A20680

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MonoMethyl-Histone H3-K18 Rabbit mAb

Catalog No.: A20680 Recombinant

Basic Information

Observed MW
17kDa

Calculated MW
16kDa

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	0.5μg-4μg antibody for 200μg-400μg extracts of whole cells
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.
ChIP	5μg antibody for 5μg-10μg of Chromatin
CUT&Tag	10^5 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℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

Contact

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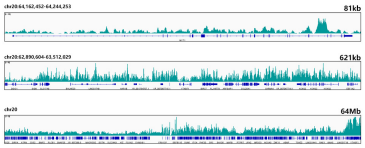
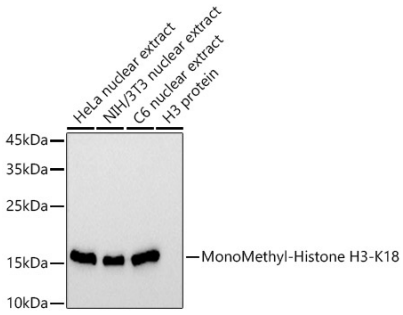
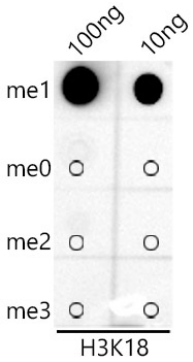
Validation Data



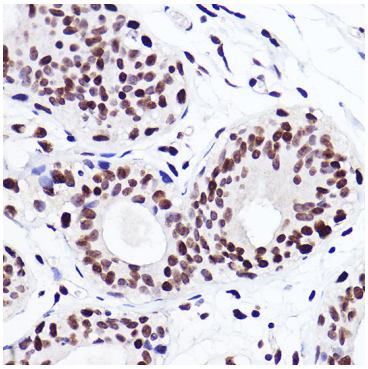
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10^5 K562 cells with 1μg MonoMethyl-Histone H3-K18 Rabbit mAb(A20680), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of H3K18Me1 in representative gene loci (MYT1), as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



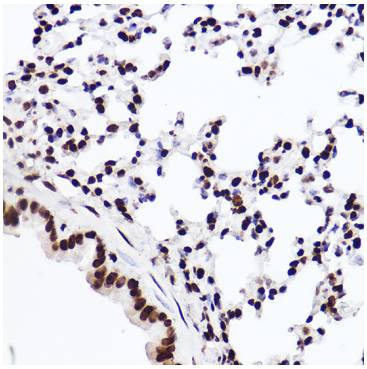
Western blot analysis of various lysates using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



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

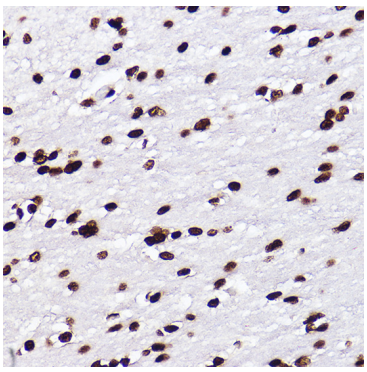


Immunohistochemistry analysis of paraffin-embedded Human breast cancer using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.

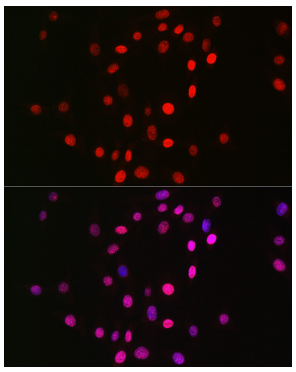


Immunohistochemistry analysis of paraffin-embedded Mouse lung using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.

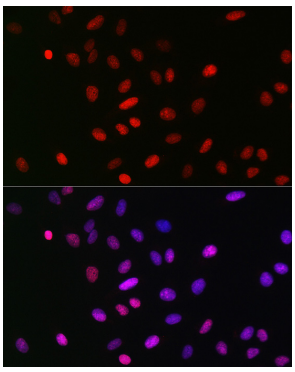
Validation Data



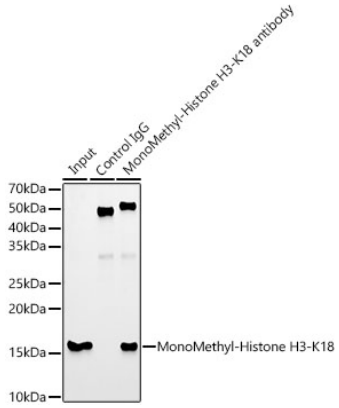
Immunohistochemistry analysis of paraffin-embedded Rat brain using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



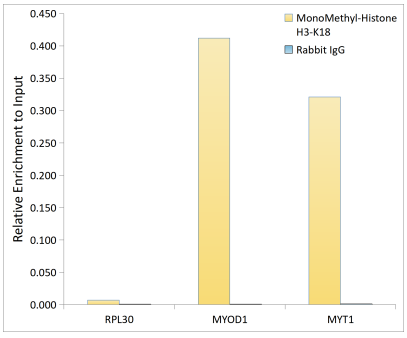
Immunofluorescence analysis of NIH/3T3 cells using MonoMethyl-Histone H3-K18 Rabbit mAb (A20680) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



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.



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.