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Anti-Histone H3 [ac Lys36] (RABBIT) Antibody
Histone H3 K36ac Antibody
Catalog # ASR5648

Specification

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

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

Gene ID 126961;333932;653604

Other Names
126961

Purity
Anti-Histone H3 [ac 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 [ac 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.

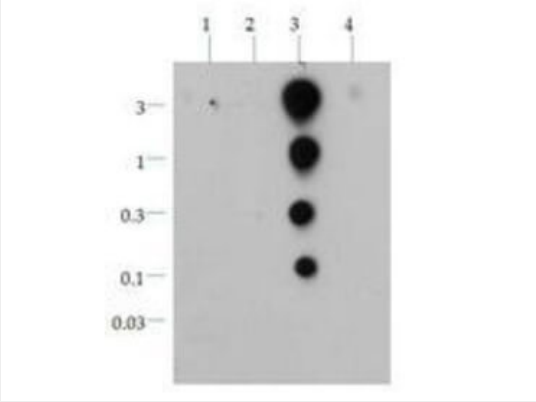
Cellular Location
Nucleus. Chromosome.

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



Dot Blot of Rabbit Anti-Histone H3 [Lys36 ac] Antibody. Lane 1: K36. Lane 2: K36-KMe2. Lane 3: K36-KAc. Lane 4: K36-KMe1. Load: 0.03, 0.1, 0.3, 1.0, 3.0 µg of peptide. Primary antibody: Histone H3 [Lys36 ac] for overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody at

1:10,000 for 45 min at RT. Block: 5% BLOTTO A overnight at 4°C.

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

Histone H3 acetylation at lysine 36 results from the activity of GCN5, which regulates transcription. H3K36ac is usually found in the promoters of RNA polymerase II-transcribed genes. When acetylation of this lysine is replaced by methylation, the activation of transcription is eliminated. This switch-like activity seems to determine the chromatin function found in transcription units. Set2 associates with RNA polymerase II and histone H3 at lysine 36, and seems to be responsible for proper acetylation of coding regions. The co-activity of Set2 and Rpd3S is important for ensuring that transcription of intragenic sequences does not occur, and is related to the acetylation and methylation of histone H3 at lysine 36. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.