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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
Antigen Region	1-30

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.

Protein Information

Name	H2BC1 (HGNC:18730)
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.

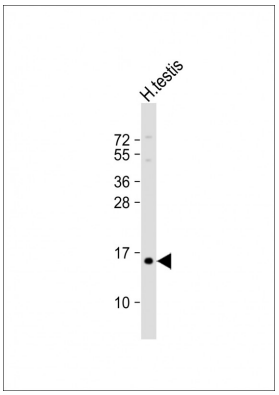
Background

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

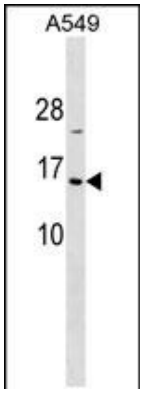
Kim, S.C., et al. Mol. Cell 23(4):607-618(2006)
Pavri, R., et al. Cell 125(4):703-717(2006)
Zhu, B., et al. Mol. Cell 20(4):601-611(2005)
Golebiowski, F., et al. Mol. Cell. Biochem. 279 (1-2), 133-139 (2005) :
Li, A., et al. Biochemistry 44(7):2529-2535(2005)

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).



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