

SUV4-20H1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12072b

Specification

SUV4-20H1 Antibody (C-term) - Product Information

Application	WB, FC,E
Primary Accession	Q4FZB7
Other Accession	NP_060105.3 , NP_057112.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	4-20

SUV4-20H1 Antibody (C-term) - 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

Target/Specificity

This SUV4-20H1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 759-789 amino acids from the C-terminal region of human SUV4-20H1.

Dilution

WB~~1:500

FC~~1:10~50

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

SUV4-20H1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SUV4-20H1 Antibody (C-term) - 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](#), 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. 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](#)). 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

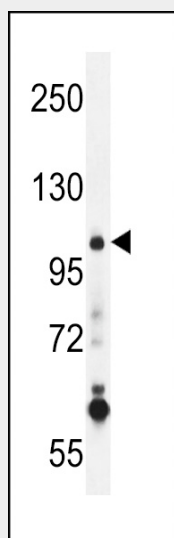
Nucleus. Chromosome. Note=Associated with pericentric heterochromatin. CBX1 and CBX5 are required for the localization to pericentric heterochromatin (By similarity).

SUV4-20H1 Antibody (C-term) - Protocols

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

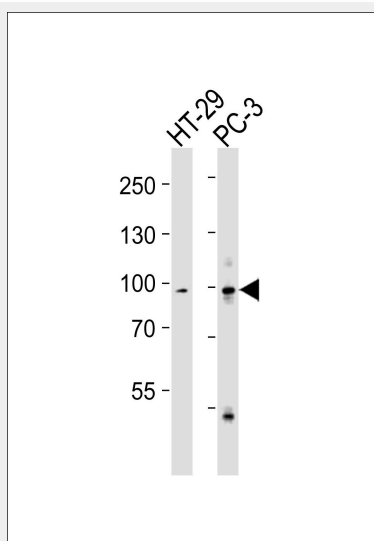
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SUV4-20H1 Antibody (C-term) - Images

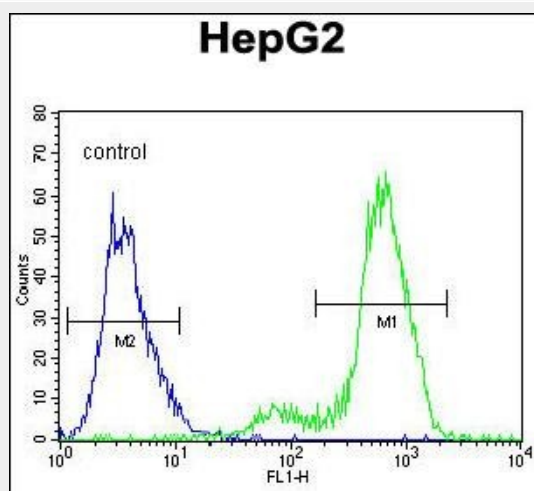


SUV4-20H1 Antibody (C-term) (Cat. #AP12072b) western blot analysis in HepG2 cell line lysates

(35ug/lane). This demonstrates the SUV4-20H1 antibody detected the SUV4-20H1 protein (arrow).



Western blot analysis of lysates from HT-29, PC-3 cell line (from left to right), using SUV4-20H1 Antibody (C-term) (Cat. #AP12072B). AP12072B was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



SUV4-20H1 Antibody (C-term) (Cat. #AP12072b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

SUV4-20H1 Antibody (C-term) - 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 display 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) - 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)