

Anti-Histone H3 [Monomethyl Lys9] (RABBIT) Antibody
Histone H3 K9me1 Antibody
Catalog # ASR5629**Specification**

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

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, IHC, I, LCI
Application Note	Anti-Histone H3 [Monomethyl Lys9] antibody is tested for Western Blot, Chromatin Immunoprecipitation, Dot Blot, and Immunocytochemistry/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 [Monomethyl Lys9] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic monomethylated peptide surrounding Lysine 9 of human Histone H3.2.
Preservative	0.01% (w/v) Sodium Azide

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

Anti-Histone H3 [Monomethyl 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 [Monomethyl 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

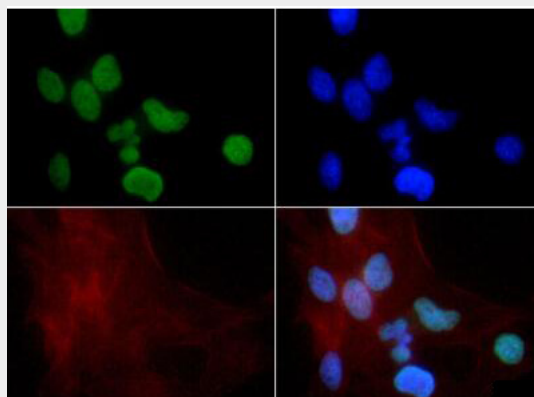
Nucleus. Chromosome.

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



Immunofluorescence of Rabbit Anti-Histone H3 [Monomethyl Lys9] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Monomethyl

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 [Monomethyl Lys9] is nuclear and chromosomal. Staining: Histone H3 [Monomethyl Lys9] is expressed in green and the nuclei and actin are counterstained with DAPI (blue) and Phalloidin (red).

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

Histone H3 K9 methylation is a conserved epigenetic silencer of transcription. However, for this modification to make its effect, the G9a/GLP heteromeric complex is required to methylate histone H3. Throughout development of normal tissues, DNA methylation and stable gene silencing is required to optimize cellular development. Likewise, in cancer, dysfunctions in these normal functions are required to enhance cellular proliferation. When K3K9 me1 silences the expression of RIZ1, normal apoptosis of pre-cancerous cells does not occur, and proliferation goes ahead unabated. From H3K9me1, conversion to H3K9me3 is mediated by SUV4, at transposons and pseudogenes. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.