

Product Name: KD-Validated EHMT2 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA00243

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 132.4kDa

Antigen Information

Gene Name	EHMT2 Euchromatic Histone Lysine Methyltransferase 2; KMT1C; G9A; C6orf30; BAT8; Euchromatic Histone-Lysine N-Methyltransferase 2; Histone-Lysine N-Methyltransferase EHMT2; Histone H3-K9 Methyltransferase 3; HLA-B Associated Transcript 8; Lysine N-Methyltransferase 1C;
Alternative Names	H3-K9-HMTase 3; 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
Gene ID	10919.0
SwissProt ID	Q96KQ7
Immunogen	A synthesized peptide derived from human EHMT2

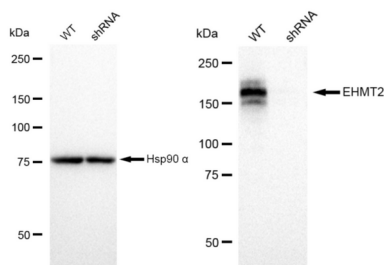
Background

This gene encodes a methyltransferase that methylates lysine residues of histone H3. Methylation of H3 at lysine 9 by this protein results in recruitment of additional epigenetic regulators and repression of transcription. This gene was initially thought to be two different genes, NG36 and G9a, adjacent to each other in the HLA locus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

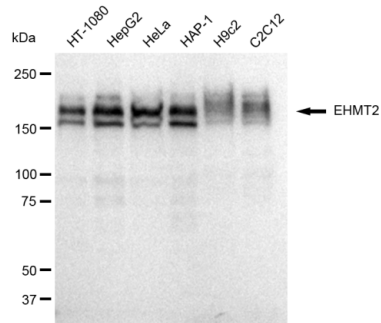
Research Area

Epigenetics and Nuclear Signaling, Stem Cells, Epigenetics and Nuclear Signaling, Developmental Biology

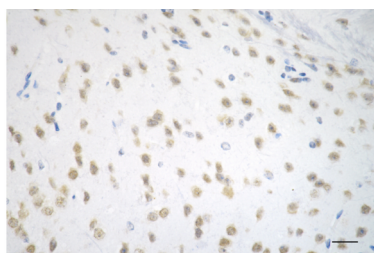
Image Data



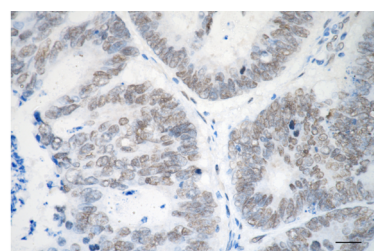
Western blotting analysis using EHMT2 antibody (KVA00243). EHMT2 expression in wild type (WT) and EHMT2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with EHMT2 antibody (KVA00243, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



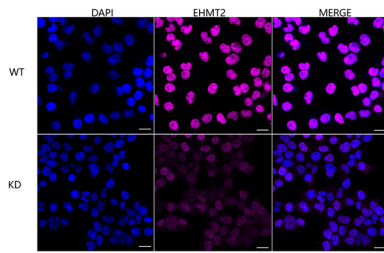
Western blotting analysis using EHMT2 antibody (KVA00243). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with EHMT2 antibody (KVA00243, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



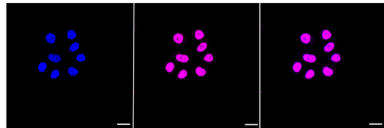
Immunohistochemistry was performed on paraffin-embedded mouse brain using EHMT2 antibody (KVA00243, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



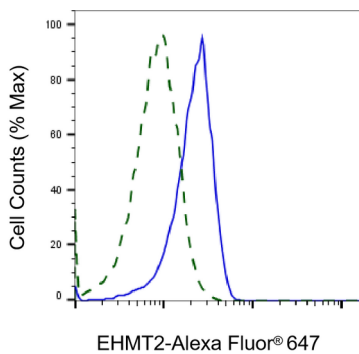
Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using EHMT2 antibody (KVA00243, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



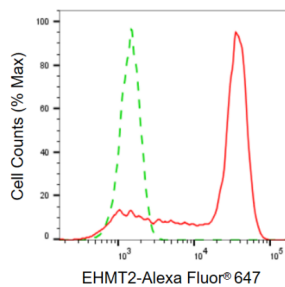
Immunocytochemical staining of HeLa cells using EHMT2 antibody (KVA00243, 1:1,000), Top panel: wild-type (WT); Bottom panel: EHMT2 shRNA knockdown (KD). Nuclei were stained blue with DAPI; EHMT2 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with EHMT2 antibody (KVA00243, 1:1,000). Nuclei were stained blue with DAPI; EHMT2 was stained magenta with Alexa Fluor® 647. Scale bar: 20 μm.



Validation of EHMT2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with EHMT2 antibody (KVA00243, 1:2,000) and analyzed using CytoFLEX.



Flow cytometric analysis of EHMT2 expression in HepG2 cells using EHMT2 antibody (KVA00243, 1:2,000). Green, isotype control; red, EHMT2.