A22295

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TriMethyl-Histone H3-K9 Rabbit mAb

Catalog No.: A22295 Recombinant 3 Publications

Basic Information

Observed MW
17kDa

Calculated MW
15kDa

Category
SMab Recombinant Monoclonal Antibody

Applications
WB,IF/ICC,ChIP,ChIP-seq,ELISA,DB,CUT&Tag

Cross-Reactivity
Human,Mouse,Rat,Other (Wide Range Predicted)

CloneNo number
ARC54898

Recommended Dilutions

WB	1:2000 - 1:20000
DB	1:2000 - 1:20000
IF/ICC	1:200 - 1:800
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
ChIP-seq	1:20 - 1:100
CUT&Tag	10^5 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
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms
H3.4; H3/g; H3FT; H3t; HIST3H3; Histone H3; HIST1H3A; TriMethyl-Histone H3-K9

Product Information

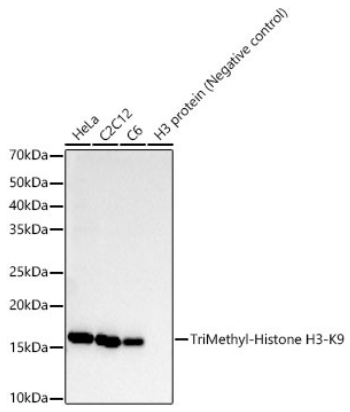
Source
Rabbit

Isotype
IgG

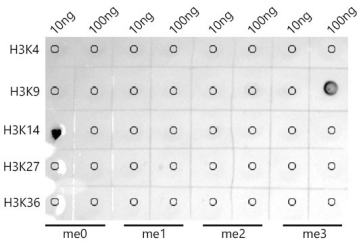
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

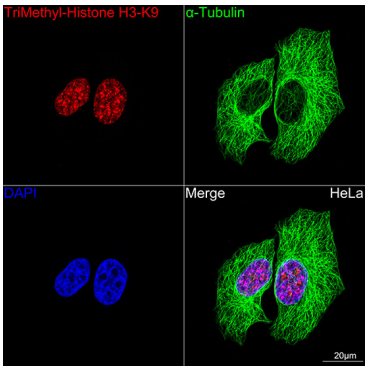
Validation Data



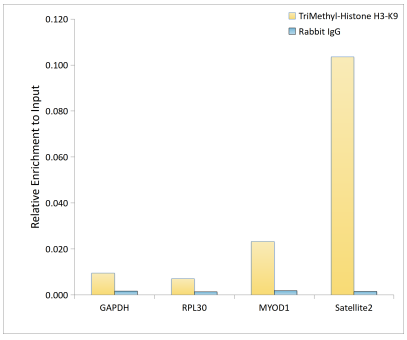
Western blot analysis of various lysates, using TriMethyl-Histone H3-K9 Rabbit mAb (A22295) at 1:20000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



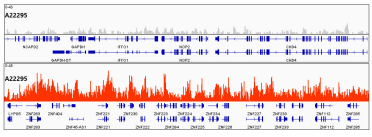
Dot-blot analysis of all sorts of peptides using TriMethyl-Histone H3-K9 antibody (A22295) at 1:20000 dilution.



Confocal imaging of HeLa cells using TriMethyl-Histone H3-K9 Rabbit mAb (A22295,dilution 1:100)(Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012,dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 100x.

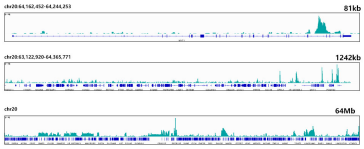


Chromatin immunoprecipitation analysis of extracts of HeLa cells, using TriMethyl-Histone H3-K9 antibody (A22295) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells and TriMethyl-Histone H3-K9 mAb (A22295). The ChIP sequencing results indicate the enrichment pattern of TriMethyl-Histone H3-K9 in selected genomic region and representative gene loci (ZNF404,GAPDH), as shown in figure.

Validation Data



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10^5 K562 cells with 1 µg TriMethyl-Histone H3-K9 Rabbit mAb (A22295), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of TriMethyl-Histone H3-K9 in representative gene loci (MYT1), as shown in figure.