

**Phospho-HIST1H3B3(S10) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3115A**

### Specification

#### Phospho-HIST1H3B3(S10) Antibody - Product Information

|                   |                           |
|-------------------|---------------------------|
| Application       | IHC-P-Leica, IF, WB, DB,E |
| Primary Accession | <a href="#">P68431</a>    |
| Reactivity        | Human                     |
| Host              | Rabbit                    |
| Clonality         | Polyclonal                |
| Isotype           | 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/i, 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 ([HGNC:4766](#))

**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.

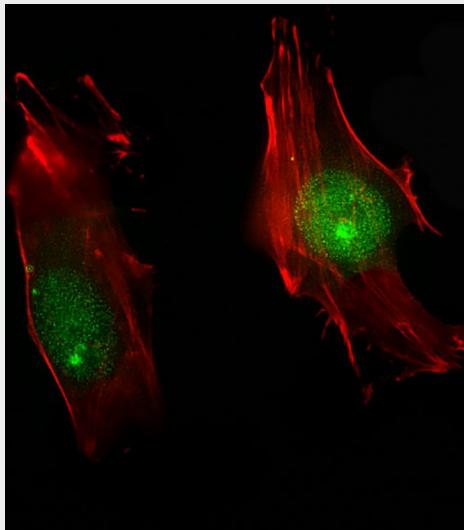
**Cellular Location**

Nucleus. Chromosome.

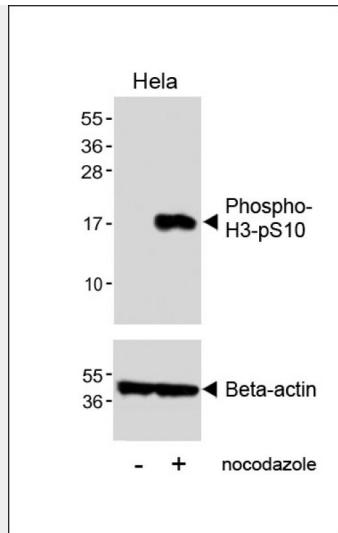
**Phospho-HIST1H3B3(S10) Antibody - Protocols**

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

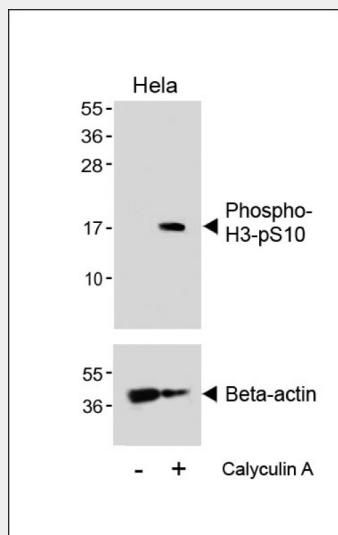
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Phospho-HIST1H3B3(S10) Antibody - Images**

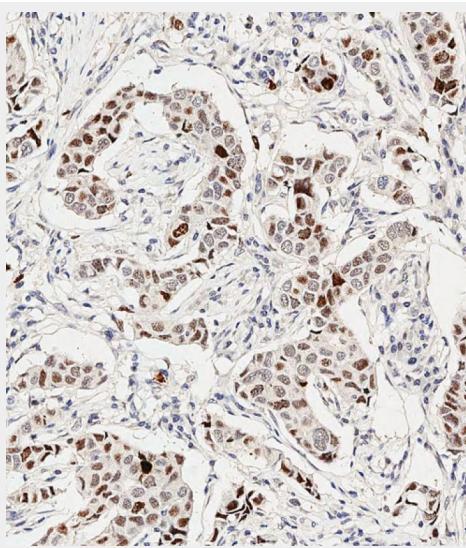
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa cells labeling HIST1H3A with AP3115A at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing Nucleus staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin(red). The nuclear counter stain is DAPI (blue).



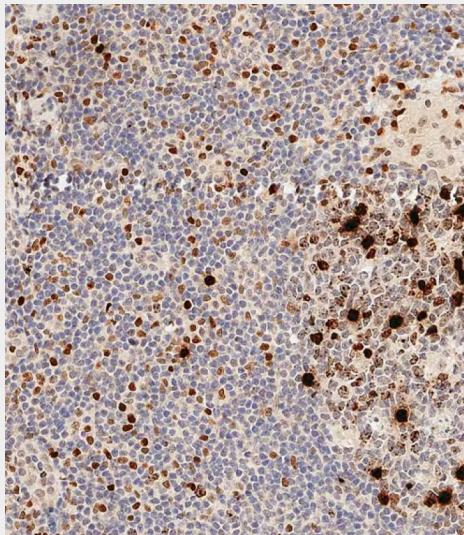
Western blot analysis of lysates from Hela cell line, untreated or treated with nocodazole(1ug/ml, 18h), using Phospho-HIST1H3B3(S10) Antibody(upper) or Beta-actin (lower).



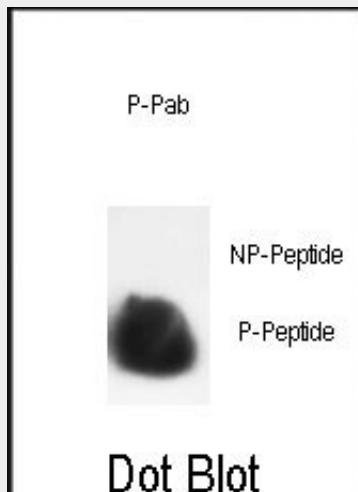
Western blot analysis of lysates from Hela cell line, untreated or treated with 20%FBS + 100nM Calyculin A, using Phospho-HIST1H3B3(S10) Antibody(upper) or Beta-actin (lower).



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).