

**SUV4-20H1 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP12072b****Specification**

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**SUV4-20H1 Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q4FZB7](#)**SUV4-20H1 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 51111

**Other Names**

Histone-lysine N-methyltransferase SUV420H1, Lysine N-methyltransferase 5B, Suppressor of variegation 4-20 homolog 1, Su(var)4-20 homolog 1, Suv4-20h1, SUV420H1, KMT5B

**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.

**SUV4-20H1 Antibody (C-term) Blocking peptide - Protein Information**Name KMT5B ([HGNC:24283](#))

Synonyms SUV420H1

**Function**

Histone methyltransferase that specifically methylates monomethylated 'Lys-20' (H4K20me1) and dimethylated 'Lys-20' (H4K20me2) of histone H4 to produce respectively dimethylated 'Lys-20' (H4K20me2) and trimethylated 'Lys-20' (H4K20me3) and thus regulates transcription and maintenance of genome integrity (PubMed: [24396869](http://www.uniprot.org/citations/24396869), PubMed: [28114273](http://www.uniprot.org/citations/28114273)). In vitro also methylates unmodified 'Lys-20' (H4K20me0) of histone H4 and nucleosomes (PubMed: [24396869](http://www.uniprot.org/citations/24396869)). H4 'Lys-20' trimethylation represents a specific tag for epigenetic transcriptional repression. Mainly functions in pericentric heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin in these regions. KMT5B is targeted to histone H3 via its interaction with RB1 family proteins (RB1, RBL1 and RBL2) (By similarity). Plays a role in myogenesis by regulating the expression of target genes, such as EID3 (PubMed: [23720823](http://www.uniprot.org/citations/23720823)). Facilitates TP53BP1 foci formation upon DNA damage and proficient non-homologous end-joining (NHEJ)-directed DNA repair by catalyzing the di- and

trimethylation of 'Lys-20' of histone H4 (PubMed:<a href="http://www.uniprot.org/citations/28114273" target="\_blank">28114273</a>). May play a role in class switch recombination by catalyzing the di- and trimethylation of 'Lys- 20' of histone H4 (By similarity).

#### **Cellular Location**

Nucleus. Chromosome. Note=Associated with pericentric heterochromatin. CBX1 and CBX5 are required for the localization to pericentric heterochromatin (By similarity).

#### **SUV4-20H1 Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **SUV4-20H1 Antibody (C-term) Blocking peptide - Images**

#### **SUV4-20H1 Antibody (C-term) Blocking peptide - Background**

This gene encodes a protein that contains a SET domain. SET domains appear to be protein-protein interaction domains that mediate interactions with a family of proteins that displays similarity with dual-specificity phosphatases (dsPTPases). The function of this gene has not been determined. Two alternatively spliced transcript variants have been found for this gene.

#### **SUV4-20H1 Antibody (C-term) Blocking peptide - References**

Chinenov, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 105(51):20185-20190(2008) Yang, H., et al. J. Biol. Chem. 283(18):12085-12092(2008) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) Tryndyak, V.P., et al. Cancer Biol. Ther. 5(1):65-70(2006) Twells, R.C., et al. Genomics 72(3):231-242(2001)