

EHMT2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5526a

Specification

EHMT2 Antibody (N-term) - Product Information

Application	WB, FC,E
Primary Accession	O96KQ7
Other Accession	NP_006700.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	132370
Antigen Region	159-186

EHMT2 Antibody (N-term) - Additional Information

Gene ID 10919

Other Names

Histone-lysine N-methyltransferase EHMT2, 211-, Euchromatic histone-lysine N-methyltransferase 2, HLA-B-associated transcript 8, Histone H3-K9 methyltransferase 3, H3-K9-HMTase 3, Lysine N-methyltransferase 1C, Protein G9a, EHMT2, BAT8, C6orf30, G9A, KMT1C, NG36

Target/Specificity

This EHMT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 159-186 amino acids from the N-terminal region of human EHMT2.

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 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

EHMT2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EHMT2 Antibody (N-term) - Protein Information

Name EHMT2

Synonyms BAT8, C6orf30, G9A, KMT1C, NG36

Function Histone methyltransferase that specifically mono- and dimethylates 'Lys-9' of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Also mediates monomethylation of 'Lys-56' of histone H3 (H3K56me1) in G1 phase, leading to promote interaction between histone H3 and PCNA and regulating DNA replication. Also weakly methylates 'Lys-27' of histone H3 (H3K27me). Also required for DNA methylation, the histone methyltransferase activity is not required for DNA methylation, suggesting that these 2 activities function independently. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. May also methylate histone H1. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Also methylates CDYL, WIZ, ACIN1, DNMT1, HDAC1, ERCC6, KLF12 and itself. Recruited to the promoters of target genes through interaction with transcriptional repressor MSX1, leading to the inhibition of myoblast differentiation via transcriptional repression of differentiation factors (By similarity).

Cellular Location

Nucleus. Chromosome. Note=Associates with euchromatic regions (PubMed:11316813). Does not associate with heterochromatin (PubMed:11316813).

Tissue Location

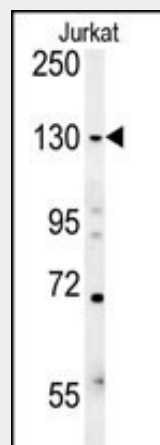
Expressed in all tissues examined, with high levels in fetal liver, thymus, lymph node, spleen and peripheral blood leukocytes and lower level in bone marrow

EHMT2 Antibody (N-term) - Protocols

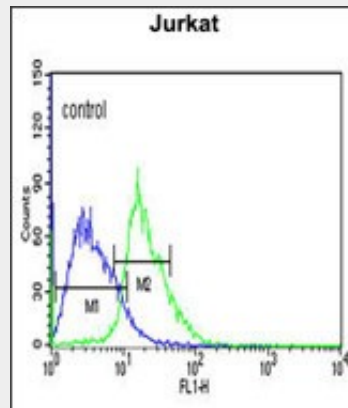
Provided below are standard protocols that you may find useful for product applications.

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

EHMT2 Antibody (N-term) - Images



EHMT2 Antibody (N-term) (Cat. #AP5526a) western blot analysis in Jurkat cell line lysates (15ug/lane). This demonstrates the EHMT2 antibody detected the EHMT2 protein (arrow).



EHMT2 Antibody (N-term) (Cat. #AP5526a) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

EHMT2 Antibody (N-term) - Background

A cluster of genes, BAT1-BAT5, has been localized in the vicinity of the genes for TNF alpha and TNF beta. This gene is found near this cluster; it was mapped near the gene for C2 within a 120-kb region that included a HSP70 gene pair. These genes are all within the human major histocompatibility complex class III region. This gene was thought to be two different genes, NG36 and G9a, adjacent to each other but a recent publication shows that there is only a single gene. The protein encoded by this gene is thought to be involved in intracellular protein-protein interaction.

EHMT2 Antibody (N-term) - References

Goyama, S., et al. *Leukemia* 24(1):81-88(2010)
de Vogel, S., et al. *Cancer Epidemiol. Biomarkers Prev.* 18(11):3086-3096(2009)
Chen, X., et al. *J. Biol. Chem.* 284(41):27857-27865(2009)

EHMT2 Antibody (N-term) - Citations

- [Inhibition of Euchromatic Histone Lysine Methyltransferase 2 \(EHMT2\) Suppresses the Proliferation and Invasion of Cervical Cancer Cells.](#)