

A20680

Leader in Biomolecular Solutions for Life Science



MonoMethyl-Histone H3-K18 Rabbit mAb

Catalog No.: A20680

Recombinant

Basic Information

Observed MW

17 kDa

Calculated MW

16 kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

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

Cross-Reactivity

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

CloneNo number

ARC2621

Recommended Dilutions

WB 1:500 - 1:1000**DB** 1:500 - 1:1000**IHC-P** 1:50 - 1:200**IF/ICC** 1:50 - 1:200**IP** 2µg-6µg antibody for
400µg-600µg extracts
of whole cells**ChIP** 5µg antibody for
5µg-10µg of Chromatin**CUT&Tag** 10⁵ cells /1 µg**ELISA** Recommended starting
concentration is 1
µg/mL. Please optimize
the concentration
based on your specific
assay requirements.

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

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

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

Product Information

Source

Rabbit

Isotype

IgG

Purification


Affinity purification

Storage

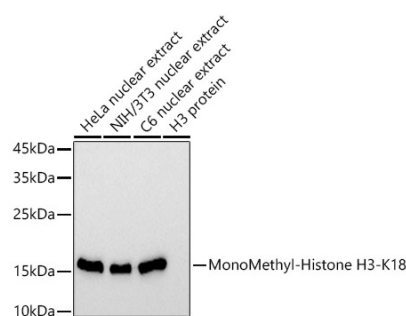
Store at -20°C. Avoid freeze / thaw cycles.

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

Contact

 www.abclonal.com

Validation Data



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

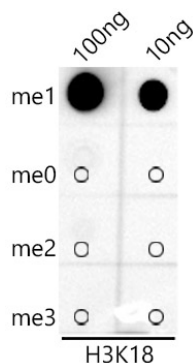
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

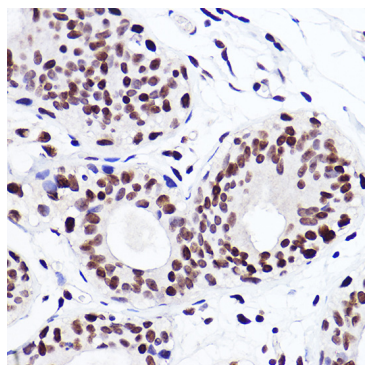
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

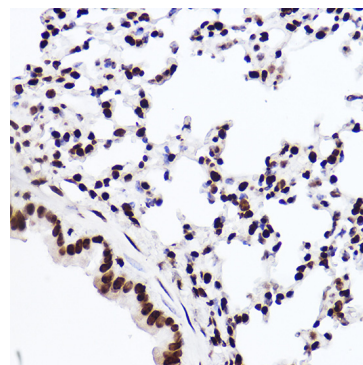
Exposure time: 30s.



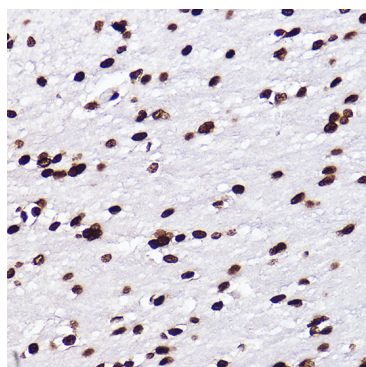
Dot-blot analysis of all sorts of peptides using MonoMethyl-Histone H3-K18 antibody (A20680) at 1:1000 dilution.



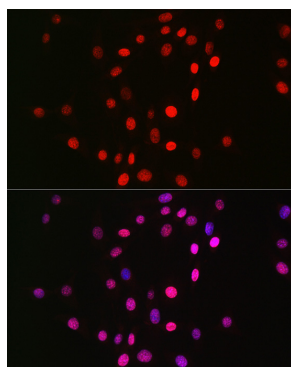
Immunohistochemistry analysis of paraffin-embedded Human breast cancer using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



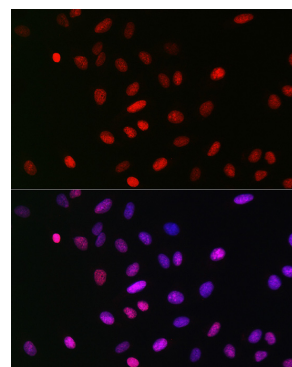
Immunohistochemistry analysis of paraffin-embedded Mouse lung using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



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 buffer (pH 6.0) prior to IHC staining.

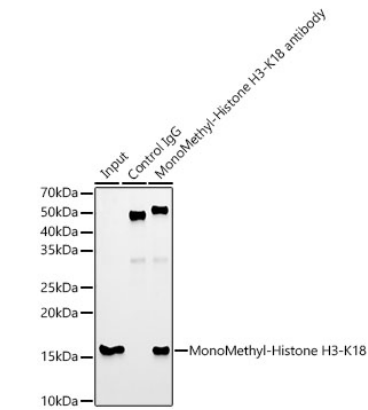


Immunofluorescence analysis of NIH/3T3 cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

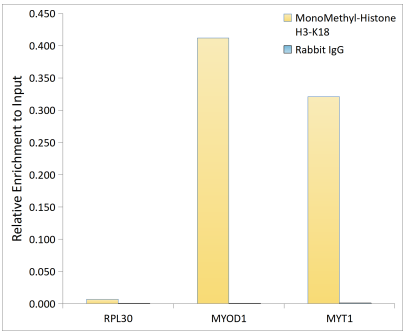


Immunofluorescence analysis of U-2 OS cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

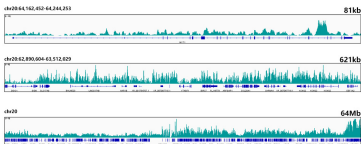
Validation Data



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.



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 Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10⁵ 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.