Immunofluorescence analysis of NIH/3T3

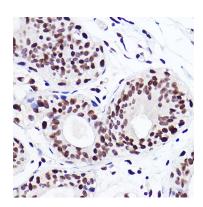
CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10<sup>5</sup> K562 cells with 1µg MonoMethyl-Histone H3-K18 Rabbit mAb(A20680), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of H3K18Me1 in representative gene loci (MYT1), as shown in figure.

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

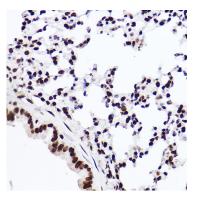
cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



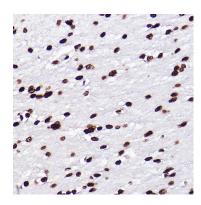
Immunofluorescence analysis of U-2 OS cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of MonoMethyl-Histone H3-K18 in paraffinembedded human breast cancer using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (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-K18 in paraffinembedded mouse lung using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (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-K18 in paraffinembedded rat brain using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.