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EHMT1 polyclonal antibody
Rabbit Polyclonal Antibody
Catalog # ABV11372

Specification

EHMT1 polyclonal antibody - Product Information

Application	**E, WB**
Primary Accession	Q9H9B1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**141466**

EHMT1 polyclonal antibody - Additional Information

Gene ID 79813

Positive Control Application & Usage	**Western blot: HeLa cells, ELISA: Peptides. ELISA: 1:100 – 1:200, Western Blotting: 1:500.**

Other Names
GLP1, KMT1D

Target/Specificity
EHMT1

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
In PBS with 0.05% (W/V) sodium azide.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
EHMT1 polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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EHMT1 polyclonal antibody - Protein Information

Name EHMT1

Synonyms EUHMTASE1, GLP, KIAA1876, KMT1D

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 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. During G0 phase, it probably contributes to silencing of MYC- and E2F-responsive genes, suggesting a role in G0/G1 transition in cell cycle. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Represses the expression of mitochondrial function-related genes, perhaps by occupying their promoter regions, working in concert with probable chromatin reader BAZ2B (By similarity).

Cellular Location
Nucleus. Chromosome. Note=Associates with euchromatic regions

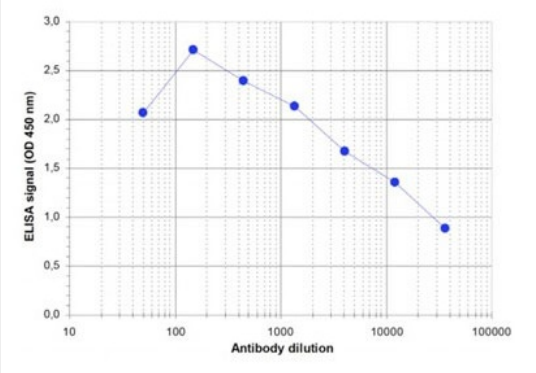
Tissue Location
Widely expressed..

EHMT1 polyclonal antibody - Protocols

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

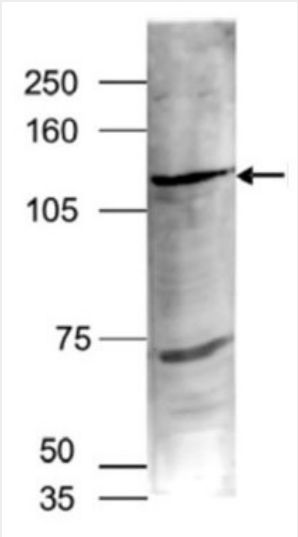
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EHMT1 polyclonal antibody - Images



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To determine the titer, an ELISA was performed using a serial dilution of the antibody. The wells were coated with the peptides used for immunization of the rabbit. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:10,600.



Nuclear extracts of HeLa cells (40 µg) were analysed by Western blot using the antibody diluted 1:1,000 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest (expected size: 138 kDa) is indicated on the right; the marker (in kDa) is shown on the left.

EHMT1 polyclonal antibody - Background

EHMT1 is a histone methyltransferase which specifically methylates histone H3 on lysine 9. H3K9 methylation represents a marker for epigenetic transcriptional repression. This repression is established by recruiting HP1 proteins to the methylated histone. H3K9 methylation may contribute to silencing of MYC and E2F responsive genes and plays a role in murine embryogenesis.