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Anti-Histone H3 [p Thr11] (RABBIT) Antibody

Histone H3 phospho T11 Antibody
Catalog # ASR5636

Specification

Anti-Histone H3 [p Thr11] (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 [p Thr11] antibody is tested for Western Blot, Dot Blot, and Immunofluorescence. This antibody is useful for Chromatin Immunoprecipitation and Immunocytochemistry. 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 [p Thr11] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phosphorylated peptide surrounding Threonine 11 of human Histone H3.2.**
Stabilizer	**30% Glycerol**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Histone H3 [p Thr11] (RABBIT) Antibody - Additional Information

Gene ID 126961;333932;653604

Other Names
126961

Purity
Anti-Histone H3 [p Thr11] 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 [p Thr11] (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.

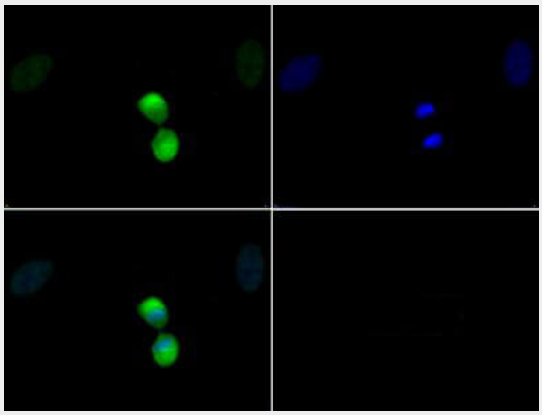
Cellular Location
Nucleus. Chromosome.

Anti-Histone H3 [p Thr11] (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 Thr11] (RABBIT) Antibody - Images



Immunofluorescence of Rabbit Anti-Histone H3 [p Thr11] Antibody. Tissue: HeLa cells. Fixation:

0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [p Thr11] 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 H3 [p Thr11] is nuclear and chromosomal. Staining: Histone H3 [p Thr11] is expressed in green, nuclei are counterstained with Dapi (blue).

Anti-Histone H3 [p Thr11] (RABBIT) Antibody - Background

Phosphorylation of H3 T11 is most abundant in the centromere, and initiates centromere assembly in mammalian cells. Dlk/ZIP kinase phosphorylates H3 T11, but may be affected by epigenetic modification itself during cellular interphase, which changes the rate of phosphorylation and de-phosphorylation of H3 T11. Other epigenetic modifiers also interact with H3 T11, including the histone acetyltransferase GCN5, which binds more readily to pT11 than unphosphorylated peptide. This binding affects downstream regulation of GCN5 genes and can contribute to transcriptional regulation. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.