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(Mouse) Ehmt2 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21305c

Specification

(Mouse) Ehmt2 Blocking Peptide (Center) - Product Information

Primary Accession O9Z148

(Mouse) Ehmt2 Blocking Peptide (Center) - Additional Information

Gene ID 110147

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, Protein G9a, Ehmt2, Bat8, G9a, Ng36

Target/Specificity
The synthetic peptide sequence is selected from aa 589-603 of HUMAN Ehmt2

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.

(Mouse) Ehmt2 Blocking Peptide (Center) - Protein Information

Name Ehmt2

Synonyms Bat8, G9a, Ng36

Function

(Mouse) Ehmt2 Blocking Peptide (Center) - Background

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.

(Mouse) Ehmt2 Blocking Peptide (Center) - References

Tachibana M.,et al.Genes Dev. 16:1779-1791(2002).
Xie T.,et al.Genome Res. 13:2621-2636(2003).
Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).
Brown S.E.,et al.Mamm. Genome 12:916-924(2001).
Tachibana M.,et al.J. Biol. Chem. 276:25309-25317(2001).

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Cellular Location
Nucleus. Chromosome. Note=Almost excluded form nucleoli. Associates with euchromatic regions. Does not associate with heterochromatin. Part of a complex composed of TRIM28, HDAC1, HDAC2 and EHMT2 (By similarity). Interacts with CDYL. Interacts with REST only in the presence of CDYL. Part of a complex containing at least CDYL, REST, WIZ, SETB1, EHMT1 and EHMT2 (By similarity) Interacts with UHRF1.

Tissue Location
Ubiquitous..

(Mouse) Ehmt2 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides