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SUV4-20H2 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6511C

Specification

SUV4-20H2 Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	Q86Y97
Other Accession	P0C2N6, Q6Q783
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**195-220**

SUV4-20H2 Antibody (Center) - 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
This SUV4-20H2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 195-220 amino acids of human SUV4-20H2.

Dilution
WB~~1:1000
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SUV4-20H2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SUV4-20H2 Antibody (Center) - Protein Information

Name 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, PubMed:28114273). In vitro also methylates unmodified 'Lys-20' (H4K20me0) of histone H4 and nucleosomes (PubMed: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 reconbination by catalyzing the di- and trimethylation of 'Lys-20' of histone H4 (By similarity).

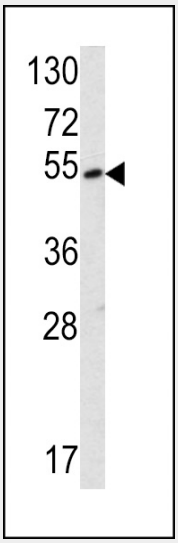
Cellular Location
Nucleus. Chromosome. Note=Associated with pericentric heterochromatin. CBX1 and CBX5 are required for the localization to pericentric heterochromatin (By similarity).

SUV4-20H2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SUV4-20H2 Antibody (Center) - Images



Western blot analysis of SUV4-20H2 antibody (Center) (Cat.# AP6511c) in mouse stomach tissue lysates (35ug/lane). SUV4-20H2 (arrow) was detected using the purified Pab.

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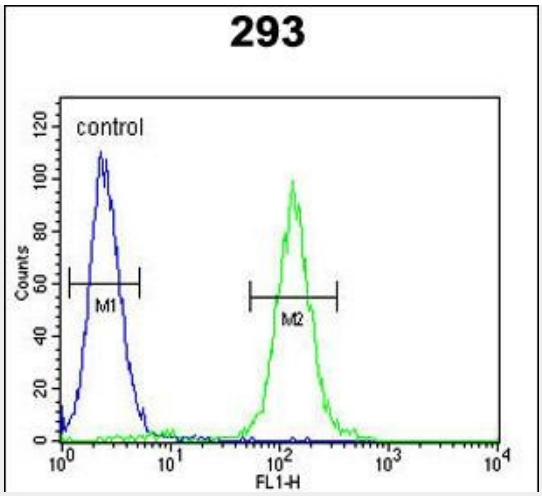

SUV4-20H2 Antibody (Center) (Cat. #AP6511c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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

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

SUV4-20H2 Antibody (Center) - Citations

- Regulation of Skeletal Muscle Stem Cell Quiescence by Suv4-20h1-Dependent Facultative Heterochromatin Formation.