

Product name:	MonoMethyl-Histone H3 (Lys4) Rabbit Monoclonal Antibody
Cat number:	MABN03934
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	A synthetic Methylated peptide corresponding to residues target protein
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:500-1:1000,IHC 1:50-1:100,ICC/IF 1:50-1:200
Molecular Weight:	Calculated MW:15 kDa;Observed MW: 17 kDa
Purification:	Affinity Purification
Form:	Liquid
Buffer:	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	Histone post-translational modifications (PTMs) are key mechanisms of epigenetics that modulate chromatin structures, termed as “histone code”. The PTMs on histone including acetylation, methylation, phosphorylation and novel acylations directly affect the accessibility of chromatin to transcription factors and other epigenetic regulators, altering genome stability, gene transcription, etc. Histone methylation occurs primarily at lysine and arginine residues on the amino terminal of core histones. Methylation of histones can either increase or decrease transcription of genes, depending on which amino acids (Lys or Arg) in the histones are methylated and how many methyl groups are attached (mono-, di-, tri-methylation on Lys, mono-di-symmetric/asymmetric methylation on Arg). Mostly, lysine methylation occurs primarily on histone H3 Lys4, 9, 27, 36, 79 and H4 Lys20, while Arginine methylation occurs primarily on histone H3 Arg2, 8, 17, 26 and H4 Arg3. Histone methylases (HMTs) and histone demethylases (HDMs) are major regulating factors.