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Anti-SUV39H2 Antibody

Catalog # AP59873

Product Information

Application	WB
Primary Accession	Q9H5I1
Reactivity	Human, Pig, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46682

Additional Information

Gene ID	79723
Other Names	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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SUV39H2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

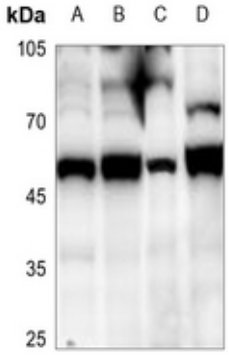
Name	SUV39H2
Synonyms	KMT1B
Function	Histone methyltransferase that specifically mediates trimethylation of 'Lys-9' of histone H3 (H3K9me3) using monomethylated H3 'Lys-9' (H3K9me1) as substrate (PubMed:10949293). H3 'Lys-9' trimethylation represents a specific tag for epigenetic transcriptional repression 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



Western blot analysis of SUV39H2 expression in MCF7 (A), HCT116 (B), K526 (C), EC9706 (D) whole cell lysates. (Predicted band size: 46 kD; Observed band size: 47 kD)

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