

**EHMT1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1018b****Specification**

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**EHMT1 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q9H9B1</a>
Other Accession	<a href="#">Q5DW34</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	141466
Antigen Region	1145-1174

**EHMT1 Antibody (C-term) - 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 1145-1174 amino acids from the C-terminal 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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**EHMT1 Antibody (C-term) - Protein Information**

**Name** EHMT1

**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**

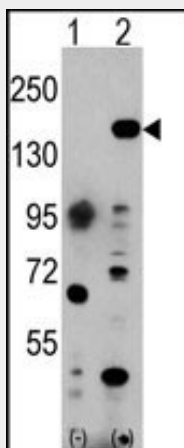
Widely expressed..

**EHMT1 Antibody (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](#)

**EHMT1 Antibody (C-term) - Images**



Western blot analysis of EHMT1 (arrow) using rabbit polyclonal EHMT1 Antibody (C-term) (Cat#AP1018b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently

transfected with the EHMT1 gene (Lane 2) (Origene Technologies).

#### **EHMT1 Antibody (C-term) - 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 (C-term) - References**

Ogawa H., Science 296:1132-1136(2002).

Ota T., Nat. Genet. 36:40-45(2004).

Nagase T., DNA Res. 8:85-95(2001).