

KMT1B rabbit pAb**Cat#: orb765553 (Manual)**

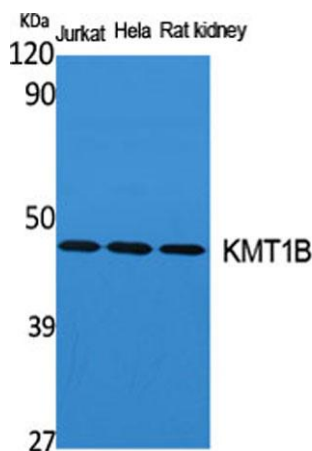
For research use only. Not intended for diagnostic use.

Product Name	KMT1B rabbit pAb
Host species	Rabbit
Applications	WB;ELISA;IHC
Species Cross-Reactivity	Human;Mouse
Recommended dilutions	WB 1:500-2000;IHC-p 1:50-300; ELISA 2000-20000
Immunogen	The antiserum was produced against synthesized peptide derived from human SUV39H2. AA range:111-160
Specificity	KMT1B Polyclonal Antibody detects endogenous levels of KMT1B protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Histone-lysine N-methyltransferase SUV39H2
Gene Name	SUV39H2
Cellular localization	Nucleus . Chromosome, centromere . Associates with centromeric constitutive heterochromatin. .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal

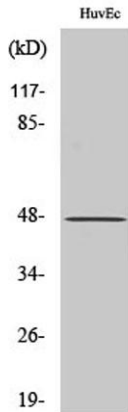
Concentration	1 mg/ml
Observed band	46kD
Human Gene ID	79723
Human Swiss-Prot Number	Q9H5I1
Alternative Names	SUV39H2; KMT1B; Histone-lysine N-methyltransferase SUV39H2; Histone H3-K9 methyltransferase 2; H3-K9-HMTase 2; Lysine N-methyltransferase 1B; Suppressor of variegation 3-9 homolog 2; Su(var)3-9 homolog 2

Background

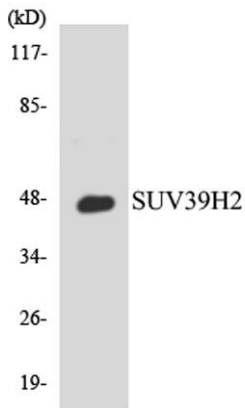
catalytic activity:S-adenosyl-L-methionine + histone L-lysine = S-adenosyl-L-homocysteine + histone N(6)-methyl-L-lysine.,domain:Although the SET domain contains the active site of enzymatic activity, both pre-SET and post-SET domains are required for methyltransferase activity. The SET domain also participates to stable binding to heterochromatin.,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.,similarity:Belongs to the histone-lysine methyltransferase family. Suvar3-9 subfamily.,similarity:Contains 1 chromo domain.,similarity:Contains 1 post-SET domain.,similarity:Contains 1 pre-SET domain.,similarity:Contains 1 SET domain.,subcellular location:Associates with centromeric constitutive heterochromatin.,subunit:Interacts with SMAD5.,



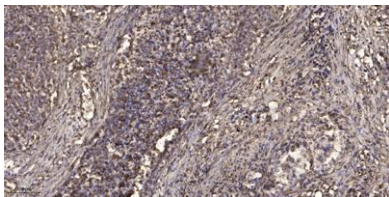
Western Blot analysis of various cells using KMT1B Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



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



Western blot analysis of the lysates from 293 cells using SUV39H2 antibody.



Immunohistochemical analysis of paraffin-embedded human Squamous cell carcinoma of lung. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).