



# Histone H4 (Di Methyl Lys21) rabbit pAb

Cat No.:ES20049

For research use only

## Overview

<b>Product Name</b>	Histone H4 (Di Methyl Lys21) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB; ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	WB 1:1000-2000 ELISA 1:5000-20000
<b>Immunogen</b>	Synthesized peptide derived from human Histone H4 (Di Methyl Lys21)
<b>Specificity</b>	This antibody detects endogenous levels of Human,Mouse,Rat Histone H4 (Di Methyl Lys21)
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C . Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Histone H4 (Di Methyl Lys21)
<b>Gene Name</b>	HIST1H4A H4/A H4FA; HIST1H4B H4/I H4FI; HIST1H4C H4/G H4FG; HIST1H4D H4/B H4FB; HIST1H4E H4/J H4FJ; HIST1H4F H4/C H4FC; HIST1H4H H4/H H4FH; HIST1H4I H4/M H4FM; HIST1H4J H4/E H4FE; HIST1H4K H4/D H4FD; HIST1H4L H4/K H4FK; HIST2H4A H4/N H4F2 H4FN HIST2H4; HI
<b>Cellular localization</b>	Nucleus. Chromosome.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	12kD
<b>Human Gene ID</b>	121504
<b>Human Swiss-Prot Number</b>	P62805
<b>Alternative Names</b>	Histone H4
<b>Background</b>	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. PTM:Acetylation at Lys-6, Lys-9, Lys-13 and Lys-17 occurs in coding regions of the genome but not in heterochromatin. PTM:Citrullination at Arg-4 by PADI4 impairs methylation. PTM:Monomethylated, dimethylated or trimethylated at Lys-21. Monomethylation is performed by SET8. Trimethylation is performed by SUV420H1 and SUV420H2 and induces gene silencing. PTM:Monomethylation at Arg-4 by PRMT1 favors acetylation at Lys-9 and Lys-13. Demethylation is performed by JMJD6. PTM:Sumoylated, which is associated with transcriptional repression. PTM:Ubiquitinated by the CUL4-DDB-RBX1 complex in response to ultraviolet irradiation. This may weaken the interaction between histones and DNA and facilitate DNA accessibility to repair proteins. similarity:Belongs to the histone H4 family. subunit:The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA.

