

EHMT2 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP5526a**Specification**

EHMT2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession [O96KQ7](#)
Other Accession [NP_006700.3](#)

EHMT2 Antibody (N-term) Blocking peptide - 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

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.

EHMT2 Antibody (N-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

EHMT2 Antibody (N-term) Blocking peptide - Images**EHMT2 Antibody (N-term) Blocking peptide - 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) Blocking peptide - 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)