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

Me2-H4(K20) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3674a

Product Information

Application	DB, IHC-P, FC, WB, E
Primary Accession	P62805
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17115
Calculated MW	11367
Antigen Region	1-30

Additional Information

Gene ID	121504;554313;8294;8359;8360;8361;8362;8363;8364;8365;8366;8367;8368;8370
Other Names	Histone H4, HIST1H4A, H4/A, H4FA
Target/Specificity	This H4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from human H4.
Dilution	DB~~1:500 IHC-P~~1:100~500 FC~~1:10~50 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	Me2-H4(K20) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	H4C1
Synonyms	H4/A, H4FA, HIST1H4A
Function	Core component of nucleosome. 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.

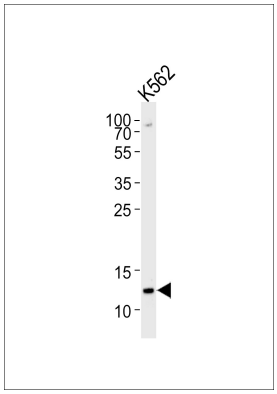
Cellular Location

Nucleus {ECO:0000250|UniProtKB:P62806}. Chromosome. Note=Localized to the nucleus when acetylated in step 11 spermatids. {ECO:0000250|UniProtKB:P62806}

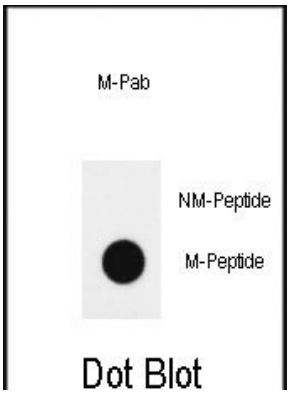
Background

Histone proteins H3, H4, H2A, and H2B function as building blocks to package eukaryotic DNA into repeating nucleosome units that are folded in higher order chromatin fibers. The nucleosome is composed of an octamer containing a H3/H4 tetramer and two H2A/H2B dimers, surrounded by approximately 146 base pairs of DNA. A diverse and elaborate array of post-translational modifications including acetylation, phosphorylation, methylation, ubiquitination, and ADP-ribosylation occurs on the N-terminal tail domains of histones.

Images

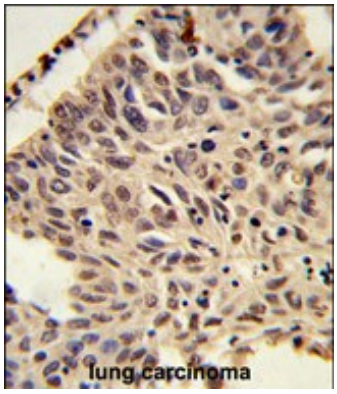


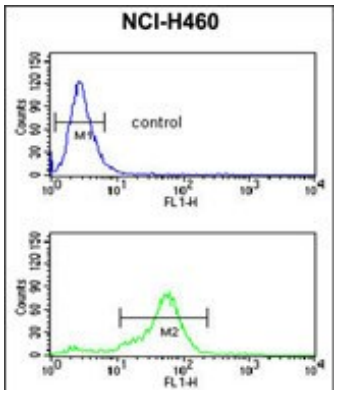
Western blot analysis of lysate from K562 cell line, using H4 Antibody (K20)(Cat. #AP3674a). AP3674a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



Dot blot analysis of anti-hH4-K20(Methyl 2) methylation-specific Pab (Cat. AP3674a) on nitrocellulose membrane. 50ng of methylation-peptide or Non methylation-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Formalin-fixed and paraffin-embedded human lung carcinoma reacted with PSMA4 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





H4 Antibody (K20 [Me2]) (Cat. #AP3674a) flow cytometric analysis of NCI-H460 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'.