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Me2-Histone H3(K9) Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1050a

Product Information

Application	DB, E
Primary Accession	P84243
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1169
Calculated MW	15328
Antigen Region	1-30

Additional Information

Gene ID	3020;3021
Other Names	Histone H33, H3F3A, H33A, H3F3
Target/Specificity	This Histone H3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from human Histone H3.
Dilution	DB~~1:500 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	Me2-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

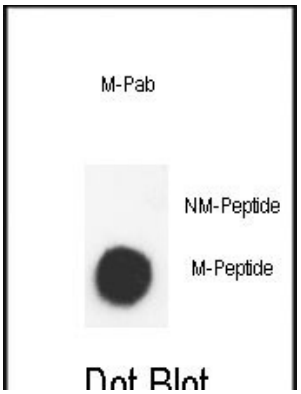
Background

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

Marzluff, W.F., et al., Genomics 80(5):487-498 (2002). Albig, W., et al., Hum. Genet. 101(3):284-294 (1997). Albig, W., et al., Genomics 40(2):314-322 (1997). Albig, W., et al., Genomics 10(4):940-948 (1991).

Images



Dot blot analysis of anti-Methyl-K-H3-K9(2Me)-4MAPS Pab (Cat. #AP1050a) on nitrocellulose membrane. 50ng of Methyl-peptide or Non Methyl-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.