

SUV4-20H2 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP6511c**Specification**

SUV4-20H2 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q86Y97](#)**SUV4-20H2 Antibody (Center) Blocking Peptide - Additional Information**

Gene ID 84787

Other Names

Histone-lysine N-methyltransferase SUV420H2, Lysine N-methyltransferase 5C, Suppressor of variegation 4-20 homolog 2, Su(var)4-20 homolog 2, Suv4-20h2, SUV420H2, KMT5C

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6511c](/products/AP6511c) was selected from the Center region of human SUV4-20H2. 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.

SUV4-20H2 Antibody (Center) Blocking Peptide - Protein InformationName KMT5C ([HGNC:28405](#))

Synonyms SUV420H2

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. KMT5C is targeted to histone H3 via its interaction with RB1 family proteins (RB1, RBL1 and RBL2) (By similarity). 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:28114273). 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).

SUV4-20H2 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SUV4-20H2 Antibody (Center) Blocking Peptide - Images

SUV4-20H2 Antibody (Center) Blocking Peptide - Background

SUV420H2 is a histone methyltransferase that specifically trimethylates 'Lys-20' of histone H4. H4 'Lys-20' trimethylation represents a specific tag for epigenetic transcriptional repression. The protein mainly functions in pericentric heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin in these regions. SUV420H1 is targeted to histone H3 via its interaction with RB1 family proteins (RB1, RBL1 and RBL2).

SUV4-20H2 Antibody (Center) Blocking Peptide - References

Souza,P.P., BMC Cell Biol. 10, 41 (2009)Tryndyak,V.P., Cancer Biol. Ther. 5 (1), 65-70 (2006)