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Anti-Histone H3 [Trimethyl Lys9] (RABBIT) Antibody

Histone H3 K9me3 Antibody
Catalog # ASR5631

Specification

Anti-Histone H3 [Trimethyl Lys9] (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, IHC, I, LCI**
Application Note	**Anti-Histone H3 [Trimethyl Lys9] antibody is tested by Western Blot, Chromatin Immunoprecipitation, Dot Blot, Immunocytochemistry, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15.4 kDa corresponding to Histone H3 protein by Western Blotting in HeLa histone prep lysate or the appropriate cell lysate or extract. Epi-Plus™ antibody production in collaboration with Novus Biologicals.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Histone H3 [Trimethyl Lys9] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic trimethylated peptide surrounding Lysine 9 of human Histone H3.2.**
Stabilizer	**30% Glycerol**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Histone H3 [Trimethyl Lys9] (RABBIT) Antibody - Additional Information

Gene ID 126961;333932;653604

Other Names
126961

Purity
Anti-Histone H3 [Trimethyl Lys9] was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with human Histone H3.2. A BLAST analysis was used to suggest cross-reactivity with Human, mouse, and C. elegans. Predicted to react with many species including rat, chicken, Xenopus, Drosophila, and plant based on 100% sequence homology. Cross-reactivity with Histone H3 from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Histone H3 [Trimethyl Lys9] (RABBIT) Antibody - Protein Information

Name H3C15 (HGNC:20505)

Function
Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

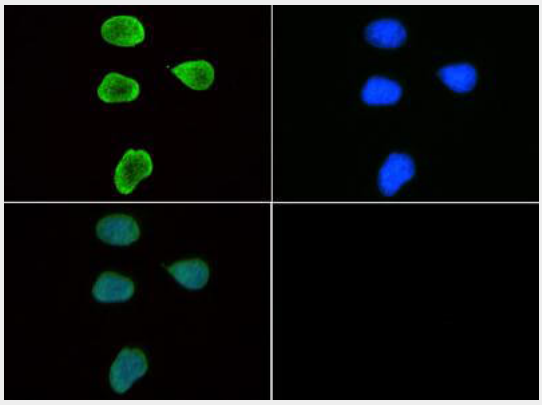
Cellular Location
Nucleus. Chromosome.

Anti-Histone H3 [Trimethyl Lys9] (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Histone H3 [Trimethyl Lys9] (RABBIT) Antibody - Images



Immunofluorescence of Rabbit Anti-Histone H3 [Trimethyl Lys9] Antibody. Tissue: HeLa cells.

Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Trimethyl Lys9] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [Trimethyl Lys9] is nuclear and chromosomal. Staining: Histone H3 [Trimethyl Lys9] is expressed in green and the nuclei are counterstained with DAPI (blue).

Anti-Histone H3 [Trimethyl Lys9] (RABBIT) Antibody - Background

Transcriptional silencing of specific genes and repetitive elements is known to be regulated partially through methylation of histone H3 at lysine 9, a hallmark of constitutive heterochromatin. In placenta, OCT2 expression and its ultimate function as a cation transporter is linked with the abundance of H3K9me3; when this methylation of histone H3 occurs in excess, mRNA for OCT2 decreases. Centromeres also are distinctly affected by the H3K9me3 modification, in that it co-localizes with several centromeric proteins, and affects the DNA methylation, particularly at the periphery of centromeric DNA. Gene expression is silenced when there is coordination between the H3K9me3 and H3K4modifications. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.