

HIST1H2BA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18457a

Product Information

Application WB, E **Primary Accession Q96A08 Other Accession** NP 733759.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB38815 **Calculated MW** 14167 1-30 **Antigen Region**

Additional Information

Gene ID 255626

Other Names Histone H2B type 1-A, Histone H2B, testis, TSH2B1, Testis-specific histone

H2B, HIST1H2BA, TSH2B

Target/SpecificityThis HIST1H2BA antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 1-30 amino acids from the N-terminal

region of human HIST1H2BA.

Dilution WB~~1:1000 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 HIST1H2BA Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name H2BC1 (<u>HGNC:18730</u>)

Function Variant histone specifically required to direct the transformation of

dissociating nucleosomes to protamine in male germ cells (By similarity). Entirely replaces classical histone H2B prior nucleosome to protamine

transition and probably acts as a nucleosome dissociating factor that creates a more dynamic chromatin, facilitating the large-scale exchange of histones (By similarity). Core component of nucleosome (By similarity). Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template (By similarity). Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability (By similarity). DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling (By similarity). Also found in fat cells, its function and the presence of post-translational modifications specific to such cells are still unclear (PubMed:21249133).

Cellular Location Nucleus {ECO:0000250 | UniProtKB:P70696}. Chromosome

{ECO:0000250 | UniProtKB:P70696}

Tissue Location Mainly expressed in testis, and the corresponding protein is also present in

mature sperm (at protein level). Also found in some fat cells.

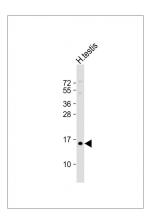
Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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 testis/sperm-specific member of the histone H2B family. Transcripts from this gene contain a palindromic termination element. [provided by RefSeq].

References

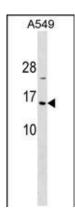
Kim, S.C., et al. Mol. Cell 23(4):607-618(2006) Pavri, R., et al. Cell 125(4):703-717(2006) Zhu, B., et al. Mol. Cell 20(4):601-611(2005) Golebiowski, F., et al. Mol. Cell. Biochem. 279 (1-2), 133-139 (2005) : Li, A., et al. Biochemistry 44(7):2529-2535(2005)

Images



Anti-HIST1H2BA Antibody (N-term) at 1:1000 dilution + human testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 14 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

HIST1H2BA Antibody (N-term) (Cat. #AP18457a) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the HIST1H2BA Antibody detected the HIST1H2BA protein (arrow).



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