

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

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** 10⁵ cells /1 µg

Contact

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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

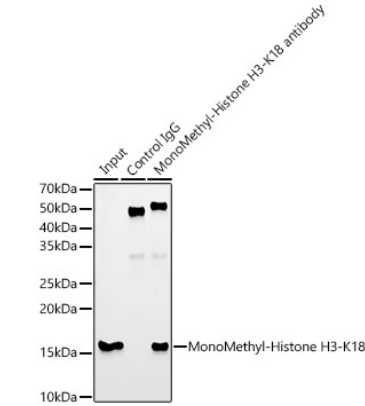
Storage

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

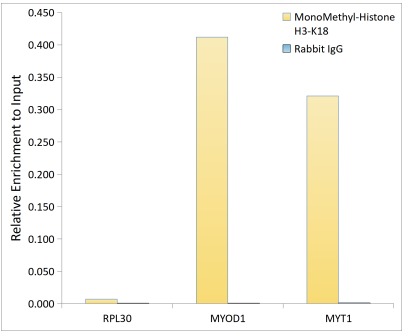
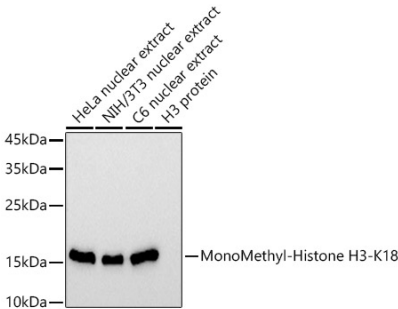
Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

Validation Data

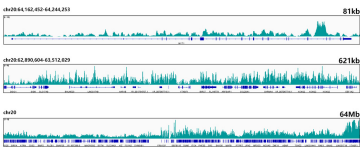
Immunoprecipitation analysis of 600 µg extracts of 293F cells using 5 µg MonoMethyl-Histone H3-K18 antibody (A20680). Western blot was performed from the immunoprecipitate using MonoMethyl-Histone H3-K18 antibody (A20680) at a dilution of 1:1000.



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



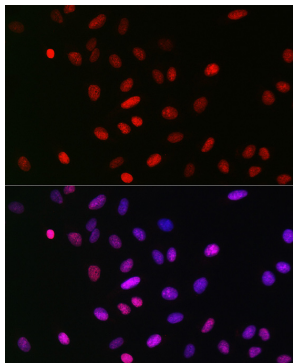
CUT&Tag was performed using the CUT&Tag

Dot-blot analysis of all sorts of peptides

Immunofluorescence analysis of NIH/3T3

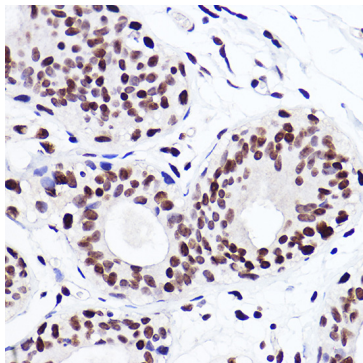
Validation Data

Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10^5 K562 cells with 1 μ 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.



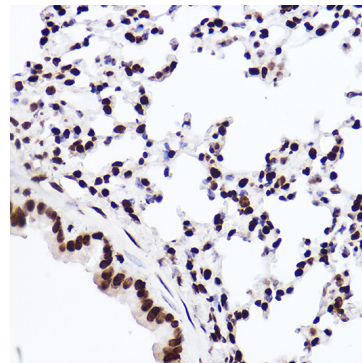
Immunofluorescence analysis of U-2 OS cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

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

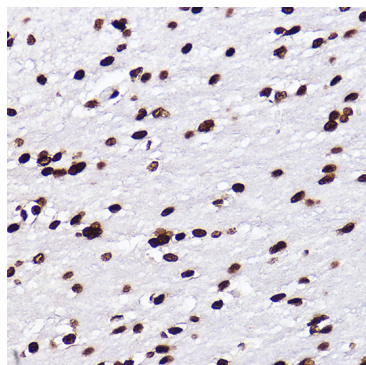


Immunohistochemistry analysis of MonoMethyl-Histone H3-K18 in paraffin-embedded human breast cancer using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

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 paraffin-embedded 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 paraffin-embedded 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.