

HIST1H2BA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18457a

Specification

HIST1H2BA Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	<u>Q96A08</u>
Other Accession	<u>NP_733759.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	14167
Antigen Region	1-30

HIST1H2BA Antibody (N-term) - Additional Information

Gene ID 255626

Other Names

Histone H2B type 1-A, Histone H2B, testis, TSH2B1, Testis-specific histone H2B, HIST1H2BA, TSH2B

Target/Specificity

This 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.

HIST1H2BA Antibody (N-term) - 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.

HIST1H2BA Antibody (N-term) - Protocols

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

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

HIST1H2BA Antibody (N-term) - Images



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).





Anti-HIST1H2BA Antibody (N-term) at 1:1000 dilution + human testis lysate Lysates/proteins at 20 μ g 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) - 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].

HIST1H2BA Antibody (N-term) - 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)