

## **EHMT2 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21098a

## **Specification**

# **EHMT2 Antibody (Center) - Product Information**

**Application** WB.E **Primary Accession** 096K07 Other Accession 09Z148 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 132370

## **EHMT2** Antibody (Center) - 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

### Target/Specificity

This EHMT2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 361-395 amino acids from the Central region of human EHMT2.

## **Dilution**

WB~~1:1000

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**

EHMT2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# EHMT2 Antibody (Center) - 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.

### **Cellular Location**

Nucleus. Chromosome. Note=Associates with euchromatic regions (PubMed:11316813). Does not associate with heterochromatin (PubMed:11316813).

### **Tissue Location**

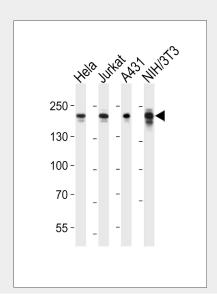
Expressed in all tissues examined, with high levels in fetal liver, thymus, lymph node, spleen and peripheral blood leukocytes and lower level in bone marrow

## **EHMT2 Antibody (Center) - Protocols**

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

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

# **EHMT2 Antibody (Center) - Images**





Western blot analysis of lysates from Hela, Jurkat, A431, mouse NIH/3T3 cell line (from left to right), using EHMT2 Antibody (Center)(Cat. #AP21098a). AP21098a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

## 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.

# EHMT2 Antibody (Center) - References

Brown S.E., et al. Mamm. Genome 12:916-924(2001). Ota T., et al. Nat. Genet. 36:40-45(2004). Xie T., et al. Genome Res. 13:2621-2636(2003). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Hirakawa M., et al. Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.