

# KMT1B / SUV39H2 Antibody

Rabbit mAb Catalog # AP91826

#### **Product Information**

Application WB, IHC, IP Primary Accession Q9H5I1

Reactivity Rat, Human, Mouse

**Clonality** Monoclonal

Other Names H3 K9 HMTase 2; KMT1B; Su(var)3 9 homolog 2; Suv39h2;

IsotypeRabbit IgGHostRabbitCalculated MW46682

### **Additional Information**

**Dilution** WB 1:500~1:1000 IHC 1:50~1:200 IP 1:50

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human KMT1B / SUV39H2

**Description** Histone methyltransferase that specifically trimethylates 'Lys-9' of histone H3

using monomethylated H3 'Lys-9' as substrate. H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **Protein Information**

Name SUV39H2

Synonyms KMT1B

**Function** Histone methyltransferase that specifically trimethylates 'Lys-9' of histone

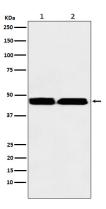
H3 using monomethylated H3 'Lys-9' as substrate. H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. Mainly functions in heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin at pericentric and telomere regions. H3 'Lys-9' trimethylation is also required to direct DNA methylation at pericentric repeats. SUV39H1 is targeted to histone H3 via its interaction with RB1 and is involved in many processes, such as cell cycle regulation, transcriptional repression and regulation of telomere length. May participate in regulation of higher-order chromatin organization during spermatogenesis. Recruited by the large PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1, contributes to the

conversion of local chromatin to a heterochromatin-like repressive state through H3 'Lys-9' trimethylation.

#### **Cellular Location**

Nucleus. Chromosome, centromere. Note=Associates with centromeric constitutive heterochromatin.

## **Images**



Western blot analysis of KMT1B / SUV39H2 expression in (1) MOLT-4 cell lysate; (2) Human testis lysate.

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