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H2BFWT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16663c

Product Information

Application	WB, E
Primary Accession	Q7Z2G1
Other Accession	NP_001002916.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36432
Calculated MW	17050
Antigen Region	62-88

Additional Information

Gene ID	158983
Other Names	Histone H2B type W-T, H2B histone family member W testis-specific, H2BFWT
Target/Specificity	This H2BFWT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 62-88 amino acids from the Central region of human H2BFWT.
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	H2BFWT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	H2BW1 (HGNC:27252)
Function	Atypical histone H2B that can form nucleosomes structurally and dynamically indistinguishable from those containing conventional H2B. 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 (PubMed:15475252, PubMed:16449661). However, unlike conventional H2B, does not recruit chromosome condensation factors and does not participate in the assembly of mitotic chromosomes (PubMed:16449661). May be important for telomere function and play a role in spermatogenesis (PubMed:16449661, PubMed:19583817).
Cellular Location	Nucleus membrane. Chromosome. Chromosome, telomere
Tissue Location	Testis-specific (at protein level).

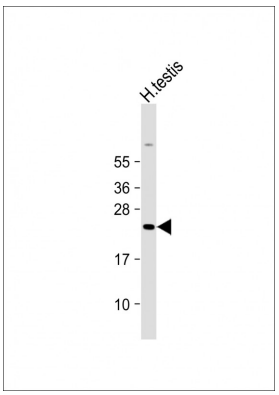
Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene encodes a member of the H2B histone family that is specifically expressed in sperm nuclei. A polymorphism in the 5' UTR of this gene is associated with male infertility.

References

Lee, J., et al. J. Cell. Mol. Med. 13 (8B), 1942-1951 (2009) :
Boulard, M., et al. Mol. Cell. Biol. 26(4):1518-1526(2006)
Churikov, D., et al. Genomics 84(4):745-756(2004)
Churikov, D., et al. Cytogenet. Genome Res. 105 (2-4), 203-214 (2004) :

Images



Anti-H2BFWT Antibody (Center) 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 : 20 kDa Blocking/Dilution buffer: 5% NFDM/TBST.