

SUV4-20H2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12073a

Specification

SUV4-20H2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB,E <u>Q86Y97</u> <u>NP_116090.2</u> Mouse Rabbit Polyclonal Rabbit IgG 60-99

SUV4-20H2 Antibody (N-term) - 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 60-90 amino acids of human SUV4-20H2.

Dilution WB~~1:1000

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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SUV4-20H2 Antibody (N-term) - 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:<u>24396869</u>, PubMed:<u>28114273</u>). In vitro also methylates unmodified 'Lys-20' (H4K20me0) of histone H4 and nucleosomes (PubMed:<u>24396869</u>). 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:<u>28114273</u>). May play a role in class switch recombination by catalyzing the di- and trimethylation of 'Lys-20' of histone H4 (By similarity).

Cellular Location

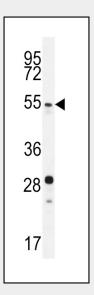
Nucleus. Chromosome. Note=Associated with pericentric heterochromatin. CBX1 and CBX5 are required for the localization to pericentric heterochromatin (By similarity).

SUV4-20H2 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SUV4-20H2 Antibody (N-term) - Images



SUV4-20H2 Antibody (N-term) (Cat. #AP12073a) western blot analysis in mouse stomach tissue lysates (35ug/lane). This demonstrates the SUV4-20H2 antibody detected the SUV4-20H2 protein (arrow).

SUV4-20H2 Antibody (N-term) - Background



SUV420H2 and the related enzyme SUV420H1 (MIM 610881) function as histone methyltransferases that specifically trimethylate nucleosomal histone H4 (see MIM 602822) on lysine-20 (K20) (Schotta et al., 2004 [PubMed 15145825]).

SUV4-20H2 Antibody (N-term) - References

Stolk, L., et al. Nat. Genet. (2009) In press : Souza, P.P., et al. BMC Cell Biol. 10, 41 (2009) : Yang, H., et al. J. Biol. Chem. 283(18):12085-12092(2008) Szafranski, K., et al. Genome Biol. 8 (8), R154 (2007) : Tryndyak, V.P., et al. Cancer Biol. Ther. 5(1):65-70(2006)