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Anti-Histone H3 [p Thr3, Sym-dimethyl Arg2] (RABBIT) Antibody
Histone H3 pT3/R2-Me2s Antibody
Catalog # ASR5770

Specification

Anti-Histone H3 [p Thr3, Sym-dimethyl Arg2] (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human, Mouse, Monkey**
Clonality	**Polyclonal**
Application	**WB, I, LCI**
Application Note	**Anti-Histone H3 pT3/R2Me2s antibody is tested in Western Blot, Immunocytochemistry, and Dot Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15kDa corresponding to 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 pT3/R2Me2s affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide surrounding the pT3 and R2Me2s site of human Histone H3.**
Stabilizer	**30% Glycerol**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Histone H3 [p Thr3, Sym-dimethyl Arg2] (RABBIT) Antibody - Additional Information

Gene ID 126961;333932;653604

Other Names
126961

Purity
Anti-Histone H3 pT3/R2Me2s 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 [p Thr3, Sym-dimethyl Arg2] (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.

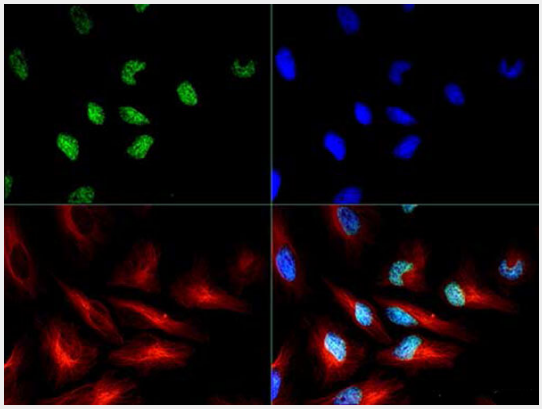
Cellular Location
Nucleus. Chromosome.

Anti-Histone H3 [p Thr3, Sym-dimethyl Arg2] (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 [p Thr3, Sym-dimethyl Arg2] (RABBIT) Antibody - Images



Immunofluorescence of Rabbit Histone H3 pT3/R2Me2s. Histone H3 pT3/R2Me2s antibody was tested at 1:50 in HeLa cells with FITC (green). Nuclei were counterstained with DAPI (blue).

Anti-Histone H3 [p Thr3, Sym-dimethyl Arg2] (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. In particular phosphorylation of threonine 3 (H3 pT3) is a known mark of mitosis. Recent findings also demonstrate that pT3 can promote binding of survivin in the nucleosome. Arg2 may have opposing effects to pT3. Anti-Histone H3 pT3/R2Me2s is ideal for researchers Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.