

# KMT1B Polyclonal Antibody

Catalog # AP70670

## Product Information

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<b>Application</b>	WB, E, IHC-P
<b>Primary Accession</b>	<a href="#">Q9H5I1</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	46682

## Additional Information

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<b>Gene ID</b>	79723
<b>Other Names</b>	SUV39H2; KMT1B; Histone-lysine N-methyltransferase SUV39H2; Histone H3-K9 methyltransferase 2; H3-K9-HMTase 2; Lysine N-methyltransferase 1B; Suppressor of variegation 3-9 homolog 2; Su(var)3-9 homolog 2
<b>Dilution</b>	WB--Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. E--N/A IHC-P--N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	SUV39H2
<b>Synonyms</b>	KMT1B
<b>Function</b>	Histone methyltransferase that specifically mediates trimethylation of 'Lys-9' of histone H3 (H3K9me3) using monomethylated H3 'Lys-9' (H3K9me1) as substrate (PubMed: <a href="#">10949293</a> ). H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones (PubMed: <a href="#">10949293</a> ). Mainly functions in heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin at pericentric and telomere regions (PubMed: <a href="#">10949293</a> ). H3 'Lys-9' trimethylation is also required to direct DNA methylation at pericentric repeats (PubMed: <a href="#">10949293</a> ). SUV39H2 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 (PubMed: <a href="#">14765126</a> ). May participate in regulation of higher-order chromatin organization during spermatogenesis (By similarity). 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 (By similarity).

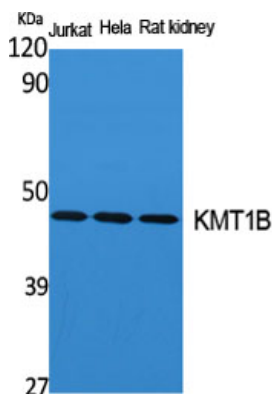
## Cellular Location

Nucleus. Chromosome, centromere {ECO:0000250|UniProtKB:Q9EQQ0}.  
Note=Associates with centromeric constitutive heterochromatin {ECO:0000250|UniProtKB:Q9EQQ0}

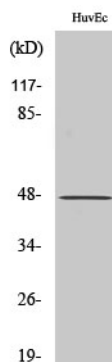
## Background

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.

## Images



Western Blot analysis of various cells using KMT1B Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Western Blot analysis of COLO205 cells using KMT1B Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.