

SUV39H2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1281b

Specification

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

Primary Accession [O9H5I1](#)
Other Accession [NP_078946](#)

SUV39H2 Antibody (C-term) 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 [AP1281b](#) 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) 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

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

The murine gene Suv39h2 encodes an H3 histone methyltransferase (HMTase) 59% identical in sequence to mouse Suv39h1. During embryogenesis, both proteins overlap in tissue expression, yet Suv39h2 transcripts are restricted to the testes in adult animals. Immunolocalization of the Suv39h2 protein during spermatogenesis indicates enrichment at the heterochromatin from the leptotene to the round spermatid stage. Moreover, Suv39h2 specifically accumulates with chromatin of the sex chromosomes, which undergo transcriptional silencing during the first meiotic prophase. Suv39h2 HMTase may also organize meiotic heterochromatin with the potential for epigenetic imprint to the male germline.

SUV39H2 Antibody (C-term) Blocking Peptide - References

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004). Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).