



# Anti-dimethyl Histone H3 (Lys4) monoclonal antibody, clone SN246 (CABT-B1510)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	This antibody reacts to Histone H3 dimethylated at Lysine 4 (K4me2). No cross reactivity with monomethylated Lysine 4 (K4me1) or trimethylated Lysine 4 (K4me3), or other methylation in Histone H3.
<b>Immunogen</b>	A linear peptide corresponding to human Histone H3 dimethylated at Lys4.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Clone</b>	SN246
<b>Purification</b>	Protein A Purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, Mplex
<b>Molecular Weight</b>	~17 kDa observed. Uncharacterized bands may be observed in some lysate(s).
<b>Format</b>	Liquid
<b>Concentration</b>	Please refer to lot specific datasheet.
<b>Size</b>	100 µg
<b>Buffer</b>	PBS with 1% BSA and 0.09% sodium azide.
<b>Preservative</b>	0.09% Sodium Azide

**Storage**

Stable for 1 year at 2-8°C from date of receipt. Note: Variability in freezer temperatures below -20°C may cause glycerol containing solutions to become frozen during storage.

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## BACKGROUND

**Introduction**

Histone H3, also known as Histone H3.1t (H3/t), H3t, H3/g, and encoded by the gene name HIST3H3/ H3FT, is a core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Therefore, histones play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. Featuring a main globular domain and a long N-terminal tail, H3 is involved with the structure of the nucleosomes of the beads on a string structure. The N-terminal tail of histone H3 protrudes from the globular nucleosome core and can undergo several different types of epigenetic modifications that influence cellular processes. These modifications include the covalent attachment of methyl or acetyl groups to lysine and arginine amino acids and the phosphorylation of serine or threonine. High levels of phosphorylation of Histone H3 are associated with mitosis.

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## GENE INFORMATION

**UniProt ID**

[P84243](#)

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