

Anti-Histone H3 [Dimethyl Lys9] (RABBIT) Antibody
Histone H3 K9me2 Antibody
Catalog # ASR5630**Specification****Anti-Histone H3 [Dimethyl 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 [Dimethyl Lys9] antibody is tested for Western Blot, Chromatin Immunoprecipitation, Dot Blot, 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 [Dimethyl Lys9] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic dimethylated peptide surrounding Lysine 9 of human Histone H3.2.
Stabilizer	30% Glycerol
Preservative	0.01% (w/v) Sodium Azide

Anti-Histone H3 [Dimethyl Lys9] (RABBIT) Antibody - Additional Information**Gene ID** 126961;333932;653604**Other Names**
126961**Purity**

Anti-Histone H3 [Dimethyl 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 [Dimethyl 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.

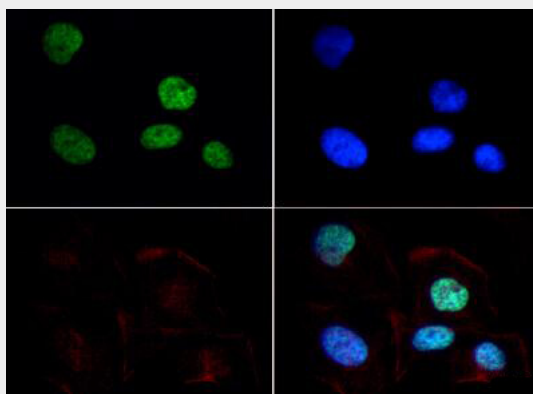
Cellular Location

Nucleus. Chromosome.

Anti-Histone H3 [Dimethyl 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 Cytometry](#)
- [Cell Culture](#)

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

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

Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Dimethyl 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 [Dimethyl Lys9] is nuclear and chromosomal. Staining: Histone H3 [Dimethyl Lys9] is expressed in green and the nuclei are counterstained with DAPI (blue).

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

Dimethylated histone H3 at lysine 9 is associated with several inflammatory diseases. Usually, the histone modification is implicated through a one-off association with critical disease related genes. For example, in Alzheimer's disease, amyloid beta-peptide accumulation is caused by insufficient neprilysin, which is in turn caused by increased concentrations of H3K9me2 in the neprilysin promoter following exposure to hypoxia. In osteoarthritis, increased H3K9me2 at the NFAT1 promoter represses the expression of NFAT, resulting in overexpression of proinflammatory cytokines. PHF2 and ARID5B are important in regulating the methylation of H3 at K9, and thus chromatin reorganization and gene transcription. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.