

Phospho-HIST1H3B3(S10) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3115A

Specification

Phospho-HIST1H3B3(S10) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype IHC-P-Leica, IF, WB, DB,E <u>P68431</u> Human Rabbit Polyclonal Rabbit IgG

Phospho-HIST1H3B3(S10) Antibody - Additional Information

Gene ID 8350;8351;8352;8353;8354;8355;8356;8357;8358;8968

Other Names

Histone H31, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h, Histone H3/j, Histone H3/k, Histone H3/l, HIST1H3A, H3FA

Target/Specificity

This HIST1H3B3 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S10 of human HIST1H3B3.

Dilution IHC-P-Leica~~1:100 IF~~1:25 WB~~1:500 DB~~1:500 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-HIST1H3B3(S10) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-HIST1H3B3(S10) Antibody - Protein Information

Name H3C1 (<u>HGNC:4766</u>)



Synonyms H3FA, HIST1H3A

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.

Phospho-HIST1H3B3(S10) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Phospho-HIST1H3B3(S10) Antibody - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized Hela cells labeling HIST1H3A with AP3115A at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing Nucleus staining on Hela cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin(red). The nuclear counter stain is DAPI (blue).





Western blot analysis of lysates from Hela cell line, untreated or treated with nocodazole(1ug/ml, 18h), using Phospho-HIST1H3B3(S10) Antibody(upper) or Beta-actin (lower).



Western blot analysis of lysates from Hela cell line, untreated or treated with 20%FBS + 100nM Calyculin A, using Phospho-HIST1H3B3(S10) Antibody(upper) or Beta-actin (lower).



Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue using AP3115A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using AP3115A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Dot blot analysis of anti-Phospho-HIST1H3B3-S10 Phospho-specific Pab (Cat. #AP3115a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-HIST1H3B3(S10) Antibody - Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA



tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3.

Phospho-HIST1H3B3(S10) Antibody - References

Lusic, M., et al., EMBO J. 22(24):6550-6561 (2003). Deng, L., et al., Virology 289(2):312-326 (2001). Deng, L., et al., Virology 277(2):278-295 (2000). El Kharroubi, A., et al., Mol. Cell. Biol. 18(5):2535-2544 (1998). Albig, W., et al., Hum. Genet. 101(3):284-294 (1997).