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KD-Validated Anti-EHMT2/G9A Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2359

Specification

KD-Validated Anti-EHMT2/G9A Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q96KQ7
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 132 kDa; Observed, 160-170 kDa KDa**
Gene Name	**EHMT2**
Aliases	**KMT1C; G9A; C6orf3; BAT8; Euchromatic Histone-Lysine N-Methyltransferase; Histone-Lysine N-Methyltransferase EHMT2; Histone H3-K9 Methyltransferase; HLA-B Associated Transcript 8; Lysine N-Methyltransferase 1C; H3-K9-HMTase; Em:AF134726.3; NG36/G9a; NG36; Histone-Lysine N-Methyltransferase, H3 Lysine-9 Specific 3; Chromosome 6 Open Reading Frame 30; Ankyrin Repeat-Containing Protein; G9A Histone Methyltransferase; HLA-B-Associated Transcript 8; EC 2.1.1.367; Protein G9a; EC 2.1.1.-; GAT8**
Immunogen	**A synthesized peptide derived from human EHMT2/G9A**

KD-Validated Anti-EHMT2/G9A Rabbit Monoclonal Antibody - Additional Information

Gene ID	**10919**

Other Names
Histone-lysine N-methyltransferase EHMT2, 2.1.1.-, 2.1.1.367, 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

KD-Validated Anti-EHMT2/G9A Rabbit Monoclonal 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).

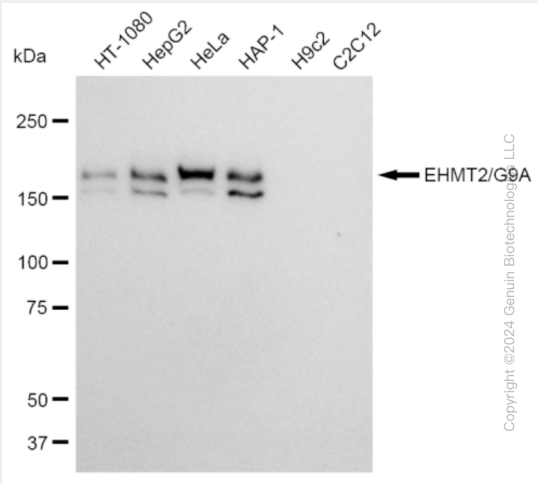
Tissue Location
Expressed in all tissues examined, with high levels in fetal liver, thymus, lymph node, spleen and peripheral blood leukocytes and lower level in bone marrow

KD-Validated Anti-EHMT2/G9A Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-EHMT2/G9A Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-EHMT2/G9A antibody (Cat#AGI2359). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-EHMT2/G9A antibody (Cat#AGI2359, 1:10,000) and HRP-conjugated goat anti-rabbit

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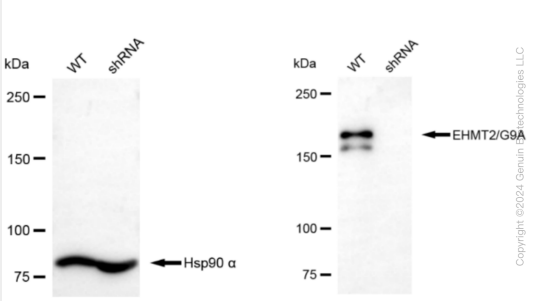
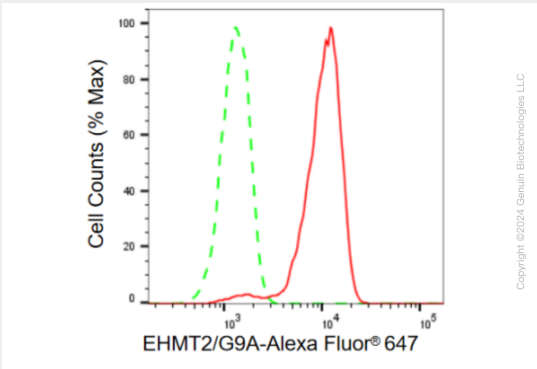
secondary antibody respectively.



Western blotting analysis using anti-EHMT2/G9A antibody (Cat#AGI2359).EHMT2/G9A expression in wild type (WT) and EHMT2/G9A shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-EHMT2/G9A antibody (Cat#AGI2359, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of EHMT2/G9A expression in HeLa cells using EHMT2/G9A antibody (Cat#AGI2359, 1:2,000). Green, isotype control; red, EHMT2/G9A.