10320 Camino Santa Fe, Suite G
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EHMT1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1018c

Specification

EHMT1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q9H9B1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**141466**
Antigen Region	**367-396**

EHMT1 Antibody (Center) - Additional Information

Gene ID 79813

Other Names
Histone-lysine N-methyltransferase EHMT1, 211-, Euchromatic histone-lysine N-methyltransferase 1, Eu-HMTase1, G9a-like protein 1, GLP, GLP1, Histone H3-K9 methyltransferase 5, H3-K9-HMTase 5, Lysine N-methyltransferase 1D, EHMT1, EUHMTASE1, GLP, KIAA1876, KMT1D

Target/Specificity
This EHMT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 367-396 amino acids from the Central region of human EHMT1.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

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
EHMT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EHMT1 Antibody (Center) - Protein Information

Name EHMT1

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Synonyms EUHMTASE1, GLP, KIAA1876, KMT1D

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 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. During G0 phase, it probably contributes to silencing of MYC- and E2F-responsive genes, suggesting a role in G0/G1 transition in cell cycle. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Represses the expression of mitochondrial function-related genes, perhaps by occupying their promoter regions, working in concert with probable chromatin reader BAZ2B (By similarity).

Cellular Location
Nucleus. Chromosome. Note=Associates with euchromatic regions

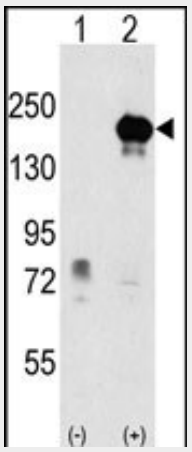
Tissue Location
Widely expressed..

EHMT1 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

EHMT1 Antibody (Center) - Images



Western blot analysis of EHMT1 (arrow) using rabbit polyclonal EHMT1 Antibody (Center)(Cat.#AP1018c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the EHMT1 gene (Lane 2) (Origene Technologies).

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EHMT1 Antibody (Center) - Background

EHMT1, also known as EUHMTASE1, is a histone methyltransferase. This protein methylates 'Lys-9' of histone H3 in vitro. H3 'Lys-9' methylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. EHMT1 is Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. During G0 phase, it probably contributes to silencing of MYC- and E2F-responsive genes, suggesting a role in the G0/G1 transition of the cell cycle.

EHMT1 Antibody (Center) - References

Ogawa H.,Science 296:1132-1136(2002).
Ota T.,Nat. Genet. 36:40-45(2004).
Nagase T.,DNA Res. 8:85-95(2001).