


### Anti-EHMT2/G9A antibody ab183889

★★★★★ **1 Abreviews** [4 Images](#)

#### Overview

<b>Product name</b>	Anti-EHMT2/G9A antibody
<b>Description</b>	Rabbit polyclonal to EHMT2/G9A
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IP, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat, Cow, Pig 
<b>Immunogen</b>	Synthetic peptide within Human EHMT2/ G9A aa 21-118. The exact sequence is proprietary. Database link: <a href="#">Q96KQ7</a>
<b>Positive control</b>	293T, A431, HeLa, HepG2 and A375 cell lysates. HeLa cells. HeLa xenograft tissue.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab183889 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100 - 1/1000.
IP	★★★★★ (1)	1/100 - 1/500.
IHC-P		1/100 - 1/1000.
WB		1/500 - 1/3000. Predicted molecular weight: 132 kDa.

## Target

### 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.

### Tissue specificity

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.

### Sequence similarities

Belongs to the class V-like SAM-binding methyltransferase superfamily. Histone-lysine methyltransferase family. Suvar3-9 subfamily.  
Contains 7 ANK repeats.  
Contains 1 post-SET domain.  
Contains 1 pre-SET domain.  
Contains 1 SET domain.

### Domain

The SET domain mediates interaction with WIZ.  
The ANK repeats bind H3K9me1 and H3K9me2.

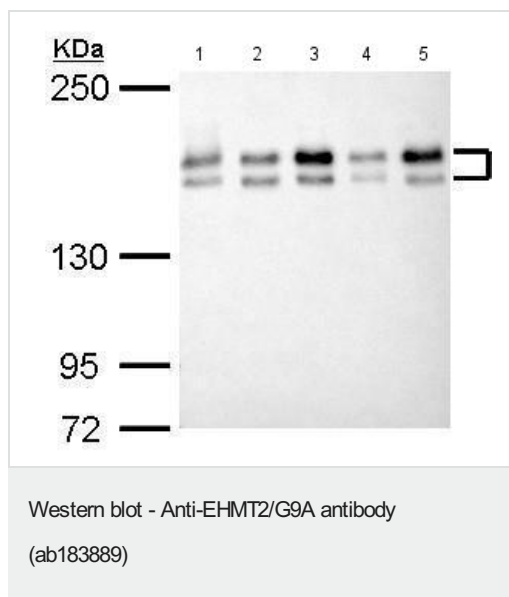
### Post-translational modifications

Methylated at Lys-185; automethylated.

### Cellular localization

Nucleus. Chromosome. Associates with euchromatic regions. Does not associate with heterochromatin.

## Images



**All lanes :** Anti-EHMT2/G9A antibody (ab183889) at 1/1000 dilution

**Lane 1 :** 293T whole cell lysate/extract

**Lane 2 :** A431 whole cell lysate/extract

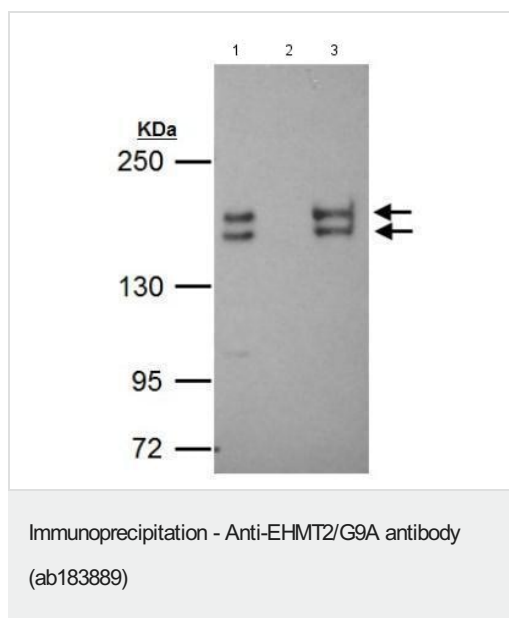
**Lane 3 :** HeLa whole cell lysate/extract

**Lane 4 :** HepG2 whole cell lysate/extract

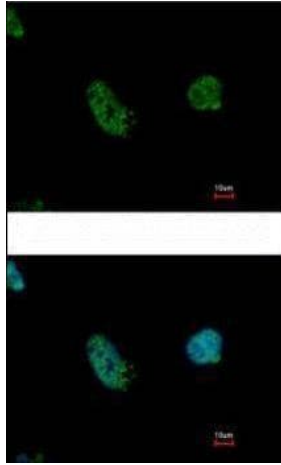
**Lane 5 :** A375 whole cell lysate/extract

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 132 kDa

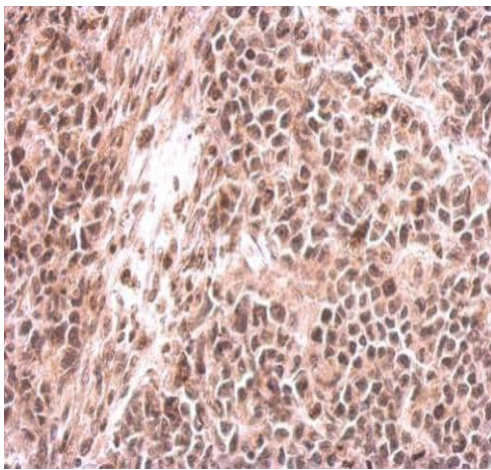


Western blot analysis on immunoprecipitation. IP sample: 2 mg of HeLa whole cell lysate/extract. Lanes: 1) 40 µg of HeLa whole cell lysate/extract. 2) control with 2 µg of pre-immune rabbit IgG. 3) immunoprecipitation of KMT1C / G9a with 2 µg of ab183889. KMT1C / G9a immunoprecipitate was detected by ab183889 at a 1/1000 dilution.



Immunofluorescence analysis of HeLa cells fixed in 4% paraformaldehyde for 5 minutes, labeling EHMT2/ G9A using ab183889 at a 1/500 dilution (green). Blue: Hoechst 33342 staining.

Immunocytochemistry/ Immunofluorescence - Anti-EHMT2/G9A antibody (ab183889)



Immunohistochemical analysis of paraffin-embedded HeLa xenograft tissue, labeling EHMT2/ G9A using ab183889 at a 1/500 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EHMT2/G9A antibody (ab183889)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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