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Anti-Histone H4 [Monomethyl Arg3] (RABBIT) Antibody

Histone H4 R3me1 Antibody
Catalog # ASR5656

Specification

Anti-Histone H4 [Monomethyl Arg3] (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 H4 [Monomethyl Arg3] antibody is tested for Western Blot and Immunofluorescence. This antibody is useful in Dot Blot, Chromatin Immunoprecipitation, and Immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~13 kDa corresponding to Histone H4 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 H4 [Monomethyl Arg3] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic monomethylated peptide surrounding Arginine 3 of human Histone H4.**
Stabilizer	**30% Glycerol**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Histone H4 [Monomethyl Arg3] (RABBIT) Antibody - Additional Information

Gene ID 121504;554313;8294;8359;8360;8361;8362;8363;8364;8365;8366;8367;8368;8370

Other Names
121504

Purity
Anti-Histone H4 [Monomethyl Arg3] was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with human Histone H4. A BLAST analysis was used to suggest cross-reactivity with Human, mouse, and rat. Predicted to react with most mammal species. Cross-reactivity with Histone H4 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 H4 [Monomethyl Arg3] (RABBIT) Antibody - Protein Information

Name H4C1

Synonyms H4/A, H4FA, HIST1H4A

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 {ECO:0000250|UniProtKB:P62806}. Chromosome. Note=Localized to the nucleus when acetylated in step 11 spermatids. {ECO:0000250|UniProtKB:P62806}

Anti-Histone H4 [Monomethyl Arg3] (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 H4 [Monomethyl Arg3] (RABBIT) Antibody - Images

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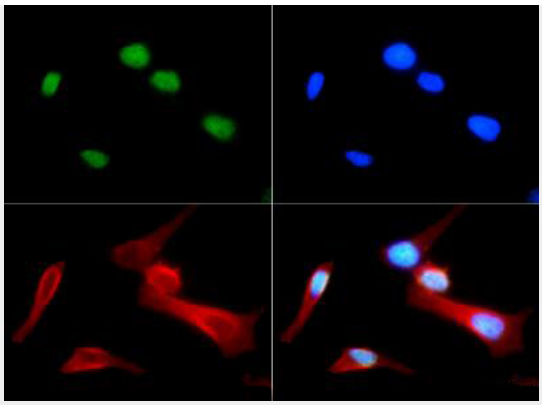

Immunofluorescence of Rabbit Anti-Histone H4 [Monomethyl Arg3] Antibody. Tissue: Nonmitotic, prophase, and telophase HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H4 [Monomethyl Arg3] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H4 [Monomethyl Arg3] is nuclear and chromosomal. Staining: Histone H4 [Monomethyl Arg3] is expressed in green, nuclei are counterstained with DAPI (blue).

Anti-Histone H4 [Monomethyl Arg3] (RABBIT) Antibody - Background

Histone H4 is an 11.4 kD nuclear protein that is a component of an octamer containing pairs of each of four core histones (H2A, H2B, H3, H4). The core histones create nucleosome structure of chromosomal fiber in eukaryotes and are dynamic in gene regulation. Histone H4 shows transcriptional regulation that is both cell cycle-dependent and -independent. Histone H4 is modified by phosphorylation, acetylation, ribosylation, and methylation. Histone H4 has been shown to interact with other histone acetytransferases, histone deacetylases, and PARP. Anti-Histone H4 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.