10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KMT1B Rabbit mAb

Catalog # AP78010

Product Information

Application	WB, IHC-P, IP
Primary Accession	Q9H5I1
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

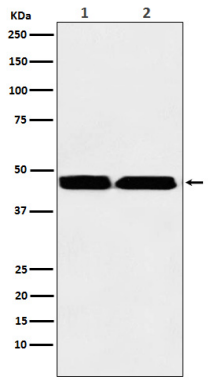
Name	SUV39H2
Synonyms	KMT1B
Function	Histone methyltransferase that specifically mediates trimethylation of 'Lys-9' of histone H3 (H3K9me3) using monomethylated H3 'Lys-9' (H3K9me1) as substrate (PubMed:10949293). H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones (PubMed:10949293). Mainly functions in heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin at pericentric and telomere regions (PubMed:10949293). H3 'Lys-9' trimethylation is also required to direct DNA methylation at pericentric repeats (PubMed:10949293, PubMed:41094145). 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:14765126). 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. Chromosome, centromere {ECO:0000250|UniProtKB:Q9EQQ0}. Note=Associates with centromeric constitutive heterochromatin (By similarity). Recruited to pericentromeric heterochromatin via its chromo domain, which specifically recognizes and binds histone H3 monoubiquitinated at 'Lys- 14' (H3K14ub) (PubMed:41094145). {ECO:0000250|UniProtKB:Q9EQQ0, ECO:0000269|PubMed:41094145}

Images



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