

EHMT1 (EUHMTASE1) Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP1074b**Specification**

EHMT1 (EUHMTASE1) Antibody (Center) Blocking peptide - Product InformationPrimary Accession [O9H9B1](#)**EHMT1 (EUHMTASE1) Antibody (Center) 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 [AP1074b](/product/products/AP1074b) was selected from the Center region of human EUHMTASE1. 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 (EUHMTASE1) Antibody (Center) 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 (EUHMTASE1) Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

EHMT1 (EUHMTASE1) Antibody (Center) Blocking peptide - Images**EHMT1 (EUHMTASE1) Antibody (Center) Blocking peptide - Background**

EUHMTASE1 is a histone methyltransferase that 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. This protein is probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. During G0 phase, it may contribute to silencing of MYC- and E2F-responsive genes, suggesting a role in the G0/G1 transition in the cell cycle.

EHMT1 (EUHMTASE1) Antibody (Center) Blocking peptide - References

Ogawa, H., et al., Science 296(5570):1132-1136 (2002).