

KMT1B Rabbit mAb

Catalog # AP78010

Product Information

Application WB, IHC-P, IP **Primary Accession** <u>09H5I1</u>

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human KMT1B / SUV39H2

Purification Affinity Chromatography

Calculated MW 46682

Additional Information

Gene ID 79723

Other Names SUV39H2

Dilution WB~~1/500-1/1000 IHC-P~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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

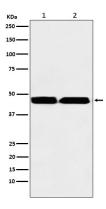
the establishment of constitutive heterochromatin at pericentric and telomere regions. H3 'Lys-9' trimethylation is also required to direct DNA methylation at pericentric repeats. SUV39H1 is targeted to histone H3 via its interaction with RB1 and is involved in many processes, such as cell cycle regulation, 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



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