

TriMethyl-Histone H3-K9 Rabbit mAb

Catalog No.: A22295 **Recombinant**

Basic Information

Observed MW

17kDa

Calculated MW

15kDa

Category

Primary antibody

Applications

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

Cross-Reactivity

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

CloneNo number

ARC54898

Recommended Dilutions

WB 1:2000 - 1:20000

IF/ICC 1:50 - 1:200

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

ChIP-seq 1:20 - 1:100

DB 1:2000 - 1:20000

CUT&Tag 10⁵ cells /1 µg

Contact

 | 400-999-6126

 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

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 trimethylated peptide around K9 of human Histone H3 (NP_003520.1).

Synonyms

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

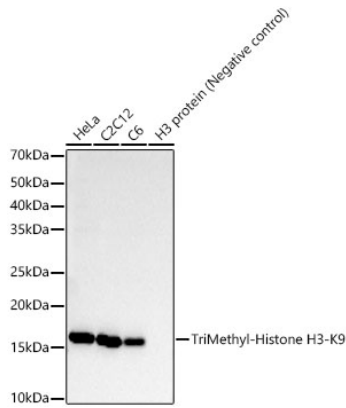
Affinity purification

Storage

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

Buffer: PBS with 0.05% proclin300, 0.05% BSA, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of various lysates, using TriMethyl-Histone H3-K9 Rabbit mAb (A22295) at 1:20000 dilution.

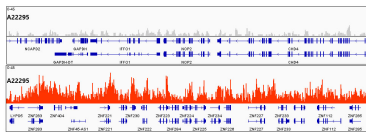
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

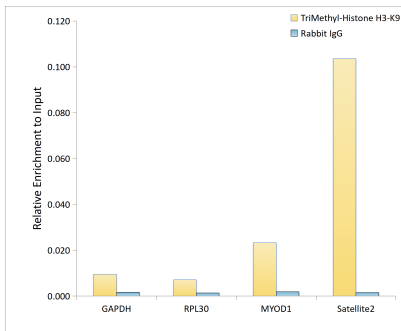
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.

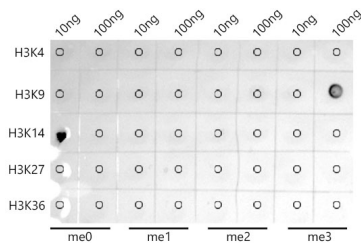


Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells and TriMethyl-Histone H3-K9 mAb (A22295). The ChIP sequencing results indicate the enrichment pattern of TriMethyl-Histone H3-K9 in selected genomic region and representative gene loci (ZNF404,GAPDH), as shown in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

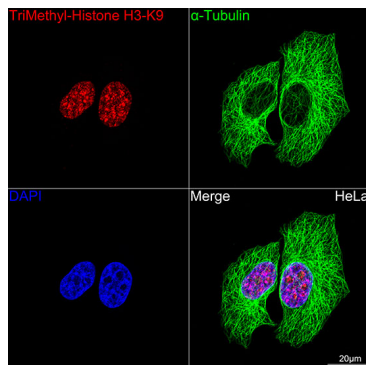


Chromatin immunoprecipitation analysis of extracts of HeLa cells, using TriMethyl-Histone H3-K9 antibody (A22295) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR.

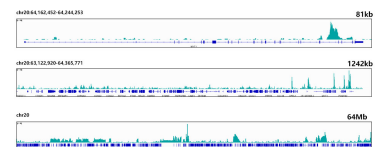
Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



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:



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

Validation Data

100x.

pattern of TriMethyl-Histone H3-K9 in representative gene loci (MYT1), as shown in figure.