

**EHMT1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1018a****Specification**

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**EHMT1 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q9H9B1](#)**EHMT1 Antibody (N-term) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP1018a](/product/products/AP1018a) was selected from the N-term region of human EHMT1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**EHMT1 Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**EHMT1 Antibody (N-term) Blocking Peptide - Images****EHMT1 Antibody (N-term) Blocking Peptide - Background**

EHMT1 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 (N-term) Blocking Peptide - References**

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