

Datasheet for ABIN7155526

anti-SUV39H1 antibody (AA 179-412) (Biotin)[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	SUV39H1
Binding Specificity:	AA 179-412
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SUV39H1 antibody is conjugated to Biotin
Application:	ELISA

Product Details

Immunogen:	Recombinant Human Histone-lysine N-methyltransferase SUV39H1 protein (179-412AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	SUV39H1
Alternative Name:	SUV39H1 (SUV39H1 Products)
Background:	Background: Histone methyltransferase that specifically trimethylates 'Lys-9' of histone H3 using monomethylated H3 'Lys-9' as substrate. Also weakly methylates histone H1 (in vitro).

Target Details

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 repression of MYOD1-stimulated differentiation, regulation of the control switch for exiting the cell cycle and entering differentiation, repression by the PML-RARA fusion protein, BMP-induced repression, repression of switch recombination to IgA and regulation of telomere length. Component of the eNoSC (energy-dependent nucleolar silencing) complex, a complex that mediates silencing of rDNA in response to intracellular energy status and acts by recruiting histone-modifying enzymes. The eNoSC complex is able to sense the energy status of cell: upon glucose starvation, elevation of NAD(+)/NADP(+) ratio activates SIRT1, leading to histone H3 deacetylation followed by dimethylation of H3 at 'Lys-9' (H3K9me2) by SUV39H1 and the formation of silent chromatin in the rDNA locus. 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.

Aliases: H3 K9 HMTase1 antibody, H3-K9-HMTase 1 antibody, Histone H3-K9 methyltransferase 1 antibody, Histone H3-K9 methyltransferase1 antibody, Histone lysine N methyltransferase, H3 lysine 9 specific 1 antibody, Histone-lysine N-methyltransferase SUV39H1 antibody, KMT1 A antibody, KMT1A antibody, Lysine N methyltransferase 1A antibody, Lysine N-methyltransferase 1A antibody, MG44 antibody, mIS6 antibody, Position-effect variegation 3-9 homolog antibody, Su(var)3 9 homolog 1 antibody, Su(var)3-9 homolog 1 antibody, Suppressor of variegation 3 9 homolog 1 (Drosophila) antibody, Suppressor of variegation 3-9 homolog 1 antibody, SUV39 H1 antibody, SUV39H antibody, SUV39H1 antibody, SUV91_HUMAN antibody

UniProt: [O43463](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

Format: Liquid

Handling

Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.