

**(Mouse) Ehmt2 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP21305c**

**Specification**

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**(Mouse) Ehmt2 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9Z148</a>
Reactivity	Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	138039

**(Mouse) Ehmt2 Antibody (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**

This Mouse Ehmt2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 589-623 amino acids from the Central region of Mouse Ehmt2.

**Dilution**

WB~~1:1000

**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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**(Mouse) Ehmt2 Antibody (Center) - 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 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 (PubMed:[22629437](#)).

#### Cellular Location

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

#### Tissue Location

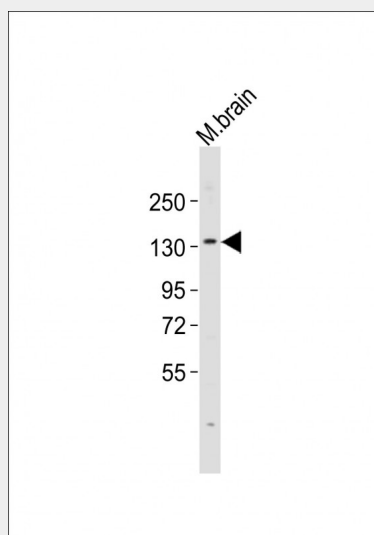
Ubiquitous..

### (Mouse) Ehmt2 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### (Mouse) Ehmt2 Antibody (Center) - Images



Anti-Ehmt2 Antibody (Center) at 1:1000 dilution + mouse brain lysates Lysates/proteins at 20 µg 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 (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 Antibody (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).