

Histone H3-K9 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9934a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P84243
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB08332
Calculated MW	15328

Additional Information

Gene ID	3020;3021
Other Names	Histone H33, H3F3A, H33A, H3F3
Target/Specificity	This Histone H3-K9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the K9 region of human histone H3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	Histone H3-K9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	H3-3A (HGNC:4764)
Synonyms	H3.3A, H3F3, H3F3A
Function	Variant histone H3 which replaces conventional H3 in a wide range of nucleosomes in active genes. Constitutes the predominant form of histone H3 in non-dividing cells and is incorporated into chromatin independently of DNA

synthesis. Deposited at sites of nucleosomal displacement throughout transcribed genes, suggesting that it represents an epigenetic imprint of transcriptionally active chromatin. 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.

Cellular Location

Nucleus. Chromosome

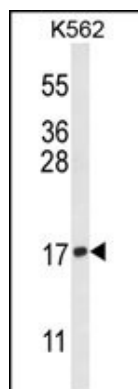
Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an 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 for histone H3-MeK9 is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3.

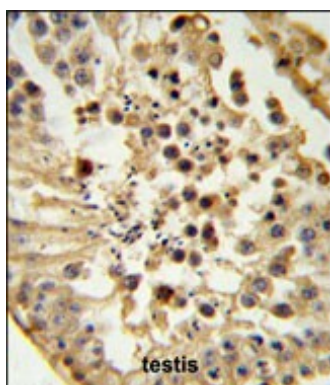
References

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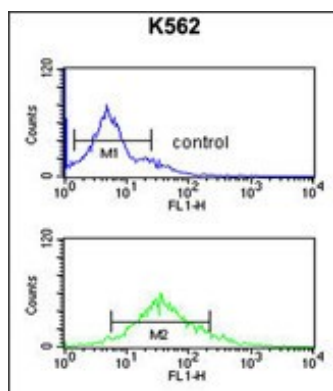
Images



Western blot analysis of Methyl-K-H3-K9(2Me)-4MAPS (Cat. #AP9934a) in K562 cell line lysates (35ug/lane). H3 (arrow) was detected using the purified Pab.



Histone H3-K9 Antibody (Cat. #AP9934a) IHC analysis in formalin fixed and paraffin embedded testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the Histone H3-K9 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



Histone H3-K9 Antibody (Cat. #AP9934a) flow cytometric analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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