

# (Mouse) Ehmt2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21266a

### **Specification**

## (Mouse) Ehmt2 Antibody (N-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>09Z148</u> Human Rabbit polyclonal Rabbit IgG 138039

### (Mouse) Ehmt2 Antibody (N-term) - 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

This Mouse Ehmt2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 227-259 amino acids from the N-terminal region of Mouse Ehmt2.

Dilution WB~~1:2000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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** 

(Mouse) Ehmt2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### (Mouse) Ehmt2 Antibody (N-term) - Protein Information

Name Ehmt2

Synonyms Bat8, G9a, 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 proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Also methylates CDYL, WIZ, ACIN1, DNMT1, HDAC1, ERCC6, KLF12 and itself.

### **Cellular Location**

Nucleus {ECO:0000250|UniProtKB:Q96KQ7}. Chromosome {ECO:0000250|UniProtKB:Q96KQ7}. Note=Almost excluded form nucleoli. Associates with euchromatic regions (By similarity). Does not associate with heterochromatin (By similarity) {ECO:0000250|UniProtKB:Q96KQ7}

Tissue Location Ubiquitous..

## (Mouse) Ehmt2 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

(Mouse) Ehmt2 Antibody (N-term) - Images



All lanes : Anti-Ehmt2 Antibody (N-term) at 1:2000 dilution Lane 1: NCCIT whole cell lysates Lane



2: HepG2 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 138 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## (Mouse) Ehmt2 Antibody (N-term) - 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 Antibody (N-term) - 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).