abcam

Product datasheet

Anti-EHMT1/GLP antibody ab231224

1 Image

Overview

Product name	Anti-EHMT1/GLP antibody
Description	Rabbit polyclonal to EHMT1/GLP
Host species	Rabbit
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse
Immunogen	Synthetic peptide corresponding to Mouse EHMT1/GLP (intracellular) conjugated to keyhole limpet haemocyanin. Three peptides. Database link: Q5DW34
Positive control	WB: HeLa nuclear extract.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	Preservative: 0.05% Sodium azide
Purity	Whole antiserum
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab231224** in the following tested applications.

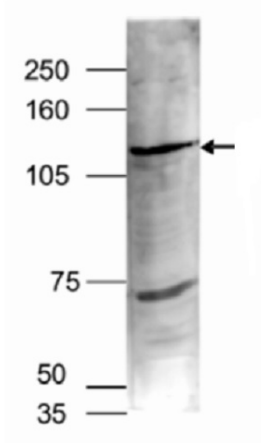
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500. Predicted molecular weight: 141 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 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.
Tissue specificity	Widely expressed.
Involvement in disease	Defects in EHMT1 are the cause of chromosome 9q subtelomeric deletion syndrome (9q- syndrome) [MIM:610253]. Common features seen in these patients are severe mental retardation, hypotonia, brachy(micro)cephaly, epileptic seizures, flat face with hypertelorism, synophrys, anteverted nares, cupid bow or tented upper lip, everted lower lip, prognathism, macroglossia, conotruncal heart defects, and behavioral problems.
Sequence similarities	Belongs to the histone-lysine methyltransferase family. Contains 8 ANK repeats. Contains 1 pre-SET domain. Contains 1 SET domain.
Domain	The ANK repeats recognize and bind RELA subunit of NF-kappa-B, when RELA is monomethylated at 'Lys-310' (By similarity). They also specifically recognize and bind H3K9me1 and H3K9me2. The SET domain mediates interaction with WIZ.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Cellular localization	Nucleus. Chromosome. Associates with euchromatic regions.

Images



Western blot - Anti-EHMT1/GLP antibody (ab231224)

Anti-EHMT1/GLP antibody (ab231224) at 1/1000 dilution + HeLa (human epithelial cell line from cervix adenocarcinoma) nuclear extract at 40 µg

Predicted band size: 141 kDa

Dilution buffer: TBS-Tween containing 5% skimmed milk.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors