

Anti-Histone H3 [Monomethyl Lys37] (RABBIT) Antibody

Histone H3 K37me1 Antibody Catalog # ASR5649

Specification

Anti-Histone H3 [Monomethyl Lys37] (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated

Target Species Human

Reactivity
Clonality
Application

Human, Mouse
Polyclonal
WB, IHC, I, LCI

Application Note Anti-Histone H3 [Monomethyl Lys37]

antibody is tested for Bot Blot, Western 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.

Anti-Histone H3 is also useful for Dot Blot.

Epi-Plus™ antibody production in collaboration with Novus Biologicals.

Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen Histone H3 [Monomethyl Lys37] affinity

purified antibody was prepared from whole

rabbit serum produced by repeated

immunizations with a synthetic methylated peptide surrounding Lysine 37 of human

Histone H3.

Stabilizer 30% Glycerol

Preservative 0.01% (w/v) Sodium Azide

Anti-Histone H3 [Monomethyl Lys37] (RABBIT) Antibody - Additional Information

Gene ID 126961;333932;653604

Other Names 126961

Physical State

Purity

Anti-Histone H3 [Monomethyl Lys37] was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with human Histone H3. 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 Lys37] (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

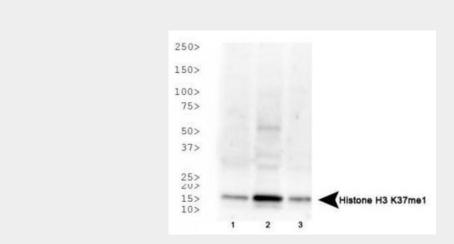
Nucleus. Chromosome.

Anti-Histone H3 [Monomethyl Lys37] (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 [Monomethyl Lys37] (RABBIT) Antibody - Images



Western Blot of Rabbit Anti-Histone H3 [Monomethyl Lys37] Antibody. Lane 1: HeLa histone prep.







Lane 2: NIH-3T3 histone prep. Lane 3: C. elegans embryo lysate. Load: 30 µg per lane. Primary antibody: Histone H3 [Methyl Lys37] at 1 µg/ml 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 [Monomethyl Lys37] (RABBIT) Antibody - Background

Chromatin is the arrangement of DNA and proteins in which chromosomes are formed. Correspondingly, chromatin is formed from nucleosomes, which are comprised of a set of four histone proteins (H2A, H2B, H3, H4) wrapped with DNA. Chromatin is a very dynamic structure in which numerous post-translational modifications work together to activate or repress the availability of DNA to be copied, transcribed, or repaired. These marks decide which DNA will be open and commonly active (euchromatin) or tightly wound to prevent access and activation (heterochromatin). Common histone modifications include methylation of lysine and arginine, acetylation of lysine, phosphorylation of threonine and serine, and sumoylation, biotinylation, and ubiquitylation of lysine. Anti-Histone H3 are ideal for researchers interested in Chromatin Research, Epigenetics, Chromatin Modifiers, Histones and Modified Histones research.