

## EHMT2/G9A Antibody

Rabbit mAb Catalog # AP92247

### **Specification**

## **EHMT2/G9A Antibody - Product Information**

Application WB, IHC
Primary Accession O96KO7
Clonality Monoclonal

**Other Names** 

Bat8; Ehmt2; G9A; GAT8; NG36;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 132370 Da

# EHMT2/G9A Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

EHMT2/G9A

Description 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

### EHMT2/G9A Antibody - 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**

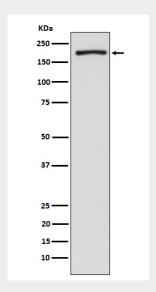
Expressed in all tissues examined, with high levels in fetal liver, thymus, lymph node, spleen and peripheral blood leukocytes and lower level in bone marrow

# **EHMT2/G9A Antibody - Protocols**

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

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

## EHMT2/G9A Antibody - Images



Western blot analysis of EHMT2/G9A expression in HeLa cell lysate.