10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

H2AFZ Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11237b

Product Information

Application	WB, IHC-P, E
Primary Accession	P0C0S5
Other Accession	P0C0S7, P0C0S6, Q5ZMD6, P0C0S4, Q6GM74, O62695, Q3THW5, Q71UI9, P08985, Q71PD7, P02272, Q27511, Q32LA7, NP_002097
Reactivity	Human
Predicted	Bovine, C.Elegans, Chicken, Zebrafish, Drosophila, Mouse, Rabbit, Xenopus, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20139
Calculated MW	13553
Antigen Region	59-86

Additional Information

Gene ID	3015
Other Names	Histone H2AZ, H2A/z, H2AFZ, H2AZ
Target/Specificity	This H2AFZ antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-86 amino acids from the C-terminal region of human H2AFZ.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	H2AFZ Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	H2AZ1 (HGNC:4741)
Function	Variant histone H2A which replaces conventional H2A in a subset of

nucleosomes. 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. May be involved in the formation of constitutive heterochromatin. May be required for chromosome segregation during cell division.

Cellular Location Nucleus. Chromosome.

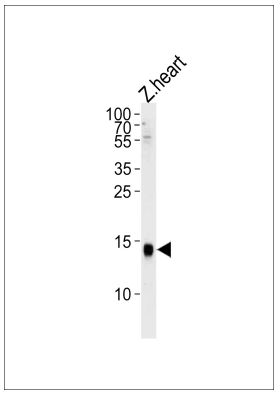
Background

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 encodes a replication-independent member of the histone H2A family that is distinct from other members of the family. Studies in mice have shown that this particular histone is required for embryonic development and indicate that lack of functional histone H2A leads to embryonic lethality. [provided by RefSeq].

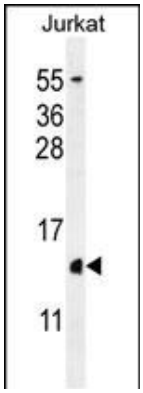
References

Marques, M., et al. Epigenetics 5(4):267-272(2010)
Svotelis, A., et al. Cell Cycle 9(2):364-370(2010)
Thakar, A., et al. Biochemistry 48(46):10852-10857(2009)
Hardy, S., et al. PLoS Genet. 5 (10), E1000687 (2009) :
Gevry, N., et al. Genes Dev. 23(13):1522-1533(2009)

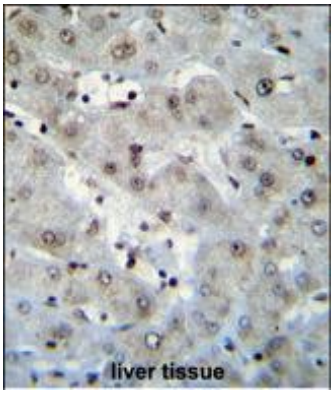
Images



Western blot analysis of lysate from zebra fish heart tissue, using H2AFZ Antibody (C-term)(Cat. #AP11237b). AP11237b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



H2AFZ Antibody (C-term) (Cat. #AP11237b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the H2AFZ antibody detected the H2AFZ protein (arrow).



H2AFZ Antibody (C-term) (Cat. #AP11237b)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of H2AFZ Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.