

# Summary

Production Name	MonoMethyl-Histone H3 (Lys4) Rabbit Monoclonal Antibody
Description	Recombinant Rabbit Monoclonal antibody
Host	Rabbit
Application	WB,IHC-F,IHC-P,ICC/IF
Reactivity	Human, Mouse, Rat

# Performance

Conjugation	Unconjugated
Modification	Monomethylated
lsotype	lgG
Clonality	Monoclonal Antibody
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide
	and 0.05% BSA.
Purification	Affinity Purified

#### Immunogen

Gene Name	H3C1
Alternative Names	H3R8me; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3/f
Gene ID	8350
SwissProt ID	P68431

# Application

Dilution Ratio	WB: 1/500-1/1000 IHC: 1/50-1/100 IF: 1/50-1/200
Molecular Weight	Calculated MW:15 kDa;Observed MW: 17 kDa



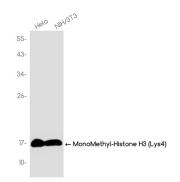
#### Background

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.

#### **Research Area**

**Epigenetics and Nuclear Signaling** 

### **Image Data**



Western blot analysis of MonoMethyl-Histone H3 (Lys4) in HeLa, 3T3 lysates using MonoMethyl-Histone H3 (Lys4) antibody.

#### Note

For research use only.