

**SUV39H2 Antibody (C-term K375) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1281d****Specification**

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**SUV39H2 Antibody (C-term K375) Blocking Peptide - Product Information**

Primary Accession [O9H5I1](#)  
Other Accession [Q6I9Y3](#)

**SUV39H2 Antibody (C-term K375) Blocking Peptide - Additional Information**

**Gene ID** 79723

**Other Names**

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, SUV39H2, KMT1B

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1281d](/product/products/AP1281d) was selected from the C-term region of human SUV39H2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**SUV39H2 Antibody (C-term K375) Blocking Peptide - Protein Information**

**Name** SUV39H2

**Synonyms** KMT1B

**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. 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.

**Cellular Location**

Nucleus. Chromosome, centromere. Note=Associates with centromeric constitutive heterochromatin.

**SUV39H2 Antibody (C-term K375) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**SUV39H2 Antibody (C-term K375) Blocking Peptide - Images****SUV39H2 Antibody (C-term K375) Blocking Peptide - Background**

SUV39H2 is a histone methyltransferase that methylates Lys-9 of histone H3 and weakly histone H1 (in vitro). H3 Lys-9 methylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. SUV39H2 may participate in regulation of higher order chromatin organization during spermatogenesis.

**SUV39H2 Antibody (C-term K375) Blocking Peptide - References**

O'Carroll, D., et al., Mol. Cell. Biol. 20(24):9423-9433 (2000). Rea, S., et al., Nature 406(6796):593-599 (2000).