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Anti-Histone H3 [Trimethyl Lys36] (RABBIT) Antibody

Histone H3 K36me3 Antibody
Catalog # ASR5647

Specification

Anti-Histone H3 [Trimethyl Lys36] (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 [Trimethyl Lys36] antibody is tested for Western Blot, Dot Blot, and Immunofluorescence. This antibody is useful in Chromatin Immunoprecipitation. 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 Lys36] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic trimethylated peptide surrounding Lysine 36 of human Histone H3.2.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Histone H3 [Trimethyl Lys36] (RABBIT) Antibody - Additional Information

Gene ID 126961;333932;653604

Other Names
126961

Purity
Anti-Histone H3 [Trimethyl Lys36] 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 Lys36] (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.

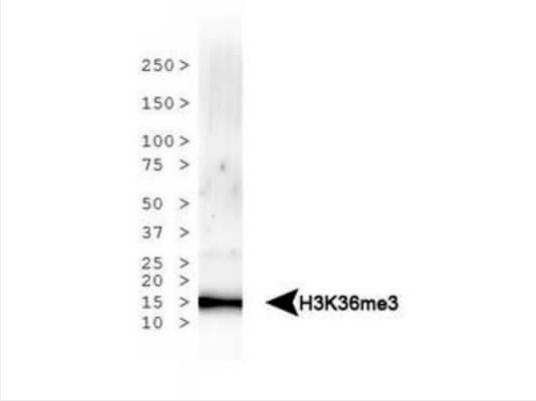
Cellular Location
Nucleus. Chromosome.

Anti-Histone H3 [Trimethyl Lys36] (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 Lys36] (RABBIT) Antibody - Images



Western Blot of Rabbit Anti-Histone H3 [Trimethyl Lys36] Antibody. Lane 1: NIH-3T3 histone preps. Load: 30 µg per lane. Primary antibody: Histone H3 [Trimethyl Lys36] at 1:500 for

overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~15 kDa. Other band(s): None.

Anti-Histone H3 [Trimethyl Lys36] (RABBIT) Antibody - Background

The histone modification H3K36me3 is important in the differentiation and maintenance of specialized cells derived from stem cell progenitors. The presence and abundance of H3K36me3 is correlated to the downstream transcription of those pathway components important for cellular functions that differentiate cells from each other. The polycomb repressive complex 2 (PRC2) represses transcription by methylation of H3 lysine 27, but this methylation is inhibited by the presence of the H3K36me3 mark. SETD2 is the main methyltransferase responsible for methylating the H3K36me3. Once methylated, H3K36me3 is highly associated with active transcription factors, and the generation of integral downstream pathways, which move stem cells towards differentiation. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.