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Phospho-HIST1H3B3(S10) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3115A

Product Information

Application	WB, IF, DB, IHC-P-Leica, E
Primary Accession	P68431
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	15404

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	WB~~1:2000 IF~~1:25 DB~~1:500 IHC-P-Leica~~1:100 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.

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.

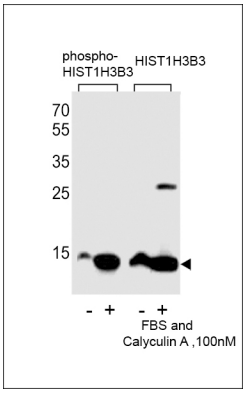
Background

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.

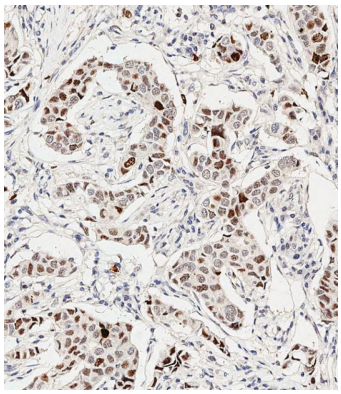
References

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Deng, L., et al., Virology 289(2):312-326 (2001).
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El Kharroubi, A., et al., Mol. Cell. Biol. 18(5):2535-2544 (1998).
Albig, W., et al., Hum. Genet. 101(3):284-294 (1997).

Images

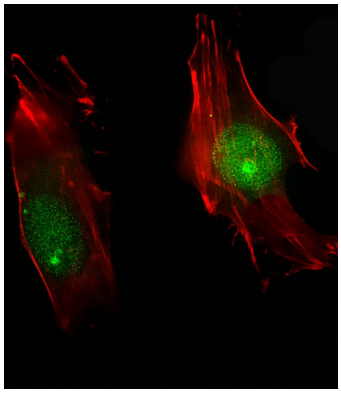


Western blot analysis of extracts from Hela cells,untreated or treated with FBS and Calyculin A ,100nM, using phospho-HIST1H3B3-S10(left) or HIST1H3B3 antibody(right)

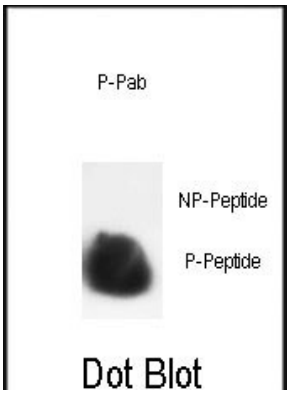


Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue using AP3115A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100)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

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).



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.